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Don't Blame Low-Income Mothers!

Understanding Low-Income Mothers' Socio-ecological Circumstances in Relation to Health Status

The literature clearly identifies the alarming trends attributable to the socio-ecological circumstances of low-income mothers including poor mental health, cardiovascular illness, poor pregnancy outcomes, and lack of participation in health promotion activities such as prenatal education. In addition, there is extensive published research related to low-income, lone parenting mothers who are unable to access health promotion programs and activities. This is despite the fact that studies have also indicated that low-income mothers do benefit from activities aimed at health enhancement, especially in the short term. This paper critically reviews some of the literature related to these problematic areas and argues for the use of a feminist and socio-ecological perspective to better understand the lived experiences of low-income, lone parenting mothers including how their socio-economic environments can impede health status. The voices of some low-income mothers who participated in a qualitative study in Nova Scotia, Canada are included.

Low-income mothers have been identified as an at risk population for poor health. There are a multitude of health issues to which low income mothers are more vulnerable which include poor mental health, cardiovascular illness, poor pregnancy outcomes, and lack of participation in health promotion activities such as prenatal education. Although participation in programs aimed at reducing smoking, controlling weight, increasing physical activity, and improving diets to reduce risks for CVD have been successful in improving the health of some low-income mothers, many are unable to access the programs because of certain life circumstances. As the focus of most program and service evaluations is to assess the impact of health care utilization at the level of the individual, the links between people and their social-environmental conditions are too often ignored. This paper critically reviews literature related to these problematic

areas and argues for the use of a feminist and socio-ecological perspective to fully understand the lived experiences of low-income, lone parenting mothers. It also includes the voices of low-income, lone parenting mothers from a qualitative study Masters thesis conducted by the author (MacLellan-Peters, 2009) in rural Nova Scotia. Conclusions suggest that more research is needed to identify the actual enablers and barriers low-income mothers experience, taking into account the complex interplay of the many determinants of health from mothers' perspectives.

Poverty persists

In Canada, literature reports that lone parent mothers and their children continue to be vulnerable to poverty (Young and Woodrow, 2000: 533; Browne et al. 2001: 1698; Spitzer, 2005: S80) and that these families continue to grow in numbers, a trend that has been consistent for at least fifteen years since the early 1990s (Gucciardi 2004: 70; Kerr and Michalski, 2005: 6; Lipman and Offord, 1994: 1, Raven and Frank, n.d.: 6). For example, in 1986, lone parent families represented 13 percent of all Canadian families and of these, 82 percent were headed by lone mothers (Cohen, 1994: 950), while in 2001, 81 percent of lone parent families in Canada were headed by women (Statistics Canada, 2003: 2). As in the past, low-income mothers are also more likely to remain in a state of poverty for long periods of time (Phipps, 2003: 9). With these shocking statistics, it is evident that we need to continue to ask why lone parent mothers are still among the majority of people living in poverty.

Socio-ecological framework and feminist perspective

Although programs and services that promote and support health have been shown to reduce morbidity and mortality for low-income mothers (Blackwell, 2002: 562; MacLellan, Bradley and Brimacombe, 2001: 183; Mikhail, 1999: 335; Stark, 2004: iv; Sword, 2003: 125), many do not participate in screening programs to detect disease and poor health (Lipman and Boyle, 2005: 1454). The conditions that contribute to the lack of access and participation in health promotion programs and activities of this vulnerable population are multiple and complex. To better understand how low-income, lone parent mothers are caught within a cycle of poverty, a feminist socioecological perspective is used to guide this discussion by providing a lens that resists blaming mothers as individuals for their deprived and difficult circumstances.

A feminist perspective has been chosen because it allows both individual and social issues to be illuminated in order to understand inequities that exist for low-income, lone parenting mothers, while a socio-ecological perspective allows the interactions between social conditions and behaviour to eventually become clear, an important consideration when examining the health of low-income, lone parenting mothers. Both of these approaches also acknowledge the influence of broad environmental and socio-economic factors as determinated and socio-economic factors and socio-economic factors are determinated and socio-economic factors as determinated and socio-economic factors are determinated and socio-economic factors as determinated and socio-economic factors are determinated and socio-economic factors and determinated and socio-economic factors are determinated and socio-economic factors and determinated and dete

nants of well-being (MacPherson, 1983: 17-24; McLeroy, et al.,1988: 351-77). Acknowledging the reciprocal relationships between people and their environments is essential when assessing access and participation in health care for vulnerable populations such as low-income, lone parenting mothers (McMurray, 2003: 34).

The following discussion summarizes and critiques some of the literature within the areas of mental health, cardiovascular disease, poor pregnancy outcomes, and participation in health promotion activities for low-income, lone parenting mothers and includes the voices of mother participants from a qualitative study conducted in 2008 in rural Nova Scotia (MacLellan-Peters, 2009). In her Masters thesis, Janis MacLellan-Peters (2009) examined the experiences of low-income, lone parenting mothers as they accessed health related services and supports. This research encouraged lone mothers to describe how the experience of low-income had impacted their lives and the lives of their children while identifying barriers and enablers to accessing and participating in health promotion activities. In doing so, their stories were told within the context of their own lived experiences and, as a result, provided a deeper context to the statistics surrounding them. Stories told by the women participants mirrored statistics that represent families in poverty and confirmed that low-income, lone parenting mothers are generally cognizant of the realities of their situations. It also confirmed that the essential component missing from government reports about these women lies in the tremendous value of their personal, normally untold, stories.

Mental health

Lone mothers suffer more mental health disorders than mothers with partners (Browne et al., 2001: 1698; Cairney et al., 1999: 320; Curtis, 2001: 337; Gucciardi, Celasun, and Stewart, 2004: 71; Lipman and Boyle, 2005: 1454; Peden, Rayens and Hall, 2005: 18). For example, they have higher rates of psychosocial distress and psychiatric disorders (Cairney and Wade, 2002 236-42; Lipman and Boyle, 2005; Browne et al., 2001) and an increased incidence of depression (Peden, Rayens and Hall, 2005) than the general population. An examination of the occurrence of major depressive episodes among lone and married mothers using representative samples from all provinces in Canada over a twelve-month period indicated that lone mothers have nearly double the rate of depression, at 15.4 percent, compared to married mothers at 6.8 percent (Cairney et al., 1999: 322). Additionally, in Canada, unemployed lone parenting mothers report twice the rate of mental distress compared to other groups (Spitzer, 2005: S88).

Causes of mental illness for lone mothers are known to be embedded in their socio-ecological circumstances and include gender inequality (Cairney and Wade, 2002: 241; Spitzer, 2005: S88), unemployment (Spitzer, 2005), declining living standards (Cairney and Wade, 2002; Gucciardi, Celasun, and Stewart, 2004: 70; Spitzer, 2005), the obligation to perform in multiple

roles as provider and nurturer (Gucciardi, Celasun, and Stewart, 2004) and increased stress in their daily lives (Gucciardi, Celasun, and Stewart, 2004; Peden, Rayens and Hall, 2005: 19). In addition, rural women's experiences of depression and the coping strategies they employ indicate that they view their depressive symptoms as expected consequences of the external stressors in their everyday lives—external stressors that often include financial difficulties, geographic isolation, and childcare responsibilities (Stoppard and Scattolon, 1999: 15).

As a low-income mother in rural Nova Scotia, this women described how her self-confidence was undermined because of the daily stress of coping as a lone parent and managing with minimal financial resources:

Nobody else is responsible for the care and welfare of these guys but me. I do everything I can to get them every penny available but when that cheque bounces the weight is on my shoulders. Yes, I can go to (a relative) and borrow money, but how does that feel when I have to ask for help when their father is suppose to be doing it. It takes away every bit of pride that you have, every bit of sense that I can do this and it takes away the feeling that I am doing a good job and doing the right thing.

Another mother who had two young children and had left her partner citing irreconcilable differences described how the limited financial support from him created continuous anxiety and distress:

His lawyer told him he was only obligated to send that much money (and) I said well ok, maybe that is true. I said to him you know that's your logic but this is my reality, these are what my bills are, with what you've given me I have a hundred dollars to feed the kids—that's how much I have left over after I pay the rent and after I pay the power... (and) this is probably the cheapest accommodation we could possibly get to live in.

From a social feminist point of view, expected consequences can be understood as a victim blaming mentality that is attributed to women who are seen as not being able to handle the stress in their lives. This is an oppressive response that has created a discourse that focuses on individual behaviour rather than using a different lens to appreciate how a person's social environment and especially their disadvantaged situation can perpetuate poor health status. With the knowledge that low-income mothers are more susceptible to poor mental health, it would seem reasonable to increase preventative services that focus on socio-ecological aspects of their lives such as social, institutional, and government programs pertaining to income.

Cardiovascular illness

Cardiovascular disease is the leading cause of death for women in Canada

(Heart and Stroke Foundation of Canada 1). Not surprisingly, lone parenting mothers have been identified as being at particular risk for cardiovascular disease (Frisby et al., 2005: 21; Young, James and Cunningham, 2004: 333) primarily as a consequence of lifestyle risk factors including smoking, poor diet, inactivity, and stress (Young, James and Cunningham, 2004: 331). These circumstances, which are embedded in the socio-environmental circumstances of low-income women, are also identified internationally as negatively impacting on their health as an aggregate population (Gettleman and Winkleby, 2000: 440).

Smoking rates for example are known to be higher among those of low socio-economic status (Gettleman and Winkleby, 2000: 440) including lone parenting mothers. (Hee-Jin Jun et al., 2004: 2171; Young, James, and Cunningham, 2004: 331). Lori Curtis (343) found that on average, lone parenting mothers smoked twice as many cigarettes per day as married mothers. It is also known that not only do low-income mothers use smoking as a way to cope with stressful life events but smoking is a contributor to their higher rates of cardiovascular disease (Young, James, and Cunningham, 2004: 332). Sadly, impoverished neighborhoods are targeted by tobacco advertisers (Gettleman and Winkleby, 2004: 440).

Smoking is a complex issue that needs to be understood from a socio-ecological perspective. If the stress of poverty creates circumstances whereby women feel they need to smoke in order to cope, then the solution is not as simple as encouraging women to participate in smoking cessation programs to modify their behaviours. Rather the social environmental circumstances of a mother's life needs to be attended to in order to understand how smoking and cardiovascular illness are integral to her lifestyle. Five of the seven women who participated in the Nova Scotia study had used smoking as a way to cope with stress. When interviewed some mothers also suggested professional one-on one support could help them cope better with the realities of being a low-income, lone parenting mother. For example this mother suggested:

If there was counseling...where you could just go and be there by yourself which would mean that they would also have people there that could take care of your kids because yes at this point in my life there's no way out, there's no time off. That is kind of what you sign up for when you become a parent.

Poor nutrition is another risk factor for cardiovascular disease (Heart and Stroke Foundation of Canada, 2006: 1). Literature reports that low-income, lone parenting mothers frequently struggle to provide basic necessities for themselves and their children, including food (Raven and Frank, 2005: 14, MacIntyre et al., 2002; Howe and Covell, 2003: 1077). Data from the National Population Health Survey indicates that in 1998 and 1999, 32 per cent of all families parented only by women were short of food and 28 per cent reported having a compromised diet (Che and Chen, 2004). Most mothers in MacLellan-Peters

2009 Masters study experienced hunger in order to provide nourishing food for their children. For example, one woman described how she compromised her own diet in order to feed her children nutritious food:

There have been times where things have been tight and I have eaten rice and water for two weeks so that my kids could have the meat and milk. I definitely have sacrificed my own healthy eating ... many times.

Reports also indicate that in Canada, 59 per cent of food bank users are parents with children and 40 per cent of those parents limit their food intake in an attempt to ensure adequate food for their families (Singer, n.d.: 5). Another mother described how she managed to keep her son from knowing she needed help from a food bank to provide enough food for her family to eat:

...one day with my son, ... I had to go to the food bank and he looked at me and he said "Mom what's happening?" and I said "Oh it's a grocery store for people that don't have much"... and he just said oh, okay, and that was it... he didn't have any right to know that his Mommy had to go there.

Hunger and poor nutritional status frequently stem from impoverished socioeconomic circumstances (McIntyre et al, 2002:. 411-15) and in Canada it is a national disgrace that low income mothers are sacrificing their own dietary intakes in order to ensure their children have healthier food choices.

Physical inactivity is a known risk factor for cardiovascular disease. Lynne Young, Allison James, and Susanna Cunningham (2004: 333) found that over 55 per cent of Canadian mothers in general were physically inactive and Wendy Frisby et al. (2005: 21) report that low-income women are least likely to participate in regular physical activity. Barriers to accessing and participating in recreational activities for low-income, lone mothers are complex and include cost, childcare, isolation, inadequate housing and transportation (Frisby et al., 2005). Physical activity has been identified as critical in reducing risk factors for CVD (Plotnikoff et al., 2000: 59). Although low-income mothers who participated in MacLellan-Peters' 2009 study identified physical activity as an important component of maintaining one's health, they also identified several disadvantages of living in areas that limited their ability to access some programs because of transportation costs. For example one mother stated:

I have a vehicle of my own ... but just being able to pay for the gas and insurance on it these days you know how pretty scary (that is) ... that's one problem about living in such a rural area.

Finally, research identifies lone motherhood and low socio-economic status as risk factors that contribute to stress and negative life events (Young, James,

and Cunningham, 2004: 333). Cardiovascular disease is reported to be greater among those who suffer from depression and anxiety, care for large families, and work in environments where they have little power or control (Spitzer, 2005: S89). Lone mothers experience considerable more stressful events in their daily lives than partnered mothers (Curtis, 2001: 337) and as previously discussed suffer higher rates of diagnosed psychiatric disorders (Cairney and Wade, 2002) and have increased rates of smoking. The daily struggles of low-income, lone parenting mothers include the dual roles of nurturer and provider that frequently contribute to increased levels of anxiety and caregiver strain (Gucciardi, Celasun and Stewart, 2004: 71). The despair and discontentment in this mother's voice was evident as she described her daily struggles as a low-income, lone parenting mother:

Even now that I work I hate it. I'm still broke, every day. I get paid for my time, and I pay rent ... I pay my bills, and get my kids what they need, and sometimes what they want, and it's like ... I'm broke until next payday.... If I have the extra money I would get them, you know a treat. How can I save money?

Another mother in MacLellan-Peters' 2009 study lived in poverty and relied on help from her parents to support herself and her infant daughter. She received minimal financial support from her baby's father and had a strained relationship with him. She stated:

... I still have previous bills, I didn't plan on getting pregnant and honestly if I didn't live here with them, then I would have trouble feeding her, feeding myself, so without their help ... without them I honestly would be ... helpless.

In Canada, Ronald Plotnikoff et al. (2000: 58-59) examined the incidence and profiles of behavioural and biomedical risk factors of heart disease in a randomized community sample of 843 Canadian women. The authors suggest that the prevention and treatment of heart disease in Canadian women must include multiple interventions aimed at their social-environmental circumstances in order to reduce the incidence of cardiovascular disease (Plotnikoff et al., 2000). Again, understanding the complex and multiple layers of low-income mother's lives will provide a better understanding of their cardiovascular health.

Poor pregnancy outcomes

Literature reports that low-income mothers are at risk for poor pregnancy outcomes (Public Health Agency of Canada, 2005: 5), including premature deliveries and low birth weight infants (Sword, 1999: 1170). Low birth-weight infants frequently have multiple health problems including developmental de-

lays, respiratory illnesses, problems with vision, and cerebral palsy (Stark, 2004: 1). These infants are also at an increased risk of developing Type II diabetes later in life (Stark, 2004). The emotional stress experienced by the mother can have a lasting impact as mother-infant bonding is frequently delayed due to medical interventions involving technology. Furthermore, the health care costs of low birth weight babies can skyrocket because of frequent hospitalizations, the need for special medical assistance such as drugs and equipment, and the need for added learning resources.

Maternal and newborn outcomes are influenced by access to health care during pregnancy, including perinatal education, support and counseling, and medical monitoring (Sword, 2000: 125), but low-income mothers are consistently identified as being among the least likely to access prenatal care (Mikhail, 1999: 336; Sword, 1999: 1171, 2000; Stark, 2004: ii). MacLellan-Peters (2009) also found that lone mothers felt marginalized and stigmatized because of their low-income status and were reluctant to attend some prenatal education sessions. One mother stated:

As far as going to classes and stuff I didn't participate because I was too afraid that people would see me there and know that I am low-income and that I am a single parent and that was embarrassing and hard because of the biases and prejudices toward people who are low income or single parents. I know people that have made comments such as "what right do you have bringing another life into the world when you are hardly taking care of the ones you have."

This is consistent with other research. In a qualitative study by Sword (2000: 126) low-income women were interviewed to determine how their life experiences might contribute to their infrequent participation in prenatal care. A negative perception of the health care system was a key theme that emerged during data analysis as well as a lack of awareness of programs, inadequate finances, and their need for childcare and transportation (127). Age, lone parenting, low-level education, and geographic location are other reasons for limited use of prenatal services (Stark, 2004: 1-8)

The socio-environmental circumstances and voices of low-income mothers must guide the design and implementation of health enhancing interventions to ensure compatibility with their lived experiences. However, they continue to be excluded from many resources because of policies that do not value their input or include their opinions in decisions that directly affect their well-being (Sword, 1997: 329).

Participation in health promotion activities

Health promotion programs and services have been shown to reduce morbidity and mortality for populations (Raphael, 2000:1355-367; Hamilton and Bhatti, 1996: 1-17) and research has demonstrated that low-income mothers

who access and participate in health promotion programs do realize health benefits for themselves and their children at least in the short term (Browne et al., 2001; Koniak-Griffin et al., 2002: 50; Mikhail, 1999: 345; Sword, 2000: 125). However, most interventions are aimed at individual behavioral change and do not consider the influence of the social determinants of health including socio-economic status. As a result, any improvement in health status is often short-lived while the barriers to health enhancement, which restrict access and participation, remain the daily reality of low-income mothers. Ellen Lipman and Michael Boyle (2005: 1454) studied the impact of a community-based program aimed at improving the mental health of lone mothers and enhancing their parenting skills through social support and education. Results clearly indicated that time-limited interventions aimed at individual behavioural change, which ignore social health determinants, had limited potential in improving the life circumstances of low-income mothers.

Accessibility and participation in health promotion activities is therefore clearly an issue of prime importance to low-income, lone parent mothers. It appears that when attention is paid to socio-ecological aspects of programs such as cost and the availability of supports, positive health outcomes can result. Literature suggests that when given an opportunity low-income mothers are able to identify enablers and barriers to their participation (Gettleman and Winkleby, 2000: 448; Hoskins et al., 2000: iv; Parades et al., 1999; Sword, 2000: 132). For example, Wendy Sword (2000) found in her Ontario study that low income mothers were more likely to access prenatal care if they felt their opinions and input were valued enough to influence program content and delivery. The findings also identified a need for health care providers, and others involved in program administration, to recognize and acknowledge the unique circumstances of low-income women that require flexibility in the creation and delivery of pre-natal programs.

The mothers who participated in MacLellan-Peters' (2009) study identified local Family Resource Centres as providers of services that included their voices in the design and implementation of health promotion programs. One mother described her sessions with a Coordinator:

When they listen they really listen. They are making eye contact with you and they are really paying attention to what you are saying and from one visit to the next they will remember what is going on with you and what your needs and issues are.

Similarly, another mother expressed appreciation for the tangible supports received from her local Family Resource Centre that promoted her access:

I found it was great and easy access because I was able to have transportation provided for me which was good because I didn't drive ... so they offered to help out that way and they offered for child care too if you needed it.

One mother acknowledged the assistance in the form of childcare that positively impacted her ability to participate in health enhancing programs:

I can bring both of them. (It was) a good thing that she (toddler) could come because if she couldn't come then I wouldn't go, because I don't have anybody that can really watch them except in an emergency.... They'd monitor her when I'm busy with (her sister) or even if I just wanted to sit; it is a bit of a break because she's busy and ... I know that she'll be kind of monitored by someone.

Some low-income women in Newfoundland expressed a preference for one-on-one prenatal education and were in favour of more classes during the day, as opposed to the traditional sessions that were usually offered in the evening. Women in focus groups also identified financial constraints as barriers to attending any type of prenatal education class (Hoskins et al., 2000: iv).

Similarly, in the United States, Lynn Gettleman and Marilyn Winkleby (2000: 443-448) in a qualitative study for low-income women with risks for Cardiovascular Disease (CVD), found that the participants were aware of their risk factors, as well as broader environmental influences that either promoted or restricted their behavioural choices, and they expressed interest in practicing healthier behaviours. When they were asked for input into priority areas for CVD prevention programs, they not only identified their need for better skills to support behavioral change, but also the need to recognize the barriers created by the socio-economic conditions of their lives.

Conclusion

More research is needed to identify the multiple influences on low-income mothers' personal health practices when accessing and participating in health promotion activities, including the complex interplay of the many determinants of health. The use of a feminist socio-ecological model, that recognizes the multiple influences on low-income mothers' personal health practices, is therefore needed. Using a socio-ecological model and feminist perspective allows for an examination of the connection between low-income mothers and their environments and helps promote an understanding of their complex lives using an in-depth, multilevel analysis. Recognizing the connection between individuals and their environments, and the effects of socio-economic conditions that promote the health inequities experienced by marginalized groups, will also assist in uncovering gender-based influences on the ability of low-income mothers to seek justice for themselves and their children.

The title of this manuscript: "Don't Blame Low-income Mothers! Understanding Low-income Mothers' Socio-ecological Circumstances in Relation to Health Status" was inspired by the Paula J. Caplan's 1989 book entitled: Don't Blame Mother: Mending the Mother-Daughter Relationship (New York: Harper & Row).

References

- Blackwell, Deborah. A. 2002. "Prenatal Care Services in the Public and Private Arena." *Journal of the American Academy of Nurse Practitioners* 14 (12): 562-567.
- Browne, Gina, Carolyn Byrne, Jacqueline Roberts et al. 2001. "When the Bough Breaks: Provider-Initiated Comprehensive Care is More Effective and Less Expensive for Sole-Support Parents on Social Assistance." *Social Science and Medicine* 53 (12): 1697-1710.
- Cairney, John, Cathy Thorpe, John Rietchlin et al. 1999. "12-Month Prevalence of Depression among Single and Married Mothers in the 1994 National Population Health Survey." Canadian Journal of Public Health 90 (5): 320-324.
- Cairney, John and Terrance Wade. 2002. "Single Parent Mothers in Canada." Social Psychiatry Psychiatric Epidemiology 37: 236-242.
- Che, J. and J. Chen. 2004. "Food Insecurity in Canadian Households." *Health Report 2001* 12 (4): 11-21.
- Cohen, May. 1994. "Impact of Poverty on Women's Health." *Canadian Family Physician* 40: 949-957.
- Curtis, Lori J. 2001. "Lone Motherhood and Health Status." *Canadian Public Policy / Analyse de Politiques* 27 (3): 335-356.
- Frisby, Wendy, Fearon Blair, Theresa Dorer, et al. 2005. "Taking Action: Mobilizing Communities to Provide Recreation for Women on Low Incomes." Research Bulletin of the Centres of Excellence for Women's Health 4 (2): 21-23.
- Gettleman, Lynn and Marilyn A. Winkleby. 2000. "Using Focus Groups to Develop a Heart Disease Prevention Program for Ethnically Diverse, Low-Income Women." *Journal of Community Health* 25 (6): 439-453.
- Gucciardi, Enza, Nalan Celasun and Donna E. Stewart. 2004. "Single-Mother Families in Canada." *Canadian Journal of Public Health* 95 (1): 70-73.
- Hamilton, Nancy and Tarig Bhatti. 1996. *Population Health Promotion: An Integrated Model of Population Health and Health Promotion*. Ottawa: Health and Welfare Canada, Health Promotion Development Division. 1-17.
- Heart and Stroke Foundation of Canada. 2006. Fact sheet on the Heart Health of Canadian Women. Retrieved May 10th, 2007 from http://ww2.heartand-stroke.ca/images/english/Women_HeartHealth.pdf>.
- Hoskins, Rhoda, Catherine Donovan, Serge Merhi, et al. 2000. "Examining Prenatal Services: Local Public Health Infrastructure Development." (LoPHID) Project. CIET Canada.
- Howe, R. Brian and Katherine Covell. 2003. "Child Poverty in Canada and the Rights of the Child." *Human Rights Quarterly* 25 (4): 1067-1087.
- Hee-Jin Jun, S. V. Subramanian, Steven Gortmaker, and Ichiro Kawachi. 2004. "Socioeconomic Disadvantage, Parenting Responsibility, and Women's

- Smoking in the United States." *American Journal of Public Health* 94 (12): 2170 2176.
- Kerr, Don and Joseph Michalski. 2005. "Income Poverty in Canada: Recent Trends Among Canadian Families 1981-2002." Discussion Paper No. 05-02. London, ON: University of Western Ontario Population Studies Centre.
- Koniak-Griffin, Deborah, Nancy L. R. Anderson, Mary-Lynn Brecht, et al. 2002. "Public Health Nursing Care for Adolescent Mothers: Impact on Infant Health and Selected Maternal Outcomes at One Year Postbirth." *Journal of Adolescent Health* 30 (1): 44-54.
- Lipman, Ellen and Michael H. Boyle. 2005. "Social Support and Education Groups for Single Mothers: A Randomized Controlled Trial of a Community-Based Program." *Canadian Medical Association Journal* 173 (12): 1451-1456.
- Lipman, Ellen L. and David R. Offord. 1994. "Disadvantaged Children." Canadian Guide to Clinical Preventative Health Care. Ottawa: Health Canada. 356-368.
- MacLellan, Debbie, Deborah Bradley, and Michael Brimacombe. 2001. "Stakeholder Evaluation of a High-Risk Prenatal Nutrition Intervention Program in Prince Edward Island." *Canadian Journal of Dietetic Practice and Research* 62 (4): 182-187.
- MacLellan-Peters, Janis. 2009. "Factors that Enhance or Limit Access to, and Participation in, Health Promotion Programs and Activities by Low-income, Lone Parenting Mothers in a Rural Nova Scotia Region." Unpublished Masters' Thesis, Dalhousie University, Nova Scotia.
- MacPherson, Kathleen I. 1983. "Feminist Methods: A New Paradigm for Nursing Research." *Advances in Nursing Science* 5 (2): 17-25.
- McIntyre, Lynn, N. Theresa Glanville, Suzanne Officer, et al. 2002. "Food Insecurity of Low-Income Lone Mothers and Their Children in Atlantic Canada." *Canadian Journal of Public Health* 93 (6): 411-415.
- McLeroy, Kenneth, Daniel Bibeau, Allan Steckler, et al. 1988. "An Ecological Perspective on Health Promotion Programs." *Health Education Quarterly* 15 (4): 351-377.
- McMurray, A. 2003. Community Health and Wellness: A Socio-ecological Approach. Sydney, Australia: Mosby.
- Mikhail, Blanche I. 1999. "Perceived Impediments to Prenatal Care Among Low-Income Women." Western Journal of Nursing Research 21 (3): 335-355.
- Paredes, S., Eileen Woodford, Agatha Hopkins, Madonna MacDonald, et al. 1999. Perinatal Care and Caring in Northern Nova Scotia: The First LoPhid Cycle: Key Findings. CIET Canada.
- Pedan, Ann, Mary Kay Rayens, and Lynne A. Hall. 2005. "A Community-based Depression Prevention Intervention with Low-income Single Mothers. Journal of the American Psychiatric Nurses Association 11 (1): 18-25.
- Phipps, Shelley. 2003. "The Impact of Poverty on Health: A Scan of Research

- Literature." Ottawa: Canadian Institute for Health Information.
- Plotnikoff, Ronald C., Kylie Hugo, Andy Wielgosz, et al. 2000. "Heart Disease and Stroke in Canadian Women: Policy Development." *Canadian Journal of Public Health* 91 (1): 58-59.
- Public Health Agency of Canada. 2005. "Make Every Mother and Child Count" *Report of Maternal and Child Health in Canada*. Retrieved March, 2005 from http://www.phac-aspc.gc.ca/rhs-ssg/whd05_e.html.
- Raphael, Dennis. 2000. "The Question of Evidence in Health Promotion." *Health Promotion International* 15 (4): 355-367.
- Raven, Pauline and Lesley Frank. 2005. *The Nova Scotia Child Poverty Report Card 2005: 1989–2003*. Halifax: Canadian Centre for Policy Alternatives Nova Scotia.
- Singer, Rachel. n.d. The Impact of Poverty on the Health of Children and Youth. *Campaign 2000*. Retrieved October, 2005 from http://campaign2000.ca/res/Poverty_healthbackgrounder.pdf
- Spitzer, Denise L. 2005. "Engendering Health Disparities." *Canadian Journal of Public Health* 96: S78.
- Stark, Janet. 2004. "Breaking the Cycle: A Community Approach to Prevention of Low Birth-Weight Babies." *International Journal of Health Care Quality Assurance* 17 (7): 1-8.
- Statistics Canada. 2003. *Income in Canada. Chapter VIII: Low Income*. Retrieved March 2004 from http://www.statcan.ca/english/freepub/75-202-XIE/2003000/part8.htm.
- Stoppard, Janet M. and Yvette Scattolon. 1999. "Getting on With Life": Women's Experiences and Ways of Coping with Depression." *Canadian Psychology* 40 (2): 205-223.
- Sword, Wendy. 1997. "Enabling Health Promotion for Low-Income Single Mothers: An Integrated Perspective." *Clinical Excellence for Nurse Practitioners* 1 (5): 324-332.
- Sword, Wendy. 1999. "A Socio-Ecological Approach to Understanding Barriers to Prenatal Care for Women of Low Income." *Journal of Advanced Nursing* 29 (5): 1170-1177.
- Sword, Wendy. 2000. "Influences on the Use of Prenatal Care and Support Services Among Women of Low Income." *National Academies of Practice Forum* 2 (2): 125-133.
- Sword, Wendy. 2003. "Prenatal Care Use among Women of Low Income: A Matter of 'Taking Care of Self'." *Qualitative Health Research* 13 (3): 319-332.
- Young, Lynne E., Allison D. James, and Susanna L. Cunningham. 2004. "Lone Motherhood and Risk for Cardiovascular Disease." Canadian Journal of Public Health 95 (5): 329-334.
- Young, Grace and Anna Woodrow. 2000. "Factors Associated with Low Income Among Rural Single Mothers in Canada." *Canadian Journal of Regional Science* 23 (3): 533-540.