expenditure of public funds. He urged the establishment of a health care "covenant" to ensure a national commitment to a properly funded health care system. He urged, in particular, that greater attention be paid to preventative measures and primary health care and to the urgent needs of rural and Aboriginal peoples. Romanow urged the expansion of home care services (he called this the "next essential service") and called for coverage of prescription drug costs. Through the winter of 2002-2003, national and provincial politicians and civil servants debated the two reports and confronted urgent provincial demands for a major injection of federal funding into the health care system. The Liberal government followed up, in part, in the late winter of 2003, announcing the transfer of up to \$15 billion in annual funding (phased in) in additional funding to the provinces and the encouragement of new initiatives in pharmaceutical support, and primary health care.

It is important to note that neither the Kirby nor the Romanow report included a major discussion of women's health issues. Romanow's report refers specifically to women's concerns in a variety of contexts, but does not elevate this area of inquiry to the same status as rural, Aboriginal, multi-cultural or other themes. Kirby's report, which was completed and tabled

shortly before the more costly and exhaustive Romanow study, deals only tangentially and sporadically with women's health issue. The Senate investigation does indicate that a series of thematic studies, including one on women's health, are due to be released at an undisclosed later date,.

D. Women's Health Issues in Canada:

Canadian women face many of the same health care issues and medical challenges as women in other countries. They have lobbied, more successfully than most, for greater attention to specific women's medical and health challenges and have been forceful in demanding a more open and women-sensitive health care system. Women obviously participate in all of the debates outlined above about the general Canadian health care regime; in addition, there are a variety of concerns and issues that are clearly gendered and require specific attention. Among the most important contemporary concerns are the following:

 Limitations on the professional role and decision-making authority of nurses. Females dominate the nursing profession in Canada (a fact which has generally contributed to the comparative lower wages and status of this critical profession).
 North American physicians and

- specialists guard their authority very carefully and have generally prevented nurses from becoming more actively involved in the delivery of health care services. (One major exception to this pattern occurs in northern, remote communities, where doctors are rarely available and where nurses have long held a more comprehensive role.) Nurses have the training and professional capacity to assume a far more active role in the medical profession, but have been barred from doing more by the male-dominated physicians.
- 2. The increasing presence of women in the medical profession, and the significance of this change for medical practice. There has been a major surge in the number of women in the post-secondary system, including the medical fields. In some provinces, lead by Quebec, women make up between 60-70% of medical students. Although the full effects of this change are not yet known, it is likely that the greater participation of women in the medical professions will have impacts on the field. Women professionals tend to incorporate child-rearing into their lifecycle and tend to be less accepting of long hours. Because of this, the medical schools will have to produce more doctors in order to keep up with demand. It is possible that women physicians will
- be less preoccupied with holding control over the medical profession and will be prepared to share authority with nurses. The feminization of medicine should also have a significant impact on research activities, treatment regimes, and patient-physician relations. A specific change associated with the increasing number of women is that female patients are increasingly showing a preference for being treated by female doctors.
- 3. Health care education, especially in the school system. Given a complex web of social and cultural changes at work in the Canadian society, the school system and public health professionals are shouldering an increasing share of the burden for health care education. Information about sexually transmitted diseases, family planning, medical effects of drug use, proper nutrition and other community health concerns is increasingly delivered through the school system. Much of this information is highly sensitive, both personally and politically, and there have been major debates about the appropriateness of leaving health care education within the school and public health systems.
- 4. Complaints about male-centred medical education and professional practice. Women have long argued

- that the intellectual edifice of medical education and medical practice reflects predominately male assumptions. The very structure of contemporary North American health care, with its emphasis on critical care and the lesser status and priority attached to preventative care is often seen as arising from male assumptions of what is important in the medical system. The competitive, hard-working medical environment, combined with what many observers see as a preoccupation with incomes, does not appear to reflect female values, assumptions and working models.
- 5. Consciousness-raising about women's health issues and services (often successful, as with breast cancer). Canadian women, borrowing liberally from developments in the United States, have been very active in promoting greater attention to women's health concerns. Major Canadian women's and feminist organizations have been effective in lobbying governments for more funding for women's health research and specialized support programs. Women have engaged in national and international campaigns to raise awareness of specific medical conditions and to alert women to the need to test (through self-examination or visits to their

- physicians) for certain common ailments. The attention drawn to breast cancer (which has included a lengthy debate about the effectiveness of mammograms), for example, is due largely to years worth of campaigning by women's groups.
- 6. Reproductive health care/access to abortions. Women in Canada have been particularly active in the campaign to secure greater control over reproductive health and the right to control their own bodies. The legal battles have largely been won; abortion is no longer illegal in Canada. On a practical level, the success of the struggle is less certain. Some provinces do not fund or limit access to abortions. There is still considerable out of province movement associated with securing an abortion to end an unwanted pregnancy. There have been major ethical and political debates about abortion and reproductive rights generally. Importantly, the battles over surrogacy that have received a great deal of coverage in the United States have been largely waged out of the spotlight in Canada. While the debate over abortions has been largely answered, there is emerging discussion about the refusal of the health care systems to fund fertility treatments. These expensive initiatives are increasing popular

- among couples unable to conceive a child without medical intervention. The fact that the government will pay the cost of terminate pregnancies (in most health districts) but will not support efforts to conceive is, at present, a mild irritant, but the frustrations appear destined to grow over time.
- 7. Immigrant women/language and cultural concerns. As mentioned before, immigrant women face significant challenges in coping with the medical care system. Women have, across the country, a higher rate of medical care usage than men, largely because of the attention needed during childbirth and the associated care of children. Immigrant women, therefore, are often face with regular difficulties in coping with medical care professionals who often lack language or cultural skills with the specific immigrant or ethnic population. potential for misunderstanding, miscommunication or culturally inappropriate suggestions or questions is quite substantial. There have been efforts to address these challenges, but the most successful initiatives are generally limited to the largest five or six cities in the country.
- 8. Women-centred developments:
 Women have argued that the medical

- care system should be more accepting of traditional medical practices, especially midwifery. There have been concerned, and occasionally successful, efforts to secure government recognition of the skills of trained and experienced midwifes. Several provinces now license midwives and provide government payments for their services. This relatively recent development came on the heels of many years of criminalizing a long-accepted, inexpensive and common medical practice.
- 9. Rural health care concerns: While fully 80% of Canada's population is now urban, rural women continue to face important challenges. Some of these are very practical: difficulties with access to medical care, absence of local facilities and support, high turn-over among the medical practitioners, lower levels and quality of medical service, and the like. Other questions are situational: high stress levels associated with the financial and economic problems of contemporary rural society, issues of depression associated with loneliness and isolation from friends and family, and the high incidence of accidents associated with farm machinery and rural equipment. Rural women have not been particularly successful in lobbying for attention to their specific

- issues, although there are a variety of prairie (western Great Plains) initiatives which have been noteworthy.
- 10. Aboriginal health care concerns: Aboriginal women are among the most at-risk populations in the country. There are a series of specific medical issues which require urgent attention, including rampant diabetes (not restricted to women). problems with poor nutrition and a general absence of preventative health care activities, uncertain medical care (despite secure federal funding) characterized by an absence of medical personnel in small communities, limited understanding of Aboriginal culture by medical professionals (very few of whom are Aboriginals themselves), high rates of sexual activity beginning at a young age, teenage pregnancies, medical concerns associated with alcohol and drug abuse, and health issues related to the wide-spread poverty of Aboriginal Canadians. High rates of sexual activity have, in term, created problems in terms of sexually transmitted diseases, including severe challenges associated with AIDS (which in the Aboriginal community is more a heterosexual issue than a homosexual one). One issue, however, outstrips all of the others in terms of urgency and
- severity. Over the past twenty years, researchers have identified the steadily increasing incidence of fetal alcohol syndrome (FAS) and fetal alcohol effects (FAE). It is most severe form, FAS children born from mothers who have consumed significant quantities of alcohol during pregnancy, have severe medical and developmental difficulties, roughly approximating those of Down's Syndrome. Children with FAE exhibit a less pronounced range of physical and mental symptoms, but the impact can nonetheless be considerable. While there is no precise estimate of the prevalence of this problem, there are reasonably convincing signs that 20-30% of children in select Aboriginal populations, particularly in rural and remote regions, have either FAS or FAE. Fetal alcohol syndrome issues raise a major challenge for health care professionals, particularly on the preventative side.
- 11. Single parent families: A growing number of Canadian children are raised by a single parent, typically their mother. Women in this situation face a wide variety of financial, occupational and health-related challenges. These include personal stress, difficulties providing appropriate food, shelter

- and clothing, problems with supervision of children, and related socio-economic challenges.
- 12. Regional variation in treatment regimes and practices (ie. Caesarian sections): The Canadian medical system, like that in other countries, suffers from the uncertainties and lack of consensus within medical science. As a consequence, there are substantial regional variations in a variety of medical practices specifically associated with women. Several studies, and not just in Canada, have identified substantial regional variations in the use of Caesarian sections to deliver babies. With proper adjustments for other factors (age of mothers, challenges facing the infant, other health care conditions), it is clear that doctors in some areas are far more likely to use this technique than in others. The use of Caesarian sections (and this is simply one, well-understood example) is dictated by medical custom, local practice and other imperatives (including, perhaps, pressure on birthing facilities) rather than by absolute and clearly understood medical principles.
- 13. Lifestyle choices, especially for young women: Canadian young women lived under a series of intense pressures and routinely confront major lifestyle choices with
- potentially severe health implications. Mass media add to these pressures, regularly portraying sexually permissive lifestyles, emphasizing the value of thinness and body type, promoting the use of cigarettes and alcohol, and legitimizing drug use. Sexual activity among Canadian women generally commences in the mid to late teens. While most young women have shown some caution in using condoms or taking the pill, there appears to be a growing trend back toward unprotected sexual activity. National concern about AIDS appears to have declined. Preoccupation with body shape and size has contributed to problems with bulimia and anorexia. Conversely. and paradoxically, lack of attention to nutrition and poor exercise habits have created severe problems with teenage obesity and general ill-health. Added to these are the challenges of an increasingly sedentary lifestyle, a sharp increase in smoking by young women, and fairly (but not uniformly) common recreational drug use. In general, many young women have often adopted a series of personal habits or practices which do not support a healthy lifestyle and which foreshadow personal and collective health challenges in the future.
- 14. Alternative medicines and therapies:A significant number of Canadian

women are not wedded to the structures and assumptions of traditional medicine. There is growing interest in alternative approaches, ranging from an increasing number of vegetarians, support for organic foods, concerns about genetically modified organisms, acupuncture and acupressure, herbal treatments, and openness to Aboriginal traditional healing. Women have, in a wide variety of forums, expressed support for opening the medical care system to other ways of understanding wellness, self-healing, and new treatment regimes. While the strength and precise nature of these movements are difficult to identify, there is nonetheless considerable evidence that many women are wishing the broaden the definition of medical care and to open the Canadian system to other ways of healing.

15. Funding medical care and health care research: North Americans have engaged in major debates over the funding of medical care and health care research. Advocates and critics of women's health care have argued, variously, that there is far too little research on women's issues or that women's concerns have been tackled out of proportion to their severity. The critics point, in particularly, to the relative

importance attached to breast cancer compared to male-specific medical conditions (like prostate cancer). While this debate is primarily a carry-over from the United States, similar concerns have been raised in Canada. On balance, it appears as though a wide variety of women's health care concerns have not been given comprehensive attention as yet, particularly on the research front. Medical attention is generally provided to women on an equitable and appropriate basis (with the obviously limitations that the quality and suitability of the care is determined by the medical practitioners and not by the funds allocated to the treatment). growing number of women in the health care professions and medical schools promises to ensure an expansion of women-centred health care and medical research. The establishment of Centres for Excellence for Women's Health [http://www.cewh-cesf.ca/en/index.ht ml] is a major step forward in this critical area.

Many of the health issues facing Canadian women are not unique to the country. They share a great deal of information and many perspectives with women from other western industrial nations and, increasingly, are open to

ideas and insights from non-western and non-industrial health care traditions. Health care in Canada, as in other democratic nations, must be understood as part of a larger socio-economic and political struggle for equality and fair treatment. It is, as an intensely personal and private field of human experience, both somewhat immune to public insight and response and an area in which all women, regardless of ethnicity, income level or educational attainment, have concerns, priorities and ideas. As women have gained greater authority in the political and commercial realm (Canadian women have been

particularly active in moving into the business of Canadian health care), they have used this increasing authority to demand changes to existing medical regimes and procedures. The struggle is far from over; male and systematic resistance to women's demands, and particularly to feminist imperatives, remains strong. So, too, however, is the determination of women to challenge and change the status quo. Increasingly, women have placed themselves in positions inside the medical professions where they will be able to make the changes that so many feel are urgently needed and long overdue.

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5. Communicating About Health and Health Care in the Information Age

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A. Health Information in the Digital Age:

For citizens of the industrial world, contemporary health care operates in an information-rich environment. Governments, corporations and non-governmental organizations have an enormous amount of information about public health, wellness, and health demographics. Half a century ago, medical knowledge rested in the hands of a nation's physicians and, depending on the level of government involvement in the society, with public health officials. There was little regulation of advertising and promotion of highly suspect medicines or treatments, which vied with legitimate products and services for spaces in newspapers, magazines and on store shelves. That world is now long past. Consumers, companies, physicians, public health officials, and anyone interested in health and health care has access to enormous quantities of information. In fact, if the challenge of the pre-1950s period was an absence of readily available data, the major problem facing researchers in the contemporary era is the over-abundance and highly

variable quality of health information and data about health care.

Governments, on-governmental organizations, universities/researchers and corporations have a wealth of health-related information at their disposal. In an age of constant polling and surveying, enormous qualities of data are collected on a regular basis. Governments which run national health care systems have, in particular, the combined statistical power of census and medical information. This enables them to produce numerous reports, analyses and other assessments of aspects of wellness and medical conditions. The United States, with its reliance on a combination of a restricted public health system and a remarkably complex privately insured medical system, faces much greater challenges in the collection, analysis and dissemination of health-related data.

A preliminary review of national and regional health information procedures and analyses relating to women in a series of western industrial nations provides useful insights into the

collection, dissemination and use of health data. Women have increasingly asserted the right to have their medical and wellness concerns granted appropriate weight within national health care systems. For several generations in most nations, the focus of female health initiatives rarely shifted beyond women's role as mothers. There were, particularly in New Zealand and Australia, active programs related to pre and post-natal health, and most western nations had specific initiatives designed to provide public health and interventionist help for mothers during the critical first two years of a child's life. The enthusiasm and commitment for women as mothers did not extend to other areas of their lives. Certain fields, such as reproductive health (particularly the control and termination of pregnancy), menopause and medical/health issues related to aging, received comparatively little attention. Furthermore, and not surprisingly given the emphasis on maternity, little effort was made to communicate with women about health realities and treatments across the life spectrum.

The rise of the feminist movement, particularly through the 1960s and 1970s, identified the gendered assumptions of national health care systems and the medical professions and resulted in greater public attention to women's health issues. This transition

occurred most rapidly in social democratic nations, particularly in Scandinavia and New Zealand, where attention to women's rights and opportunities in general attracted greater attention. The preliminary assessment of the creation and dissemination of women's health related information suggests that the process remains markedly politicized. Issues that have attracted a great deal of attention from women's organizations, particularly reproductive health, breast cancer and, more recently, AIDS, have generally drawn specific government and/or private sector responses. Concerns that lack the intensity or public profile of such topics, including menopause and osteoporosis, have primarily drawn the attention of university academics and researchers associated with women's groups.

It is important to note that, in most countries, it appears as though women's medical and wellness issues are attracting as much, if not more, specific government notice than men's issues. The comparative absence of men's organizations and the limited male interest in national campaigns related to health care and wellness has meant that there is comparatively little effort made to publicize or coordinate information gathering and sharing on issues specific to men. There have been information campaigns in several nations related to male-indicated illnesses, such as prostate

cancer and early-onset heart conditions. For men and women (particularly in North America), disease-based organizations are by far the most active distributors of public information related to wellness and medical care. Because of the intensity of their interest in a specific illness or medical condition, these organizations are generally well-attuned to gendered differences in health, incidence of the disease and medical treatments. As a consequence, these organizations tend to provide a large amount of gender-specific information and commentary.

Information on Health Characteristics:

Western nations have become, in many ways, health-obsessed. This shows up in a variety of manners: preoccupation with fitness and diet, development of new treatments and medications, intense interest in the quality of health care, strong emphasis on the education of health care professionals, a vast proliferations of television programs, movies, books and radio-talk shows devoted to medical and health issues, and steadily increasing advertising on health matters. In many western nations, this is something of an artifact of the aging of the baby-boomers (the children of the post-World War II era), a wealthy, health-obsessed generation that has been both beneficiary and consumer of the rapid expansion in health care services.

In countries with state-run medical systems, health care typically remains at or near the top of public political concerns.

As a consequence of the public preoccupation with wellness and health care, governments have a vested interest in collecting and maintaining statistical information on these subjects. Each of the countries surveyed has a strong track record for collecting health-related information, with the manner of collection varying according to the political structure of the specific nation. In the United States, the federal government is most active in assembling health care data. In Canada, in contrast, the responsibility falls to both the federal and provincial governments. Other countries, like New Zealand, Norway and others, have more centralized systems. The health data is used, in large measure, to plan and pay for state-run medical care and health-related programs, and to provide professionals and the general public with

The Specific Challenges of Women's Health:

Analysts of the condition of women's health and medical services targeted at women long ago identified the unique and important health experiences of women. The distinctive realities include the obvious considerations (due to the medical challenges of maternity and

related issues, women generally have more contact with the medical system than men) and the systematic (the long-standing patriarchal nature of the medical profession and the attendant marginalization of both female professionals and women's health issues). Add to this the higher level of responsibility that women typically undertake for their children's health, and a picture developments of a sector in which the information needs of women do not match with the structures and processes of wellness and medical information.

Beginning in the 1960s in most countries (earlier in New Zealand. Sweden and even Australia than in other nations), women's organizations began to push for major changes in the management of the health care system and, less directly, for the production and dissemination of health information. These developments built on a century-long tradition of women's activism. While a great deal of historical attention has focused on the campaign to gain the right to vote, most women's organizations devoted far more attention to broader matters of public education, child-care and related social and economic considerations. The reinvigorated women's movements of the 1960s pushed for greater and faster reforms. They challenged male dominance of the medical profession,

arguing that research activities, service priorities and standards of practice did not address the needs of women. (They pointed, in particular, to the unwillingness of the male-dominated medical profession to share authority with the female-dominated nursing profession.) They fought for the right to have access to basic medications, like oral contraceptives, and to otherwise have the right to use medical services to control their reproductive lives. There were campaigns for female-targeted research programs, such as screening for breast cancer and improved treatment in this highly important area. And there were special initiatives in all countries aimed at attracting more women into the medical professions.

Governments responded with some enthusiasm to the demands and expectations for a more women's centre wellness and health-care system. funded public health centres and made specific efforts to address pre and post-natal needs. In some countries, governments funded women's health clinics. Where they were reluctant to do so, women's groups established their own centres. These institutions proved to be of pivotal importance, working outside the professional mainstream and yet staffed by trained health care providers. Women could use these centres to get published material and highly specialized professional advice. They could do so in

an environment created for and by women, and one dedicated to addressing the specific medical and personal concerns of women. These and related centres also made it possible for women to explore alternative medicines and medical treatments, moving away from the heavily interventionist and crisis-focused western system toward more holistic and natural means of addressing issues of wellness and illness. The gradual and then steady increase in the number of women in medicine assisted the trend toward more inclusive health care. Women now had increasing opportunities to have their medical care handled by a female physician, a development many hailed as a major accomplishment.

Women had largely felt disenfranchised within the medical system in the western industrial world, a sentiment which still lingers (particularly in North America). The patriarchal structures of the medical profession remain substantially in place and many women still question the responsiveness of the system to women's concerns. Women still struggle to ensure that appropriate attention is paid to illnesses and conditions which are specific to women or to which women are particularly disposed. And they continue to work to find places within the state-funded and insurance-based medical programs for alternate medical

systems. Because the tensions about women's health and women's medical care remain, controlling the collection and dissemination of health-related information remains a key consideration for women.

Effectiveness of the Distribution of Information:

Until the advent of the Internet (see the discussion below), members of the general public had uneven access to health-related information. Government data enjoyed little circulation outside professional and administrative circles, save for occasional use by a journalist. The public had limited direct access to the massive volumes of statistical and programmatic information available, and generally little use for it when they found it. Similarly, academic research materials (commented on in the general press only when significant discoveries or advances were made) enjoyed little circulation beyond its originating scientific community. The research was prepared for select groups of specialized academics, and the information reached the general public only through the careful filters of the medical profession. Corporate information, likewise, was targeted generally at physicians, specialists, and support professionals; only with readily available, over-the-counter medications was there much of an effort made to

reach a broader audience. (Importantly, this began to change in the late 1990s, particularly in the United States.

Television advertisements for new pharmaceuticals, available only by prescription, became more commonplace.

The extraordinary success of the marketing of Viagra (a drug aimed at male impotence) appears to have embolden other drug manufacturers to venture into the marketplace with advertisements for a variety of pharmaceuticals.

The manner in which most citizens gain access to health information has changed little over the past several generations. Relatively accessible health care (state funded or insurance based) allowed individuals to turn swiftly and easily to medical professionals for advice and information. These individuals, in turn, gained access to information through the standard courses: medical and health journals (usually related to specific specialties) and hospital and university libraries. Public health nurses and related professionals, who played an active role in health care education and primary care delivery in all of the western industrial nations, likewise provided the general public with less specialized information. Working through schools, pre-natal care courses, and other outreach activities, public health professionals offered data on broader

societal health matters, such as the medical consequences of smoking, various sexually transmitted diseases (escalating with the AIDS epidemic), and the benefits of a proper diet and an appropriate level of exercise. That the vast majority of the public education was undertaken through or by government ensured that a reasonably high standard was applied to the quality of information involved (although this system broke down in some areas, as with the over-zealous reporting of the impact of certain recreational drugs).

In general, the middle and wealthier classes tend to have reasonable access to information related to wellness and health care, typically through medically trained intermediaries. The same does not hold for the less well-educated members of industrial societies. Although state-funded health care is generally available (less readily in the United States than most other countries), people in the lower socio-economic categories are less likely to take advantage of both preventative and reactive medical treatments. Governments target a great deal of their dissemination efforts at these groups, hoping to contribute to the alleviation of the full effects of poverty and marginalization. Campaigns about drug and alcohol abuse, safe sexual practices. infant nutrition and the like have been designed specifically to address common

health problems in these populations. Success has been uneven, at best.

Until recently, medical and health-related information, though abundant in quantity and diverse in quality, remained largely in silos. Medical professionals and government agencies generally held the keys to the distribution of this data. Public health initiatives used health information. rather selectively, to promote community wellness and what was deemed to be appropriate, normative behaviour (ie. In terms of sexual practices). Governments also collected vast quantities of information which they used to plan a variety of wellness and medical initiatives. Consumers, in comparison, relied heavily on others to provide access to the information and its interpretation.

Information and Informed Choices about Health Care:

In a world of abundant, if incomplete, information about wellness and health care, it is difficult for the lay-person and professional alike to sort through the mass of data and stay abreast of recent developments in the field. Corporations spend an enormous amount of money promoting specific medications and treatments, focusing most of their effort (except in the United States) on medical professionals. Government collect reams of data about public health, women's health issues, and specific

regional and ethnic group concerns. They use this information both to plan effectively for public health interventions and to provide the statistical and informational foundation necessary for public information campaigns. The collective result, in those nations with a free press, activist governments, few constraints on advertising, and well-developed non-governmental organizations, is often information overload. The reporting and misreporting of health information by the media typically results in a government and NGO response. Private sector advertising for newly developed drugs often results in a very rapid increase in inquiries to health care professionals about alternate treatment regimes. For the lay person, typically without the specialized knowledge to move easily through the abundant materials and numerous reports, the over-reporting of health information can be bewildering, unnerving, confusing and unhelpful. In countries without well-developed health information systems, the major problems are an absence of solid statistical epidemiological evidence, no easy means of communicating key medical and health-related information to target populations, and a generally ill-informed population. In countries with properly function health information systems, the major problems are an over-abundance of information, conflicting emphases among

the various information providers, few effective means of filtering the data, and a general public that is often confused, if not mystified, about the reality of wellness and medical care.

As with any professional or government service, the challenge of relating information/data to need and opportunity is formidable. In the western industrial nations, there is no shortage of health-related information. Statistical data are readily available as is comprehensive information on a wide variety of ailments, treatments, services and programs. Data is not the problem. Gaining access to the appropriate information, vetted for professional and scientific appropriateness and applicability to personal circumstances, is an enormous challenge. Even in advance of the development of the Internet, which created new problems and opportunities, the difficulty lay with the fact that there is too much information, of widely varying quality and utility, and of uneven availability. Key material is only accessible, due to problems of availability, language and scientific content, to professionals with advanced levels of preparation. Information of dubious quality, in contrast, can be found in television and magazine ads and other promotion material. In such circumstances, the ability of the consumer to discriminate in the selection of use of wellness and

health-related data becomes a key determinant. Whatever the problems and accomplishments in health information in the past two decades, and they were significant enough, the transformation unleashed by the advent of the Internet creates a radically different environment for the sharing, analysis and use of health-related information.

B. Digital Health Information: The Internet and the Promotion of Women's Health

The promotion of women's health remains a key government and public challenge throughout the world. In developing countries, aid organizations, national governments and other agencies devote considerable energy to the dissemination of basic and dependable health education, hoping to thereby address the many medical challenges facing the globe's poorest citizens. In industrial nations, women generally have access to much better medical care, but routinely raise questions about the quality, accessibility and suitability of the information provided. For many women activists, medicine remains a male-dominated profession, with the "secrets" and insights of the discipline largely guarded from women's view. Even on issues of fundamental importance to the world - reproductive health, breast cancer, sexually

transmitted diseases, etc. --- the critics allege that women often lack access to the information necessary to make informed choices about their wellness, preventative strategies, and medical treatments.

Since the late nineteenth century, women across the European and Anglo-American world have sought ways of promoting and encouraging the sharing of health-related information. The public health movement had its roots in the 19th century and focused on the provision of health care information to the general population. There was particular concern, as wealthier citizens became more concerned and responsible for the "lower" classes, that material be made available for those who could not read. Women were the prime conduit for learning and public education. A wide variety of voluntary and charitable organizations distributed information and provided public clinics dealing with women's issues. Many, however, mixed religious and moral lessons with medical advice, often making it difficult to separate these sometimes conflicting elements. Government programs aimed at pre and post-natal care likewise endeavoured to build a healthy population through attention to women and their young children. Information, however, generally remained largely controlled by church groups and other non-profit agencies, by government departments and by special interest

groups. For countless women, the opportunity to secure reliable, affordable and accurate medical information remained elusive. These women found themselves, instead, dependent upon health care professionals to provide necessary advice and support

The digital revolution of the 1990s and beyond changed the situation dramatically, and in ways that few people anticipated. The cornerstone of the "revolution" has been the Internet, a technology which has altered the way people work, communicate, learn, investigate, and understand their world. Even in the aftermath of the dot.com collapse, which ended some of the fanciful visions of am information-intensive digital world, most citizens of industrial nations have a reasonable awareness of the value of the Internet in finding and sharing data, news, insights and conversation. The continued transformation of digital communications, led by DoCoMo's remarkably successful introduction of the i-mode telephone (mobile Internet), suggests that the future will see further refinement and expansion of Internet-capable devices and information-sharing strategies. For women in countries with excellent Internet systems and wide dissemination of personal computers, the digital revolution provides a technological foundation for a revolution in the distribution of information.