

*There's a Way Out for Me:  
Insights from Support Intervention for Low-income  
Women Who Smoke*

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*Based on an assessment of low-income women's support needs and preferences, an intervention was designed consisting of 14 weekly group support sessions encompassing peer and professional facilitators and volunteer buddies. Participants (n=44) completed a 13-item semi-structured qualitative interview following the intervention and an 8-item semi-structured interview three months later. Most women reported that the support group mobilized and reinforced their intentions to quit smoking. Participants enjoyed opportunities to interact with women facing similar challenges and to receive emotional, informational, affirmation and practical support. Women indicated that the program provided useful information about life skills; improved their self-esteem; taught them smoking reduction and cessation strategies; offered an opportunity to share feelings and life experiences; and helped them to relax and enjoy their time together through exercises and crafts. The intervention addressed multiple issues in low-income women's lives, suggesting that tobacco cessation for vulnerable populations require comprehensive intensive intervention.*

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Poverty is a worldwide problem afflicting more than one billion adults and children (Oxfam International, 2002). Despite Canada's relative affluence, 16.9% of Canadians are poor (Raphael, 2007). Those at greatest risk for being poor are unattached individuals, children, recent immigrants, Aboriginal people, and women (Canadian Council on Social Development, 2002; Tjorman, 2001). People who live in poverty have lower life expectancy, activity limitations, poorer health status, and less social support than other income groups (Brunner & Marmot, 2006;

Commission on the Social Determinants of Health, 2006). Poverty is a crucial determinant of health and wellbeing (Canadian Institute of Health Information, 2007). Mechanisms through which poverty influences health include processes of social comparison and social distancing (Raphael 2007; Reutter, et al, 2009). Researchers have identified strong effects of socioeconomic status on social isolation and sense of belonging (e.g., Green & Rodgers, 2001). Inadequate incomes can restrict people's ability to seek and sustain social support (Hawthorne, 2006). Stigma linked to poverty can foster feelings of isolation and distancing behaviours (Stewart et al, 2009).

Smoking is concentrated among the poor in Canada and other industrialized countries. Materially and socially disadvantaged populations exhibit greater rates of smoking and lower levels of smoking cessation (Sweet, 2002; Wiltshire et al., 2001; World Health Organization, 2001). Conversely, the use of tobacco has a deleterious effect on family economic health, and on macro economies and sustainable development (World Health Organization, 2001). The complex connections between women's smoking and disadvantage are linked to lack of economic resources (Graham, 2009). Worldwide, 236 million smokers are women; this number is predicted to triple by 2025 (CCDPHP, 2001; Ernster et al., 2000). Smoking-related problems experienced by women include: reduced household earnings, productivity, quality of life and life expectancy, and increased morbidity (CCDPHP, 2001).

In Canada, there has been a consistent and gradual decline in women's smoking rates over the past twenty years (Public Health Agency of Canada, 2007). However, this decline has not been experienced across all groups of women, with particularly high smoking rates still occurring among low-income women (Kirkland, Greaves & Devichand, 2003), single mothers (Ockene, et al., 2002), Aboriginal girls and women (van der Woerd, et al., 2005) and women with mental health conditions (Williams & Ziedonis, 2004), other addictions (Najavits et al., 2003), or trauma histories (Nichols & Harlow 2004). While general tobacco policies have reduced exposure to smoke, changed the marketing environment, denormalized smoking and reduced access to tobacco products through taxation and sales restrictions, low-income women have not always benefited equally from these broad policies (Graham et al., 2006; Greaves & Jategaonkar, 2006).

Tobacco cessation programs have yielded mixed results (Glasgow et al., 2000), possibly because they are rarely tailored to the support needs and preferences of people facing health inequities (Lancaster & Stead, 2002) and because interventions have typically not been informed by an assessment of the needs and wishes of the population involved (Stewart, 2000). Low-income women, in particular, have received limited attention and supportive interventions are needed

to offset the negative impact of smoking on vulnerable women's lives. Consequently, we designed and tested a comprehensive support intervention reflecting the support needs of low-income women who smoke, the individual and systemic factors influencing their smoking behavior, and their preferred form of intervention. As intervention ingredients and processes are rarely reported, inhibiting replication and adaptation in future programs, they are emphasized in this paper. Five *research questions* guided this study. From the perspectives of low-income women who participated in the peer support intervention: 1) what strategies promoted accessibility to the intervention?; 2) what components of the intervention were helpful?; 3) what types of support were provided in support groups and dyads?; 4) what were the intervention processes in the groups? and 5) what factors influenced success of and satisfaction with the intervention?

Review of relevant research reveals the need to address multiple factors related to smoking in vulnerable populations. Social support as an intervention strategy can influence smoking cessation (Andrews et al., 2007). However, the few reported programs geared to low-income populations provide short-term support by professionals in clinics or telephone (Pohl & Caplan, 1998; Glasgow et al., 2000; Curry, et al., 2003) and emphasize absolute cessation of smoking (Solomon et al., 2000; Wadland, Soffelmayr & Ives, 2001) rather than reduction. No opportunity was provided for low-income women to learn from peers, support was time-limited (Stead, Perera & Lancaster, 2007; Twigg et al., 2009), and inequitable life circumstances that influence smoking cessation were not targeted (Graham et al., 2006). Most reported interventions have relied primarily on professionals and not focused on peer support. Peers and professionals working in partnership can enhance the success of support interventions for vulnerable people (Stewart, 2000). Participatory strategies (Heenan, 2004) to solicit participants' intervention preferences can enhance the relevance of intervention research to changing smoking behavior of low-income women. Furthermore, participatory strategies, engaging a wide variety of stakeholders, can ensure responsiveness to low-income women's life situations and can expand potential application of research knowledge (Baker, White & Lightveld, 2001). Our support group intervention program was designed with the full participation of low-income women who smoke (Stewart et al., 2010).

## RESEARCH DESIGN

A one-group within-subjects design was used for this multi-method study to examine the effects of the pilot intervention over time. In addition to evaluating the impact of the intervention (Stewart et al., in

press), we sought to understand women's experiences of the intervention. Ethics approval for the study was received in each of the three research sites.

### *Participatory Intervention Design*

A group support intervention was designed and tested based on the findings of ten group interviews in three Canadian cities with 44 women who smoked, to assess their support needs and intervention preferences (Stewart et al., 2010). Input was also obtained from the national and community advisory committees and local community agencies at the study sites in western Canada: Edmonton, Vancouver and Winnipeg. The intervention consisted of 14 weekly support sessions lasting 2-3 hours that emphasized three support components: experienced peer and professional facilitators, a support worker and a volunteer buddy. The support group was guided by an experienced facilitator and a peer facilitator who was a former smoker. In addition to the support group, women could access one-on-one support outside the group sessions at the community agency hosting the intervention. The support worker met with each woman individually as requested throughout the intervention to help her access other community resources and supports she needed to improve her social and economic situation. Women also had the option to choose a volunteer buddy from within the support group or their network of family and friends to provide them with ongoing emotional support during the intervention.

### *Sample Recruitment*

Inclusion criteria for participants were: (a) English speaking women aged 25-69 years, (b) living on low-incomes (based on Statistics Canada's low-income cut-off levels, 2006), (c) not pregnant (previous research reveals distinct differences in cessation motivation), and (d) not involved in other tobacco cessation interventions (e.g., pharmacologic treatment such as nicotine replacement patches). Using purposive sampling, participants were chosen to represent varied low-income situations (e.g. working poor, social assistance recipients, unemployed, homeless) and demographic characteristics (e.g. family composition, ethnicity, education, occupation). Community agencies and provincial organizations facilitated recruitment. Participants received an honorarium and compensation for child-care and transportation associated with each interview. Previous research reveals the importance of compensation for participation, including our studies focused on people living in poverty (e.g., Stewart et al., 2009; Stewart et al., 2008).

Forty-four low-income women across the three sites attended at least half of the group sessions in the support intervention and participated in post-intervention interviews. Subsequent attrition from

follow-up data collection primarily resulted from inability to contact women (i.e., telephone disconnected, moved). Table I presents key sample demographics and hints of the complex challenges and multiple stressors faced by women who participated in the support intervention. Many women reported difficulty making ends meet; they faced challenges with housing, transportation and food security. Women struggled with limited finances, identifying difficulties securing affordable, safe housing and stable employment and reliance on food banks as major stressors that contributed to their smoking and made it difficult to implement typical smoking cessation strategies such as buying nicotine replacement therapy. Nearly all women with children were single parents, compounding pressures related to low income and efforts to secure stable employment. Some women also faced stressors from their relationships, including a personal history of abusive relationships and addictions to alcohol, medications and gambling; living with family members who struggled with their own addictions; and caring for children with special needs such as fetal alcohol spectrum disorder or behaviour disorder. The notably high proportion of Aboriginal women and absence of Asian and Black women participating in the intervention reflects the populations served by the community agencies that facilitated recruitment for our support intervention. Moreover, smoking statistics indicate that smoking rates are higher among the Aboriginal population compared to the Canadian population as a whole (van der Woerd, et al., 2005).

#### *Data Generation & Analysis*

Women completed a 13-item semi-structured qualitative interview immediately following the intervention and an 8-item semi-structured interview three months later. In the semi-structured interviews, women reflected on their perceptions of the impacts of the support intervention on their smoking attitudes and behaviors, social networks and relationships, and lives; support intervention processes; satisfaction with the intervention; and suggestions for improvements. The interviews were approximately 60 minutes long. Interviews were also conducted with professional and peer facilitators to elicit perceptions of intervention processes. Interviews were recorded and transcribed verbatim to enable thematic and content analysis (Creswell, 2003). Inductive content analysis was used to analyze the discussion themes in dyads and groups. A preliminary coding framework was developed from the themes and sub-themes emerging in the initial interviews and modified as analysis progressed. The coding framework included themes identified a priori from the research questions (e.g. types of social support provided), as well as themes that emerged from

participants' descriptions. Two research assistants achieved a minimum inter-rater reliability of 80%.

**Table I: Sample Demographics**

	Frequency ( <i>n=44 women</i> )
Age (years)	
< 30	7
30-39	14
40-49	13
50-59	6
60-69	4
Ethnicity	
Aboriginal	20
Euro-Canadian	24
Partner status	
Never married	18
Married/common-law	3
Separated/divorced/widowed	23
Number of children	
0	7
1-2	18
3-4	16
5-6	3
Years of education completed*	
< Grade 9	3
Incomplete High school	13
High school diploma	6
Incomplete post-secondary	12
Post-secondary trade/technical	7
Undergraduate degree	2
Occupation*	
Not employed	18
Student	9
Technical in health care/social service	8
Clerical/office/business	3
Transportation	1
Primary income source*	
Employment	7
Welfare/income support/disability	34
Student finance	1
Annual family income (\$ Canadian)*	
< 5 000	8
5 000 - 9 999	11
10 000 - 14 999	17
15 000 - 19 999	2
20 000 - 39 999	5

\*Does not total 44 due to selective non-response by participants

## FINDINGS

Findings presented respond to the research questions and represent the perspectives of women in diverse circumstances across the three sites.

### *Factors Influencing Participation (Research Question 1)*

Facilitators and participants at all sites reported that the first session of each group was well attended but attendance declined to a core group over subsequent weeks. Facilitators reported that women's intention to quit smoking and the group's approach was the reason for their participation, an observation echoed by several women. "I've been interested in trying to quit smoking for a while and I knew that doing it cold turkey just doesn't work for me. So I figured it was worth it to go and get ideas and learn from what others had to say." The opportunity to socialize with other women in similar life situations was also cited as a reason to participate. "We all enjoyed it, just being together. Just doing things and having fun, and just watching each other." Women valued the outings and activities that the group offered, opportunity to 'get out', and 'time and space to be heard'. "I found it really nice, in that every lady there had a chance to talk... so everybody felt like whatever they wanted to say was important enough to be said and to be heard." Women also identified child-care, transportation vouchers, meals, opportunity for learning, varied weekly topics and activities, and informal and comfortable structure of the sessions as incentives to attend. In addition, some participants noted that incentives such as a gift basket were an inducement to attend the group.

Facilitators in some sites encouraged women to attend the weekly groups by reminding them of the upcoming sessions through telephone calls. Telephone calls also served as a check-in opportunity for women to update their peer facilitator about their smoking cessation efforts and events that occurred during the week. Various factors prevented women's consistent attendance including children's illness or activities, participant's illness, family obligations, deaths in the family, employment or pre-employment activities and moving residence. A few facilitators and participants believed that women's attendance was also influenced by their motivation and dedication to the goal of smoking cessation. "I had a hard time and I think it was basically because I'm still not wanting to quit, I had a hard time getting there on time." Some women were disappointed when they were unable to attend all sessions. They also expressed disappointment in other group members who were late for the group or whose attendance was inconsistent.

*When you start out as a group, I think you should be a group, and every time you're together is important, and when one person is missing, it DOES affect everybody else... I expect when you commit to something, you're there. So that was the thing I didn't like was people showing up late when you're in the middle of a discussion about something.*

*Supporting Accessibility:* Child-care, provided in all groups in which participants required this support, was seen by the women as an important component of the program to facilitate attendance. Women were generally satisfied with the care that their children received. The child-care allowed women to focus on themselves rather than worrying about their children. Some women reported that the child-care had a positive impact on their children and the smoking cessation program facilitated dialogue between women and their children on smoking. Transportation support was viewed as important to facilitate access to the program. Participants at two sites were given bus tickets to facilitate attendance, but bus tickets were not needed for sites to which the participants routinely traveled during weekdays. Additional transportation support (e.g. taxi fare) was provided to participants with disabilities and for night sessions.

*Support Program Philosophy:* Women valued the program philosophy, including the participatory, nonjudgmental and holistic approach and lack of perceived pressure to quit smoking. They believed that the program was designed to provide information and strategies which would facilitate the process of reduction and cessation of personal tobacco use. Women appreciated the opportunity to provide their input into content of the group discussions. Participants and facilitators agreed that the program's holistic approach addressed smoking reduction or cessation and stressors that influenced their smoking habits.

### ***Intervention Ingredients (Research Question 2)***

During check-in to begin every session, women described their experiences between each session. Although some reported on their efforts to quit smoking, many also discussed other issues in their lives and used check-in as a forum to express their frustrations.

*I found it really nice, in that every lady there had a chance to talk, because they had a sharing stone, which was nice, so there was no one interrupting each other, so everybody felt like whatever they wanted to say was important enough to be said and to be heard.*

Craft activities were used as a strategy to reduce smoking, to foster a sense of accomplishment and to facilitate communication and



exploration of difficult subjects. Some women indicated that crafts provided time for themselves and encompassed positive affirmation as women wrote encouraging messages to one another.

*Things like that give me ideas on what to do with my time for me, 'cause you don't get a lot of time to do things for you. Like, fun stuff. I mean we do the church group, but that's a seminar where we're listening to people, whereas hands-on, we get to do things for us. I think that's pretty neat; I like it.*

Women clarified why they smoked, which led them to question their smoking habits and consider alternatives. Women also appreciated the information presented on alternatives and activities to replace smoking. "They give you really good ideas to quit smoking. They give you support. You get a lot of information on how to quit if you're really serious about it." Several women were encouraged by information presented about the capacity of the body to recover following smoking cessation. Another program element, 'Sally's story', based on a fictitious character representing low-income women who participated in previous interviews that informed the intervention design, was used to facilitate women's exploration of their smoking. Many facilitators shared their own stories about smoking and encouraged participants to share their stories. Pack diaries were introduced to women as a tool to increase awareness of their smoking habits and many participants reported that pack diaries were a helpful strategy. All groups used the *Wheel of Health* as a strategy for women to record their smoking experiences and the effect on their health and lives. Some participants believed it highlighted the impact of smoking on their health and lives, including awareness of their feelings when they reduced smoking. "Just looking at the body, heart, soul, financial, all that... it just reaffirmed I'm breathing a little bit easier, things are cleaner in the apartment, I feel better, I'm eating better."

Relaxation exercises included muscle relaxation, visualization and breathing exercises. Participants reported that these exercises facilitated stress and smoking reduction. "I thought it was awesome, the deep breathing and everything. Learning that really, really helped. I knew how to do it before, but I never really did, and doing it every Tuesday helped me." Yoga was considered a popular and enjoyable activity. Some women viewed yoga as a strategy to reduce smoking by offering a distraction to deal with cravings, while others considered it a relaxation method, a form of exercise that could help them to lose weight, or a strategy to deal with relationship problems. A nutrition session consisted of information and discussion facilitated by a nutritionist or dietician, distribution of a cookbook, and on-site meal

preparation. Women found the cookbook a useful tool for preparing healthy meals on a limited budget. They valued cooking as an opportunity to create something as a group and develop confidence

At the end of each session, women selected items from a self-care basket including bubble bath, lotion, nail care supplies, make-up, candles, stickers, perfume, needlepoint crafts, aromatherapy items, and chocolate. Women enjoyed this aspect of the program and perceived it as a reward. "Self-care's important to everybody and a lot of people don't realize that; they neglect themselves. And that's important, that people actually think of themselves, because that's how you heal." Some participants noted that the self-care items made them feel special and served as a reminder to care for and reward themselves. "I went for the food basket... Being a single parent, stuff like that's huge for me."

### ***Social Support Components of Intervention (Research Question 3)***

*Buddy System:* Participants were encouraged to match with another member of the group or to identify a friend or family member who would serve as a 'buddy'. These dyads provided support to one another between group meetings. A few women noted that the buddy system increased safety for the participant's walk home and gave them someone to talk to following the conclusion of the support group. "It was satisfying to have phone calls just for me, to have a phone buddy say that she loved me."

*One-on-one Support:* In addition to support offered to participants within the groups, one-on-one support from a support worker was incorporated into the program. These workers called participants periodically and participants were also encouraged to initiate contact. Most participants did not access one-on-one support because they received sufficient support from facilitators during the session breaks, had other sources of support (e.g. friends, family, counselors) that they preferred to access, or had scheduling constraints. Two support workers from an inner city site reported that their role was listener, a safe place to vent and a source of information about resources. They provided direct support focused on smoking cessation and emotional support for stressful aspects of women's lives such as children, health, housing, finances, and relationship problems.

*Support Groups:* Participants and facilitators reported that the support group fostered women's smoking cessation efforts as they shared their experiences and strategies and learned from each other. "They gave me ideas that I hadn't thought of... For example, washing the walls, taking the smell away from the place and try and make it no-smoking, or just keep your hands busy doing something, which I'm going to be needing." The group setting provided affirmation and emotional support not experienced in independent smoking cessation

efforts. A few women noted that the group offered motivation to match other women's efforts to stop smoking. "Going to group and sharing and whatever, you have to keep up; you have to."

According to facilitators, the dynamics of the groups were positive and participants supported one another. Prior relationships with other participants in the group were considered beneficial by some participants and facilitators as they reduced the need for the 'forming' stage of group development and facilitated an atmosphere of openness and discussion. Women who knew each other prior to the group encouraged attendance. Some women, however, found that their relationship history negatively influenced the group environment.

*Affirmation Support:* Many participants reported that facilitators and other group members validated their smoking cessation experiences. Peer facilitators shared their experiences and were role models of successful cessation, affirming that women could change their smoking.

*People who have already quit... they stay strong and they stay... without cigarettes... where you hear other people's stories that they've already done it and then like 20 years later they still get a craving... but they don't do it. And them being able to stay strong without it.*

Interactions with other participants helped women to realize that they were not alone in their challenges and to develop awareness of their smoking behavior.

*Knowing that there are other people out there that want to quit, but we're just not sure if we want to quit 'cause some will fail. So it's nice to know that I'm normal... just the support, knowing that people were there to help you along and that other people were going through the same thing as you.*

In addition to providing affirmation support for participants with respect to their smoking cessation efforts, the support group also validated their life situations. During the group meetings, women communicated their challenges living on a low-income, being single parents, and other struggles. Participants felt understood by others and learned that their struggles were 'normal'.

*Actually, I think the group as a whole was a good thing – like, all the women, seemed to connect, 'cause we all came from lower poverty and wanting to smoke, not being able to quit, not being able to afford to keep it up, and yeah, so it was good. We all had different problems, but yet, when we talk about our problems*

*there, it was, "Yeah, she has problems and I have problems. They might not be the same, but yet, in one sense, they are." So it really was support.*

Participants noted that being around other women with the same goals created a sense of solidarity. They encouraged each other to quit smoking during and after the meeting.

*Emotional Support:* The groups provided a safe, compassionate, accepting, confidential, and supportive environment for women to express themselves and to share their experiences, feelings, fears, challenges and coping strategies. "I liked that there were other women in the same situation as I was. I found it comforting, supportive, and just to be there and get information from them, that was really pretty good; I liked that." While group members often provided emotional support by listening and understanding, they also encouraged each other's smoking cessation efforts during the group sessions. Some women indicated that they set goals about smoking cessation through group participation. "I went from 31 to 10 or 12 a day. As other ladies got excited, they would cheer and I would want to cut back more that week." Being part of the group was meaningful for women and helped them learn how to seek support and develop a sense of belonging and solidarity.

*I'm glad I took part in it. I think it really got the ball rolling on digging deeper into my core desires, like, reasons inside me to - inner realization and understanding of myself, and that really makes all the difference, when you get in touch with what you really want to do, and it brings you a vision and starts up a passion in your heart that you want to do this. And once you start having a vision, then a goal, it's easier to attain. I've learned to reach out more through the group. I felt a sense of belonging, it's helped me to further expand my horizons, not to be afraid to ask for help.*

Although most participants felt that the group was a safe place for them to share their experiences, not all women felt comfortable communicating their thoughts and feelings.

*Informational Support:* Facilitators and participants provided information about issues related to smoking and smoking reduction strategies. In some cases, information received from other women enhanced credibility of suggested strategies.

*Something I might think of trying, I might think, "I'm not going to do that; that's silly." But then the next person's story, well,*

*they just tried that and it works, so I guess it's not too silly, so I'll try that.*

*Instrumental Support:* Although participants did not receive as much instrumental support as affirmation, emotional, and informational support during group sessions, women offered examples of instrumental support received during the intervention. Peer facilitators at two sites drove participants to the meetings. Participants also received practical support from their peers (e.g., transportation) during and after the program.

*I still keep in contact with my buddy MJ. She phones me... actually, she's come over a few times, and she's ready to quit now and she wants to quit, so we've been doing the "Okay, are we ready to quit?" We'll do the buddy system; if we're ready to quit, we're quitting. So she's ready to quit, too.*

#### ***Reciprocity of Support Among Participants (Research Question 4)***

Women provided information, advice, and suggestions, particularly on smoking cessation or reduction strategies to other members. Women kept each other motivated about positive health behaviours learned in the support group.

*Because somebody would say, "Let's go for a smoke." I'd say, "No, I've had my limit." "Oh, yeah, me, too." You know, this gentle reminder amongst each other that "How are you doing with your smoking?" Or somebody would come in and say, "I only had one cigarette last night," and offering them the encouragement... So that was really good.*

*Group Duration & Frequency:* Most participants and facilitators thought that the 2-3 hour session length was adequate although some wanted longer sessions.

*I don't think there's anything I would change except for the time span: extend the time span... we'd be having so much fun and all of a sudden, the facilitator would say, "Okay, it's time to get ready now." That was – we were just beginning to have fun and it's time to pack up now. That was sad.*

Facilitators from two sites indicated that as the sessions were too short to accommodate all program components, they had to be selective about the information presented. Although a few women suggested

having several sessions weekly, most wanted to extend the program length.

*If I were to design it, once you do your weekly programs, maybe, like, meet once a month after and talk about how you've slowed down or if you stopped or if you've gotten worse. Like, instead of once a week, maybe meet once a month or once every couple of months, just to keep in contact.*

Some participants expressed a sense of loss about the end of the group particularly in one site where the pre-employment program completion coincided with the end of the smoking cessation program compounding women's sense of loss. There was no consensus regarding the optimal timing of sessions. Participants' preferences varied according to other commitments and responsibilities. Some participants with children, found it challenging to attend evening sessions.

*The kids got worn out because it was so late. If we started it earlier, it probably wouldn't have been so bad, 'cause we would have been out early... [we didn't get home until about] nine o'clock [and they are usually in bed] between 7:15 and 8 o'clock... it wasn't late for the adults, but I thought it was late for the kids.*

Other participants did not like the evening sessions due to the necessity to take public transit at night, or interference with employment.

*Physical Environment:* The location and physical environment influenced attendance and group activities. The efforts of a facilitator at one site to create a warm and soothing atmosphere for participants were appreciated. "I liked the atmosphere that they provided. Like, the smells when you walked in and the music and stuff like that." A few participants criticized noise levels, lighting, dust, inadequate furniture and the location of the hosting agency.

*Relationships Among Group Participants Outside of Group Sessions:* Through their participation in the support groups, participants established friendships with one another outside of the group sessions. Women reported that they talked to other participants as acquaintances in the community and in some cases, women asked each other about their smoking cessation efforts.

*There's women there that I normally wouldn't really talk to and it's cool getting to know people that you wouldn't normally know... it was kind of a learning experience for me, 'cause I'd never hang with those girls ordinarily... [I talk to them] when I*

*see them. It's not like I made a close friend... normally girls that I'd just walk by, now we actually talk.*

Participants discussed their challenges maintaining contact with other participants after the completion of the group due to extensive responsibilities or lost telephone numbers.

*It takes me a long time before I get close to anybody. But towards the end, I was starting to be able to talk to them more and open up more. I just wish I could have kept in contact with them, became closer or whatever, developed friendships, and maybe through that, I might have been able to quit smoking.*

*Other Support from Outside the Groups:* Some participants reported that they had received support from agencies or professionals who were not involved in the smoking cessation group. Women indicated that support from physicians and other sources helped their smoking cessation efforts. In addition to seeking support for smoking cessation, participants used counseling services and other sources of support including therapy group meetings, Bible study groups, women's resource centre, and family centres to address personal or domestic issues. While some participants were aware of the myriad public services available for them and their family, others were unaware

*If I could make it in the city, anybody can. I hate the city – the noise, the crowd, I cannot get used to it. I miss the trees and the water and the quiet, but the resources [sic] is what keeps me here for my children's and my own education.*

*Support From Family & Friends:* Several participants reported that their families and friends including non-smokers and those who had successfully quit smoking, supported their smoking cessation efforts. Family and friends frequently provided emotional support through encouragement. In some cases, participants wanted to quit smoking because of their family's aversion.

*They were PROUD of what I'm doing, because all of my family, all at one time, used to smoke, and with the exception of my son, everybody has quit. And it's been years that they've quit, so they're really, really – the support there is PHENOMENAL, really great.*

*Appraisal of Support Intervention (Research Question 5)*

According to facilitators and participants, when participants' needs for support from friends and family were unmet, support received from the group became very important. Most women agreed that the support received in the groups mobilized and reinforced their intentions to quit smoking. Although most women believed that their support needs, related to smoking cessation, were met during the group, they wanted extended support as the end of the group left a void. Participants noted that the program gave them the opportunity to listen to different ideas, obtain useful information, and become motivated to reduce or quit smoking. They enjoyed interacting with women from similar backgrounds and receiving emotional, informational, affirmation and practical support. Women indicated that the program provided useful information about life skills; improved their self-esteem; taught them smoking reduction and cessation strategies; offered an opportunity to share feelings and life experiences; and helped them to relax.

**DISCUSSION**

The 14 week face-to-face, intensive program addressed the myriad of psychosocial issues faced by low-income women that complicate their intention and potential for success with tobacco reduction or cessation. The women valued the program components, the experience of being in a support group and the program's fit in their lives. These low-income women appreciated time when their children received care, their basic needs were alleviated, buddies became an ongoing presence, and they learned skills regarding health and tobacco reduction. They liked the opportunity to reflect on, monitor, record, and discuss tobacco use. This space to address tobacco use and relevant health practices was valued by these vulnerable women.

This intervention, although focused on tobacco reduction and cessation, addressed multiple issues in women's lives, reflecting research suggesting that tobacco reduction and cessation for low-income women who smoke requires complex and intensive intervention (Andrews, et al., 2007; Greaves & Hemsing, 2009). Although face-to-face comprehensive interventions are labour and cost intensive, they are justifiable, within a broad definition of costs that includes "stress, time, relations, lost paid employment, discrimination, and oppression" (Armstrong & Armstrong, 2008, p. 13). Evaluation of the impact of this support intervention, using quantitative and qualitative measures, revealed significant decreases in temptation to smoke and number of cigarettes smoked, and significant increases in emotional support seeking, eating breakfast, and breathing exercises. Trends in increased self efficacy, increased social network size, and decreased loneliness are



promising (Stewart et al., 2010), and may enhance women's capacity to survive the challenging life circumstances and health-related risks associated with low-income status (e.g. Alvi, Clow & DeKeseredy, 2008; Johner et al., 2009).

To guide knowledge transfer, women's reactions to the elements of this intervention offer a basis for building cost-effective interventions that may incorporate these elements or integrate this intervention into other services and settings.

*I liked everything about the program: the little group that we had. It was a wonderful opportunity that I thought didn't exist... I highly recommend it. It's a must-attend for somebody who wants to quit smoking. Because it triggered my inner self; I was extra-aware of the harmful effects of cigarette smoking. It made me extra sensitive, too and it provided me with a stronger desire to stop... I just wish it would be an ongoing thing here in the city. I have a lot of friends and family who are still struggling to quit. Nothing worked for me; I've tried everything, everything. Then this group provided a way out for me.*

Undoubtedly, tobacco reduction or cessation is more difficult for women living in poverty, due to limited options and resources for making change, and burdens derived from parenting in limited and reduced circumstances (Graham et al., 2006). Poverty also fosters a constellation of factors affecting health behaviours and smoking, such as poor living conditions, unhealthy built environments, and social acceptability for smoking in private and public spaces (Bryant, 2009; Copeland, 2003). Hence, tobacco reduction programs and policies aimed at low-income women need to be holistic and reflect the wide range of social and economic factors that affect smoking and cessation (Greaves, Vallone & Velicer, 2006; Greaves & Jategaonkar, 2006). Further, low-income women should be engaged as participants in the design and operation of interventions, as this study did, to respect their experiential knowledge and use it effectively to promote relevance of programs. This approach is efficient in creating appropriate tailored programs and policies and ethical as it lends legitimacy to women's knowledge and engages low-income women as a means of empowerment.

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