CUISR:

Community – University Institute for Social Research

Postpartum Depression Support Program Evaluation

by Kyla Avis and Angela Bowen

Building Healthy Sustainable Communities

Community-University Institute for Social Research

CUISR is a partnership between a set of community-based organizations (including Saskatoon District Health, the City of Saskatoon, Quint Development Corporation, the Saskatoon Regional Intersectoral Committee on Human Services) and a large number of faculty and graduate students from the University of Saskatchewan. CUISR's mission is "to serve as a focal point for community-based research and to integrate the various social research needs and experiential knowledge of the community-based organizations with the technical expertise available at the University. It promotes, undertakes, and critically evaluatea applied social research for community-based organizations, and serves as a data clearinghouse for applied and community-based social research. The overall goal of CUISR is to build the capacity of researchers, community-based organizations and citizenry to enhance community quality of life."

This mission is reflected in the following objectives: (1) to build capacity within CBOs to conduct their own applied social research and write grant proposals; (2) to serve as a conduit for the transfer of experientially-based knowledge from the community to the University classroom, and transfer technical expertise from the University to the community and CBOs; (3) to provide CBOs with assistance in the areas of survey sample design, estimation and data analysis, or, where necessary, to undertake survey research that is timely, accurate and reliable; (4) to serve as a central clearinghouse, or data warehouse, for community-based and applied social research findings; and (5) to allow members of the University and CBOs to access a broad range of data over a long time period.

As a starting point, CUISR has established three focused research modules in the areas of Community Health Determinants and Health Policy, Community Economic Development, and Quality of Life Indicators. The three-pronged research thrust underlying the proposed Institute is, in operational terms, highly integrated. The central questions in the three modules—community quality of life, health, and economy—are so interdependent that many of the projects and partners already span and work in more than one module. All of this research is focused on creating and maintaining healthy, sustainable communities.

Research is the driving force that cements the partnership between universities, CBOs, and government in acquiring, transferring, and applying knowledge in the form of policy and programs. Researchers within each of the modules examine these dimensions from their particular perspective, and the results are integrated at the level of the Institute, thus providing a rich, multi-faceted analysis of the common social and economic issues. The integrated results are then communicated to the Community and the University in a number of ways to ensure that research makes a difference in the development of services, implementation of policy, and lives of the people of Saskatoon and Saskatchewan.

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Abstract

Postpartum Depression (PPD) is a significant problem that occurs in approximately 10-18% of women following the birth of a child. Symptoms can range from the "blues" to severe depressive episodes with the presence of hallucinations, delusions, and confusion. Severe depression can pose a serious risk to new mothers and their children. Research has shown that support programs are effective in assisting women to manage and overcome their PPD. In order to maintain and secure support for the program in Saskatoon, an evaluation of the Postpartum Depression Support Program (PPDSP) was requested.

One hundred women who attended or contacted PPDSP between January, 2001 and December, 2002 were asked to participate in the study. Forty-one women completed a phone survey. Results were analyzed using SPSS version 11.0.

Women who participated in the program were more likely to be married/common-law, in their 30s, Caucasian, and have a greater than high school education. Those who attended the sessions more than twice were more likely to be affected by anxiety, guilt, excessive sadness, and crying. Women who attended the program 1-2 times were less affected by psychological symptoms, with the exception of feelings of little support. Most of the women attended the group to meet others with similar problems and find help and support. Program limitations included limited telephone and one-on-one support, problematic group dynamics, and mothers feeling that they did not fit in with the group. Ninety-two percent of the women said that the program was somewhat or very close to meeting their expectations and that they would recommend it to others.

Overall, the program is effectively meeting the needs of women suffering with PPD. More research into Aboriginal PPD and services should be continued to ensure that these mothers' specific needs are being met. Increased resources are also recommended to enhance telephone and one-on-one support, continued data collection and program evaluation, and public education.

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Introduction

Postpartum depression is a significant problem for new mothers and their families. Approximately fifty women in Saskatoon each year seek relief from depression symptoms through the Postpartum Depression Support Program (PPDSP). This report is an evaluation of the outcome experiences of 41 women who participated in PPSDSP in 2001 and 2002.

Program Overview

The Postpartum Depression Support Program/Group (PPDSP/G) was established in 1998. It is a partnership of the Saskatoon Health Region (SHR), Saskatoon Community Clinic, and Catholic Family Service Bureau. The program was designed to provide knowledge, awareness, and understanding of postpartum depression. Specifically, it provides support for women who experience adjustment difficulties after childbirth. The program provides postpartum women and their families with weekly support group sessions, telephone consultation, information and other resources, one-on-one support to women, and referrals to other professionals within the Saskatoon Health Region.

The program is located in the Sturdy Stone building, Saskatoon. It is staffed by registered nurses, registered psychiatric nurses, and a psychiatric social worker. One quarter of a full-time position (.25FTE) is allocated to PPDSP. Wendy Stefiuk, manager of nursing for the Postpartum Unit and Healthy and Home Program, Saskatoon Health Region, administers the program.

The Postpartum Depression Support Program includes a support group facilitated by both a mental health and a maternal child nurse, telephone service, and individual support as needed. The services are available to all women within the Saskatoon Health Region who suffer with postpartum depression. The group is free and readily accessible throughout the year. Women are told about the group in prenatal classes, and brochures are visible in doctor's offices, public health centers, and other locations throughout the city.

Literature Review

The birth of a baby is expected to be a joyous time anticipated and celebrated by everyone. However, it can be a devastating time for women who experience depression.

Most people are familiar with "the blues"—a transient emotional response that occurs shortly after the birth of a baby. The blues occur in 85% of women, usually last only a few days, but not related to a history of psychiatric illness. However, even though it is considered a "normal" syndrome, 20% of women experience a major depression in the first postpartum year (Kornstein and Clayton, 2002). For some women, especially those with a previous history of depression, childbirth can trigger a serious depressive episode (Flores and Hendrick, 2002; Misri et al, 2000).

Postpartum depression (PPD) is a major depression that affects between 15% and 25% of women. PPD usually occurs from four to twelve weeks after birth, but can happen up to a year after the baby is born. Women experience their first depression in 60% of PPD cases, but the presence of an existing depressive disorder makes relapse more likely during the postpartum period (Flores and Hendrick, 2002; Arnold et al, 2002; Misri et al, 2000).

Untreated PPD can lead to postpartum psychosis, something which affects 0.1-0.2% of women. Women with postpartum psychosis experience hallucinations, delusions, and confusion, are frequently hospitalized, and can pose a serious safety risk to themselves and their children (Mauthner, 2002).

A woman with postpartum depression has five or more of the following symptoms for a two-week period:

- Depressed mood most of the day
- Anhedonia (severely diminished interest or pleasure in activities)
- Weight changes as secondary to appetite changes
- Insomnia or hypersomnia; psychomotor changes
- Restless, agitated, or slowed
- Diminished energy
- Feelings of worthlessness or excessive guilt
- Decreased concentration and increased indecisiveness
- Recurrent thoughts of death or suicide (American Psychiatric Association, 2000).

In addition to hormonal changes, particularly the decrease in progesterone following delivery, there are many reasons for increased susceptibility to depression during this time. Women may feel more vulnerable as they face new responsibilities of motherhood along with a dramatic change in the relationship with their partner. These factors, combined with sleep deprivation associated with care of a newborn, can increase a woman's vulnerability for depression. Mauthner (2002) described women suffering from PPD as perfectionists, particularly first-time mothers who may have romantic thoughts of being the perfect mother. Each of the women whom Mauthner interviewed

described different and specific aspects of motherhood that they regarded as important (e.g. breastfeeding, natural delivery), and how they felt like a failure if they did not achieve their ideal experience.

Postpartum depression represents a significant health problem for the entire family; not only are women and spouses affected by postpartum depression, but research has shown that children of depressed mothers experience more psychopathology than those of non-depressed mothers (Lieb et al, 2002).

Support is an essential component for recovery from depression. Support groups are used extensively in the care of women with postpartum depression (Pacific Post Partum Support, 1997). According to Misri et al (2000), a supportive partner minimizes development of a PPD. However, not all partners understand what is happening and cannot be supportive. This project's purpose was to evaluate the Postpartum Depression Support Program's services and determine if this support was effective in producing both short and long-term relief from symptoms.

Objectives of the Evaluation

This evaluation follows two earlier reports completed for the Postpartum Depression Support Program, *Postpartum Needs Assessment* (Irwin, 1998) and *Postpartum Depression Support Program Process Evaluation* (Irwin, 2000). Presently, PPDSP uses a follow-up client satisfaction survey (**Appendix A**). However, in order to maintain and secure support for program services, a more in-depth outcome study was requested.

This project's objective was to conduct a follow-up of women who had completed the program over the past three years. The goals were to determine past program participants' overall functioning, adjustment, and health status.

1. Have these women maintained any gains that they achieved while attending the program?
2. Did the women feel that the program met their needs and expectations?
3. Have they continued to experience problems related to postpartum depression?
4. Have they accessed additional social and health services?

The information gathered from this evaluation will provide a basis for program changes and/or expansion to improve the quality of care provided. Ultimately, it is hoped that this evaulation will have a positive impact on the quality of life of postpartum women and their families in Saskatoon.

Methodology

The original plan called for a three-year span of clients who had participated in PPDSP. However, researchers and program staff decided not to include those who were involved in the Postpartum Depression Support Program Process Evaluation (Irwin, 2000). There were also concerns that recall bias might have been a significant problem after three years. Therefore, only the women who were in touch with and/or participated in the Postpartum Depression Support Program between January 2001 and December 2002 were contacted for potential participation in the project.

One hundred women had contacted or attended the program during this period. Participants were divided into three groups: Full participation (attended or received service 3 or more times); Minimal participation (attended group or received service 1-2 times), and Non-Attendees (contacted PPDSP, but never attended any sessions).

The women from the Full participation and Minimal participation groups were sent a letter inviting them to participate in this study. The letter also gave options to set a time for the interview, to withdraw from the study, or to not have telephone interviewers contact them (see **Appendices B and C**). Letters were sent using University of Saskatchewan letterhead rather than Saskatoon Health Region in an effort to preserve confidentiality. There was concern that some women may not have told their family that they had attended the group, and receiving a letter from the Health Region may have triggered questions. A request from the University of Saskatchewan might seem more anonymous. The letter also included sample questions (**Appendix D**) and a list of available services should they have ongoing problems with depression (**Appendix E**).

There were 33 women who never attended or used any of the services, and were therefore ineligible for participation in the project. However, the researchers reviewed their files, particularly the facilitators' notes, to determine the factors that contributed to them not attending the program.

Forty-one women completed this study (32 Full and 9 Minimal participants), which represents 41% of the total women who contacted PPDSP during the two-year period. More than 24% of Minimal participants (compared to 14% of Full participants) had either moved or had their telephone disconnected. Only four people (all from the Full participant group) refused to be interviewed. Eight women available for participation (19%) could not be contacted, despite repeated calls or messages left.

Two graduate students in Community Health and Epidemiology at the University of Saskatchewan, who are also Registered Nurses, conducted the telephone interviews. The interviews took place from April to July 2003. The interviewers used the questionnaires in conjunction with a telephone script (**Appendix F**). A call sheet recorded the telephone call results (**Appendix G**). J. Franko, the Ethics Coordinator for the Saskatoon Health Region, approved the project.

Table 1. Client Involvement With PDDSP, 2001-2002.

	Number of Women
Full participation	**50**
Completed	32
Refused	4
Phone disconnect/moved	8
Never able to connect	6
Minimal participation	**17**
Completed	9
Refused	0
Phone disconnect/moved	6
Never able to connect	2
Never attended	**33**
Phone disconnect/moved	5
Other support	9
Hospitalized	1
Got better on own	13
Back to work	1
Other issues	3
Unknown	1
Total	**100**

Interview Questions

Graduate students Kyla Avis and Angela Bowen developed the original interview questions. Following two consultation meetings with Helen Irwin and Dr. Alexitch, the questions were revised, and Dr. Alexitch approved the final draft. The *Admission Assessment Form* used by intake nurses in PPDSP helped generate the survey section related to psychological and physical symptoms. Separate questionnaires were created for Full and Minimal participation clients to better understand what factors led to the latter group's discontinuation of involvement with the program (**Appendices H and I**).

Pre-Program Health Status

As stated in the initial proposal, one of the study's goals was to determine participants' health issues by exploring these questions:

1. What were the physical and psychological symptoms that these women experienced before attending the program?
2. How severe were the symptoms?
3. Were some symptoms more prominent?
4. Was there a difference between symptoms experienced by Full participants and those by Minimal participants?

From this, an overall health status baseline was established for these women prior to their entering the program.

The pre-program health status section was developed in conjunction with PPDSP's *Admission Assessment Form* (as used at that time). This intake assessment form includes both physical and psychosocial indicators of well-being. However, the nurses doing the intake interview used the intake assessment as a "worksheet," and segments of the form are often incomplete. As a result, there was concern that it may not accurately represent women's health status before entering the program. Instead, the women were directly asked about these health issues in order to get a complete understanding of the level of functioning and problematic symptoms that they were experiencing prior to contacting the program.

To get a fuller understanding of the pre-program level of functioning, all clients were asked about any history of depression and whether they had used medication for depression or any other emotional problem before pregnancy.

Post-Program Health Status

Questions for Full participants included their perceived level of improvement following involvement with PPDSP. This allowed them to think sequentially about how their level of functioning did or did not improve during their time with the program. Minimal participants were not asked these questions as the researchers were not sure that symptom improvement, or lack thereof, could be accurately linked to PPDSP after only one or two visits.

A question was also included regarding initiation of anti-depressant medication during or following involvement with the program. Introduction of medication during this time could significantly affect a woman's health status and outcome of the evaluation.

Minimal participants were not asked about their post-program health status due to their limited (i.e. one or two visits) exposure to PPDSP. It was not expected that participation would be a primary reason for relief of symptoms. Therefore, the Minimal participation questionnaire was shorter and focused more on why the women discontinued their involvement with the program.

Current Health Status

Current health status questions dealt with women's present health. This section was developed to determine whether the women had maintained any gains that they achieved while attending the program. Arguably, this was one of the most crucial parts of the survey. It was also important to determine how much participation in PPDSP versus other factors (e.g. medication, private counseling, increased family support, time) influenced recovery. Although clients receive a *Client Satisfaction Survey* when they finish involvement with PPDSP (**Appendix A**), the researchers believed that it was important to ask these particular questions again to reflect on the experience.

In this section, all participants were asked about their current level of functioning, particularly:

1. Did they feel that they had recovered?
2. Were they still on medication?
3. Were they continuing to experience symptoms and using services to cope?

These questions were included in an attempt to find information related to continued effects of involvement with the program.

Program Participation

This section of the survey was developed to generate information on participants' involvement with services both inside and outside of the program. The objective was to determine extent of involvement in PPDSP and how it contributed to recovery. The evaluation also reviewed what services were used outside the program, whether telephone or individual support services offered by the program were utilized, how closely PPDSP services met the client's expectations, and which aspects of the program were most/least helpful. The programmers also wanted to know how supportive friends and family were of the client's involvement in the program. Support was viewed as an important factor in recovery from PPD and satisfaction with the PPDSP experience (Irwin, 1998; Misri et al, 2000). Minimal participants were also asked what led them to discontinue involvement with the program.

Summary and Demographic Questions

Summary questions asked participants if they would recommend PPDSP to others and their reasons for recommending or not recommending it. Women were asked if there were any other program experiences that they would like to discuss. It was important that women felt free to talk candidly about any aspect of the program covered in the questionnaire.

Demographic questions generated data about a participant's race, age, income, marital status, and education. This information was used to compare demographic differences between Minimal and Full participants.

Analysis

Data were entered into the software package SPSS (v.11.0). Frequencies and chi-square analyses were carried out on the data. Frequencies were performed on all variables. Chi-square testing was performed to compare differences between the Full and Minimal participant groups with respect to demographics and symptom frequency.

RESULTS

It must be recognized that sample size for the Minimal participation group was small (n=9). Therefore, inferences drawn from this group are limited and cannot be considered statistically significant or generalizable to all postpartum women in Saskatoon. Minimal participants were asked about their reasons for discontinuation from PPDSP. The four main reasons were:

1. Recognized that their problem was not postpartum depression (33%);
2. Felt better on their own (33%);
3. Felt that they did not fit into the group (22%); and
4. Chose to use other services that they felt better met their needs (22%).

DEMOGRAPHICS

The demographic profile describes the characteristics of women who regularly attended the program, as well as those who withdrew after a few sessions.

Table 2 indicates that 58% of those who attended PPDSP were between 30 and 39 years of age. There were no women less than 20 years old. This is not typical. Johanson et al (2000) studied over 400 women and found that incidence of postpartum depression was associated with younger age. Almost half of the women had an income of $20-40,000 and 61% had attained a post-secondary diploma or degree. Ninety percent of the women were married or living common-law.

The majority of women were Caucasian. Only seven percent (n=2) of the women were Aboriginal. According to management, 13% of women who deliver and live within the SHR self-report to be Aboriginal. Vital Statistics Saskatchewan, however, reports an average rate of 15.2% for this study period. Therefore, only half of the expected women attended PPDSP. The postpartum depression rate in the Aboriginal population has not been reported, so it is not known whether there is a rate difference between people of different ancestry in our study. The two Aboriginal women who regularly attended PPDSP stated that they would have felt more comfortable if there had been other Aboriginal women in the group.

It is worthy to note that more Minimal than Full participants were single, divorced, or separated (22% and 6%, respectively). Some women in the Minimal group who lived outside of Saskatoon found that transportation to meetings was problematic. The Minimal participants were also less educated. Thirty-three percent had a high school diploma or less, compared to 19% of Full participants.

Table 2. Demographics (%).

	Full	Minimal	Total
Age			
<20	0	0	0
20-29	13 (40.6)	3 (33.3)	16 (39)
30-39	18 (56.3)	6 (66.7)	24 (58)
>40	1 (3.1)	0	1 (2.4)
Income			
<20,000	6 (19.4)	4 (44.4)	10 (25)
20-40,000	14 (45.2)	3 (33.3)	17 (42.5)
40-60,000	5 (16.1)	1 (11.1)	6 (15)
>60,000	6 (19.4)	1 (11.1)	7 (17)
Education			
<High school	0	1 (11.1)	1 (2.4)
High school diploma	6 (18.8)	2 (22.2)	8 (19.5)
Some post-secondary	5 (15.6)	0	5 (12.2)
Post-sec dip./deg.	20 (62.5)	5 (55.6)	25 (61)
Graduate degree	1 (3.1)	1 (11.1)	2 (4.9)
Marital Status			
Married/Common Law	30 (93.8)	7 (77.8)	37 (90.2)
Single/Divorced/Separated	2 (6.3)	2 (22.2)	4 (9.8)
Race			
Indian	1 (3.1)	2 (22.2)	3 (7.3)
Metis	1 (3.1)	0	1 (2.4)
Visible Minority	0	0	0

Birth that Led to Program

As **Table 3** shows, 46% of women who attended the group did so following the birth of their second child, while 66% attended following a birth of the child other than their first. Many women commented that they probably had experienced an undiagnosed postpartum depression with their first pregnancy. As a result, they had not used the program during their first postpartum experience, something that they now regretted.

Table 3. Birth that Led to Involvement with PPDSP (%).

First child	14 (34.1)
Second child	19 (46.3)
Third child	5 (12.2)
Fourth child	2 (4.9)

Pre-Program Health Status

Women from both the Full and Minimal participation groups seemed more likely to experience psychological than physical symptoms of depression (**Table 4**). Both groups

reported a high level of mood swings (94% of Full and 100% of Minimal participants) before entering the program.

The most frequently reported symptoms for the Full group were anxiety and panic (97%), while significantly fewer Minimal participants reported the same problem (66%). Full participants reported significantly more excessive crying and sadness than the Minimal participants (94% versus 56%). Interestingly, Full participants also experienced more feelings of guilt (94% versus 67%), while Minimal participants had more feelings of inadequate support (100% versus 69%).

Table 4. Symptoms Experienced Before Program (%).

Psychological Symptoms	Full	Minimal	p-value
Sleep Disturbances	26 (81.3)	5 (55.6)	.113
Appetite Changes	18 (56.3)	5 (55.6)	.970
Mood Swings	30 (93.8)	9 (100)	.442
Difficulty with Concentration	29 (90.6)	8 (88.9)	.877
Anxiety/Panic	31 (96.9)	6 (66.7)	0.007
Thoughts of Harm (self or baby)	19 (59.4)	5 (55.6)	.837
Hearing/Seeing Things	6 (18.8)	0	.160
Guilt	30 (93.8)	6 (66.7)	.028
Excessive Crying/Sadness	30 (93.8)	5 (55.6)	0.004
Difficulty with Decisions	30 (93.8)	8 (88.9)	.621
Feelings of Little Support	22 (68.8)	9 (100)	.054
Physical Symptoms*			
Weight changes	21 (65.6)	3 (33.3)	.082
Headaches	17 (53.1)	2 (22.2)	.100
Aches and Pains	15 (46.9)	3 (33.3)	.470
Bloating	6 (18.8)	0	.160
Constipation/Diarrhea	10 (31.3)	3 (33.3)	.906
Fatigue	29 (90.6)	9 (100)	.340

***The categories of symptoms differ slightly from the original questionnaire, which included cramps and tiredness. These were transcribed and printed together incorrectly, so they were not asked in the same manner by the two interviewers. Therefore, these two symptoms were deleted from the analysis.**

History of Depression

Sixty-one percent of the women reported having experienced depression at some point in their life before becoming pregnant. Literature confirms an increase in the prevalence of postpartum depression with women who had experienced depression previously in their lives or had a family history of depression (Flores and Hendrick, 2002; Kornstein and Clayton, 2002; Misri et al, 2000).

Use of Anti-Depressant Medication

Many women found that medication was helpful to their recovery. One quarter of the women had used antidepressant medication at some point before becoming pregnant,

while 78% started using medication during or following involvement with the program. Fifty-one percent of women were still using anti-depressants. One participant reported that she had started using antidepressant medication and felt that she needed to continue it, but could not afford to be on the drug. Of the women who were taking medication, less than 10% found it to be unhelpful in their recovery (**Table 7**).

Post-Program Health Status

Overall Health Improvement

Almost 94% of Full participants felt that their overall health had improved following involvement with PPDSP. The greatest improvement in symptoms was in anxiety/panic and guilt (an 88% improvement in each). Difficulty with decisions and mood swings, which were amongst the most frequently reported symptoms before entering the program, dramatically improved (84% and 81%, respectively). Excessive crying and sadness decreased for 82% of participants. **Table 5** provides a summary of symptom improvement for those who used the program's services more than twice.

Ongoing Symptoms

Forty percent of women were still experiencing a variety of psychological problems, many reporting more than one symptom. The most commonly reported continued symptoms are summarized in **Table 6**.

There was no significant difference between current symptoms reported by either Full or the Minimal participants. The number of women reporting current symptoms was too small to compare Full and Minimal participants in terms of statistical significance.

Ongoing Services Used

Interestingly, 63% of women still experiencing symptoms were currently not using any services. Twenty-five percent were using their family physician or a psychiatrist, and 31% were using counseling to cope with ongoing issues. Some women indicated that they were using both.

Perceived Recovery

Almost two-thirds believed that they had fully recovered from their postpartum depression. **Table 7** summarizes the perceived factors that influenced postpartum recovery. Seeing a doctor (85%) was the highest rated factor. This concurs with Webster et al (2001), who found that depressed women were more likely to use general practitioners than any other service in the four months post-delivery. However, these women were also less satisfied than their non-depressed counterparts. Only half reported depression as the reason for physician visits.

Table 5. Overall Health Improvement For Full Participants (%).

Symptoms *	No Improvement	Some Improvement	A Lot of Improvement	Total Improvement**
Anxiety/Panic	3 (9.4)	16 (50.0)	12 (37.5)	28 (87.5)
Guilt	2 (6.3)	17 (53.1)	11 (34.4)	28 (87.5)
Difficulty with Decisions	2 (6.3)	18 (56.3)	9 (28.1)	27 (84.4)
Mood Swings	3 (9.4)	14 (43.8)	12 (37.5)	26 (81.3)
Excessive Crying/Sadness	3 (9.4)	14 (43.8)	12 (37.5)	26 (81.3)
Sleep Disturbances	4 (12.5)	14 (43.8)	8 (25.0)	22 (68.8)
Feelings of Little Support	1 (3.1)	9 (28.1)	13 (40.6)	22 (68.7)
Fatigue	10 (31.3)	12 (37.5)	7 (21.9)	19 (59.4)
Thoughts of Harm (self or baby)	1 (3.1)	9 (28.2)	8 (25.0)	17 (53.2)
Appetite Changes	3 (9.4)	9 (28.1)	6 (18.8)	15 (46.9)
Headaches	2 (6.3)	8 (25.0)	7 (21.9)	15 (46.9)
Weight changes	10 (31.3)	6 (18.8)	5 (15.6)	11 (34.4)
Aches and Pains	5 (15.6)	8 (25.0)	2 (6.3)	10 (31.3)
Constipation/Diarrhea	3 (9.4)	3 (9.4)	5 (15.6)	8 (25.0)
Hearing/Seeing Things	2 (6.3)	2 (6.3)	3 (9.4)	5 (15.7)
Bloating	2 (6.3)	3 (9.4)	1 (3.1)	4 (12.5)
Difficulty with Concentration	3 (9.4)	19 (59.4)	7 (21.9)	26 (81.3)
Other	-	-	-	

***The categories of symptoms differ slightly from the original questionnaire, which included cramps and tiredness. These were transcribed and printed together incorrectly, so they were not asked in the same manner by the two interviewers. Therefore, these two symptoms were deleted from the analysis.**
****Total Improvement = Some Improvement + A Lot of Improvement.**

Table 6. Current Symptoms (%).

Anxiety / Panic	7 (53.9)
Mood swings	4 (30.8)
Fatigue	2 (15.4)
Guilt	2 (15.4)
Thoughts of harm	2 (15.4)
Inability to make decisions	2 (15.4)

Table 7. Factors that Influenced Recovery (%).

	Not Very Influential	Somewhat Influential	Very Influential	Total Influence*
Doctor	4 (9.8)	12 (29.3)	23 (56.1)	35 (85.4)
Partner	4 (9.8)	14 (34.1)	20 (48.8)	34 (82.9)
Time	6 (14.6)	20 (48.8)	14 (34.1)	34 (82.9)
PPDSP	7 (17.1)	11 (26.8)	22 (53.7)	33 (80.5)
Medications	4 (9.8)	7 (17.1)	23 (56.1)	30 (73.2)
Friends	12 (29.3)	13 (31.7)	15 (36.6)	28 (68.3)
Family	12 (29.3)	18 (43.9)	10 (24.4)	28 (68.3)
Church / Spiritual	9 (22.0)	11 (26.8)	10 (24.4)	21 (51.2)
Counseling	4 (9.8)	5 (12.2)	8 (19.5)	13 (31.7)
Other	-	1 (2.4)	1 (2.4)	2 (4.8)

*** % Total influence = % Somewhat Influential + % Very Influential**

In Total Influence, PPDSP was ranked fourth (81%), and ranked third in the Very Influential category, behind doctor and medication. Only 17% of participants saw PPDSP as not very influential in their recovery. This contrasts with Webster et al (2001), where the women in their study ranked postpartum support groups as least likely to be the most helpful in their recovery.

More than half of the women reported that their partners were "very influential" in their recovery—83% said that their partner was either "very influential" or "somewhat influential." The literature supports the finding that partner support is a key factor in recovery from postpartum depression (Beach, 2001; Glasser et al, 2000; Misri et al, 2002). The passage of time since delivery was also considered influential.

Friends, family, and church/spiritual support were reported as least influential (29%, 29%, and 22%, respectively) to recovery. The group stated that family and friends, including mothers, often did not understand what they were going through. However, once they did understand, these individuals were more helpful. Women who had already found support from those other sources, therefore, may not have sought further support from PPDSP.

Use of Other Therapies Concurrent with PPDSP

Forty-four percent of women who participated in PPDSP also used other therapies or services to help them cope with their postpartum depression. Individual counseling, in conjunction with PPDSP, was the most frequent choice (70%). Fifteen percent of women also indicated that they were seeing their doctor or psychiatrist for additional support, and another 15% reported using their church for support.

Telephone Support

Approximately half of the women (n=21) reported using telephone support services. Of those who used telephone support, 81.0% were Extremely Satisfied and 14.3% were

Somewhat Satisfied. A few were upset that the phone service was limited to weekdays because they were often most distressed in the evening or on weekends. Some women were not aware that this service was available through PPDSP.

Individual Support

Only four of the women interviewed received individual support from PPDSP staff. However, all of these women were extremely satisfied with the service that they received. Again, some women seemed unaware of this service when asked by the interviewer. For those who did not use the service, it was quite possible that they, too, were unaware of the opportunity.

Response of Friends and Family to PPDSP

While many stated that they had feelings of inadequate support before joining the program, 66% stated that their friends and family were either Very Supportive or Supportive of their involvement with PPDSP once they had joined. It is surprising that almost 15% of women, all of whom from the Full participant group, did not tell their friends and family about their involvement with the program. The women often stated that the amount of support often varied between different friends and family members. As the question did not differentiate between family or friend responses, only an overall level of support could be ascertained. **Table 8** shows the women's preceived level of support.

As previously stated, more women in the Minimal group experienced pre-program feelings of inadequate support (100% of Minimal versus 69% of Full). However, the above findings suggest that women in the Minimal group appeared to have more support from friends and family to joining PPDSP. Eighty-nine percent of women in the Minimal group felt Very Supported or Supported in their choice to join PPDSP compared to only 61% in the Full group. Again, with only nine participants in the Minimal group, this finding should be interpreted with caution.

Table 8. Level of Support (%).

	Full	Minimal	Both Groups
Very Supportive	11 (35.5)	6 (66.7)	17 (41.5)
Supportive	8 (25.8)	2 (22.2)	10 (24.4)
Somewhat Supportive	4 (12.9)	1 (11.1)	5 (12.2)
Not Supportive	2 (6.5)	0	2 (4.9)
Did Not Know	6 (19.4)	0	6 (14.6)

Postpartum Depression Support Program

Gains From the Program

The women were asked what they had hoped to gain from their involvement with PPDSP, to which a wide variety of responses were given. These were then grouped into themes and summarized in **Table 9**.

Table 9. Expectations of Program (%).

Support	24 (58.6)
Feeling of not being alone	16 (39.1)
Information / Coping strategies	15 (36.6)
Facilitators	7 (17.1)
Childcare	3 (7.3)

Most Helpful Aspects of the Program

As **Table 10** shows, women stated overwhelmingly that the program's most helpful aspect was the feeling of support that it gave them, followed by a feeling that they were not alone, and strategies and information material that were provided.

Table 10. Most Helpful Aspects of Program (%).

Support	24 (58.6)
Feeling of not being alone	16 (39.1)
Information / Coping strategies	15 (36.6)
Facilitators	7 (17.1)
Childcare	3 (7.3)

Some statements made by the women include:

- "Being around other women who were having the same problems I was made me feel I was normal."
- "All aspects of the program were helpful—the childcare was huge and I was confident in the childcare workers which was nice."
- "It helps to have other women share similar stories. It was a big relief!"
- "Talking to other women, sharing stories, the support from everyone and realizing I wasn't alone because that was my biggest problem."

Least Helpful Aspects of the Program

Researchers also wanted to gain insight into what participants felt were the program's least helpful aspects. Twenty-four women stated that there was nothing that they could think of that was "least helpful." Out of those who responded, a reoccurring theme was problems with group dynamics. Many women were dissatisfied with some group members who dominated the session or discussed personal problems besides their PPD. Just over 19% of women felt that problems with group dynamics negatively affected their experience with PPDSP. Some women (17%) also indicated that they felt that they did not fit in with the group (e.g. being the only single woman in a group of married women). Statements from some of the respondents are as follows:

- "Listening to teenage moms with totally different issues was agitating. I would prefer to have groups for older and younger moms."
- "Listening to women who 'fed off' the stories of other women—some women dominated the conversation, so it would have been better if there was better enforcement of time to talk."
- "Everything was good except for the make-up of the group."

Group Expectations and Recommendations

Ninety-two percent reported that PPDSP was either Very Close (56%) or Somewhat Close (36.9%) to meeting their expectations. It is anticipated that if the group met a woman's expectations, she would recommend the program to others. Indeed, an overwhelming number of women (92.7%) said that they would recommend PPDSP to others, and many stated that they had already told friends or family about the program. Many women who had stopped going to the program still spoke highly of it and had recommended it to other women.

Table 11. Reasons for Recommending Program (%).

Helpful / Very good	15 (36.6)
Support / Felt you were not alone	12 (29.3)
Facilitators	8 (19.5)
Knowledge / Coping Strategies	4 (9.7)
Childcare	2 (4.8)

Some women, primarily from the Minimal participant group, commented that they would recommend it, but only particular aspects or under certain conditions:

- if the woman was not single
- phone support, but not group support
- individual counseling if symptoms were severe
- if the woman had 1 or 2 children and easy access to transportation

Additional Comments about the PPDSP Experience

At the end of the survey, participants were asked whether there was anything else that they would like to mention about their experience with PPDSP. The most common responses included positive comments about the facilitators and childcare provided. Fifteen percent of respondents to this question stated that they found the facilitators very helpful and an essential part of the program's success. Comments include:

- "People that run it actually really care and it shows. They are always there to talk in person or on the phone."
- "The facilitators were perfect."

The childcare service offered by PPDSP was also frequently praised. Only one respondent stated that she was not comfortable leaving her child with the childcare providers. When asked if there was anything else they would like to say about the program, nearly 20% of women stated that they felt the childcare was an important service.

It is important to acknowledge the reasons for discontinuation from the program, both for Full and Minimal participants. These appear to be of a personal nature, rather than related to the program itself:

- recognition that the problem was not PPD
- feeling better on her own
- feeling that she did not fit into group (e.g. being the only Aboriginal participant)
- choosing other services

Summary of Findings

The majority of women in this study were Full participants. They were more likely to be married/common-law, Caucasian, have greater than a high school education, and in their thirties. This is not the typical profile of a depressed woman (Johanson, 2000). Women who attended only a couple of times were less likely to be married or in a common-law relationship. This may have contributed to their non-participation in the group. Although there is an on-site daycare service, it may have been be more difficult for women to organize and attend if there was no other adult to help with her children.

Women were more likely to attend the group only after the birth of their second child. Postpartum depression often increases with increasing parity (Nielsen-Forman et al, 2000), making this finding consistent with the literature. The additional burden created by caring for more than one child might also affect a woman's stress levels and ability to cope (Nielsen-Forman et al, 2000). Many women in this study believed that they had experienced postpartum depression after the birth of their first child, but that it went undiagnosed. Increased emphasis on postpartum depression in prenatal classes or in postnatal visits by Healthy and Home may promote early identification of postpartum depression and intervention in first pregnancies.

The pre-program symptom profile of participants who attended for varying amounts of time is dissimilar. More Full participant women were affected by anxiety and panic, guilt, and excessive sadness and crying, while women who attended just a few times were less affected by both psychological and physical symptoms overall (with the exception of feelings of inadequate support). Therefore, those who drop out of the program early may do so because they are experiencing fewer symptoms.

All Minimal participants had significantly more feelings of little support. Perhaps they did not attend the group because they felt that they had little support anywhere. Perhaps these women were depressed because of their lack of support, but when they found personal support they no longer needed additional support from PPDSP. Indeed, the study found higher levels of friend and family support for women who did attend PPDSP. Therefore, inadequate understanding and support from friends and families during the mother's time of need may have led her to seek support from other sources, such as PPDSP.

Some women voiced a desire to have programs customized to their situation or demographic profile (e.g. single, older, Aboriginal). Given Saskatoon's size and the small number of women who contact the group each year, having many different postpartum depression groups tailored to individual needs is not feasible. Perhaps flexible approaches within each group by various facilitators based on a particular group's demographics would likely be more efficient. A few women commented that facilitators allowed some women to talk too long about distressing personal situations that were not helpful to other participants. Closer monitoring of the discussion may help all womenfeel included in the group.

Many women came to the program to meet others with similar symptom profiles and get help and support for these problems. PPDSP met or exceeded their expectations for all of the support services provided: group, individual, and telephone. Even so, individual and telephone support appeared to be under-utilized, with many unaware of the service. Many women also stated that the telephone and individual support was not readily available outside of business hours. The researchers did not ask if the women were aware of other services that could be accessed during times of crises in the program's off-hours. Although women are now told about services available to them during off-hours, program staff stated that they do not advertise the telephone or individual support because they do not have the staff or budget to provide the service.

Most women found nothing about the program that was unhelpful. Accordingly, most of the women said that they would recommend or had already recommended PPDSP to others.

Limitations

There were a number of limitations associated with this study. Of the 100 women who had contacted PPDSP, 41 were interviewed (32 Full and 9 Minimal participants). This represents a response rate of 41% of the women who sought help from the Postpartum Depression Support Program during the two years. Four women refused to participate. The remaining women had either moved or their phone was disconnected. This low number decreases the generalizability of the findings to all participants of the program.

Length of time was another limitation. For some women, it had been two years since they had participated in the program. Recollection of symptoms, feelings, or events would be subject to recall bias after such a period.

Study design did not allow analysis that could determine the degree of the woman's recovery due to participation in PPDSP alone.

Recommendations

The following recommendations are offered to help PPDSP fulfill its mandate of providing support to depressed postpartum women in Saskatoon:

- To increase validity, prevent recall bias, and limit follow-up loss as women move from the area, client evaluation should regularly follow program completion.
- For ease of compiling and analyzing data, evaluation criteria should echo that used in the assessment form when a woman enters the program. PPDSP should access a database for ongoing recordkeeping and future evaluations.
- Available support and services should be reviewed for specialty groups, single, teenage, and Aboriginal women who may have PPD, but are not attending PPDSP.
- Continue providing onsite daycare services.
- Evaluate facilitators' skills and provide ongoing training.
- Increase awareness and resources associated with telephone and individual support services.
- Review the availability of telephone and other support for crisis situations, especially in the evenings or on the weekend. Ensure that women are aware of all services available to them during crisis times.
- Target first time mothers, their families, and the public for increased PPD education and awareness.
- Review the content and emphasis on PPD in prenatal classes.
- As it appears that knowledge improves the ability of friends and family to provide support to women, it may be helpful to offer regular family and partner sessions.
- Some women said that they would like to be involved in the program by developing peer support initiatives, such as telephone calls or transportation.

Conclusions

The Postpartum Depression Support Program is available to all women within the Saskatoon Health Region who suffer from postpartum depression. This evaluation has developed a profile of participating women, as well as of those who withdrew early from the program. These findings may be helpful for tailoring program content and targeting recruitment activities.

A majority of women who attend PPDSP are thankful for the services, appreciate the support, find it very influential in their recovery, and report that it meets their expectations for relief of postpartum depression symptoms. They have already recommended or would recommend it to friends and family, but had some suggestions for improving accessibility to services (telephone, in particular) and group make-up or facilitation.

Recommendations have been included to increase both awareness of PPD provision of services to meet the expressed needs of PPDSP participants and women in our community who may not be accessing the program.

This report offers evidence that PPDSP provides essential services to women experiencing postpartum depression in the Saskatoon Health Region. It is clear that these women benefited from the support and knowledge that they received from facilitators and other participants. It is hoped that the Postpartum Depression Support Program continues to grow and provide quality service with the full support of all stakeholders.

PostScript

This report was presented to PPDSP facilitators and community members at a CUISR Brown Bag Lunch (BBL) meeting. Both the facilitators and supervisor said that the high rating of partner support was not their recollection of women's experiences in the program, but rather most women did not feel supported by their husbands, and this was a major reason for attending the group. Indeed, the women said that they were attending the program for support. This change in view may have been due to recall bias. If the relationship had improved significantly since the postpartum period, the woman may have chosen to remember her husband's role more positively. In our sample, only one woman changed her status from married to separated in the time between first attending PPDSP and participating in the study. Perhaps these women had more supportive husbands, as suggested by their continued marital status.

Facilitators also stated that the participant profile was somewhat different from what they see in the groups. For example, they believed that more women who participate in the program are from lower incomes, single, or have lower education levels than those interviewed in this report. Researchers were unable to locate or interview 59% of the women who participated in the group, which might have skewed the profile that was derived. One participant at the BBL, a mental health worker, commented that it was a positive sign that there are women from the middle class attending the group,

that postpartum depression is not just a problem of the high-risk groups, that there is potential for everyone to suffer from this problem, and that they, too, would benefit from this type of intervention.

The administrator and facilitators acknowledged that they did not advertise telephone support or one-on-one counseling due to a lack of resources to staff these services. Some changes, however, have been made to their availability since the partipants were in the program.

The facilitators were surprised at the high rate of response to the question of "thoughts of harming self or baby" (59.4% for Full participants and 55.6% for Minimal participants). Fortunately, only 3.1% of women did not find improvement in these thoughts. It may have been that women were afraid to report the self-harm for fear of repercussion (e.g. having the baby taken from them or being committed to a mental health facility). This could be explored in more detail with individual clients or within the support group itself.

As stated in the report, a number of women of various demographics raised the issue of discomfort with group members who were notably different from themselves. Those women believed that they would be most comfortable sharing in a group with similar issues. The poorer, single women, for example, could not relate to the women who had a husband (and perceived support) and no financial worries. One BBL participant, however, thought that the recommendation for having specialty or separate groups for the different women would be a "form of labeling."

The supervisor and facilitators stated that many of the recommendations made in this report are priorities for them and that they will be implemented. The presentation will be made available to PPDSP for use in public and professional awareness efforts.

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Appendix A. Postpartum Depression Support Group Evaluation.

Your feelings and reactions to the group are important to us. We are very committed to improving and changing things to better meet the needs of group members. Your honest feedback will help the Postpartum Support Group grow and become more effective as it continues. Please complete the following questions and add your comments.

1. What was the general atmosphere of the group?

   Was this helpful to you?

2. The most important part of the group has been:

3. The least important part of the group has been:

4. I would have liked _more or _less structured information provided. Please comment:

5. Please comment on the following:

Parking_____
Location_____
Time of Group_____
Child Care_____
Facilitators_____

6. Suggestions for improvement (i.e. topics, format, method, etc.).

   Number of sessions attended:

7. General comments:

Thank you. Please return in stamped, self-addressed envelope. ppd.eval

Appendix B. Letter of Introduction to Full Participants.

12 May 2003

Dear Postpartum Depression Support Program Participant,

Our names are Angela Bowen and Kyla Avis. We are graduate students at the University of Saskatchewan and Registered Nurses. The Postpartum Depression Support Program has hired us to carry out an evaluation of their services. They would like to know how well the Support Program is working to help women cope with depression or other concerns after the birth of their baby. We are interested in exploring your general health status just before entering and following completion of the program. This will help determine the value of the program in helping women overcome their postpartum depression. We are also interested in how satisfied you were with the various aspects of the program and how it might be improved in the future.

Starting May 19th and continuing through June 2003, we will be contacting you by phone to participate in this research project. If you decide to take part in the study, we will set up a convenient time for one of us to interview you over the phone. We understand that you are probably quite busy so we have designed the interview should to take approximately 15 to 20 minutes.

If you are concerned about us calling your home, please contact us directly within one week of your receiving this letter.

Participation in the project is voluntary and you have the right to stop the interview at any time. We also recognize that you may not wish to answer one or two of the questions. If this applies to you, you may simply state that you do not wish to answer and we will move on to the next question. Sample questions are included with this letter to give you an idea of the type of questions we will be asking. All responses to the questions will be kept in strict confidence. We anticipate the results of study will be ready by the Fall of 2003.

Should you have any questions or concerns, please contact Dr Louise Alexitch at the University of Saskatchewan (xxx-xxxx) or Helen Irwin (xxx-xxxx) from the Postpartum Depression Support Program. Study responses will compiled in a report for the Saskatoon Health Region and may be presented at future conferences. If you wish see them you can contact Dr Louise Alexitch at that time.

We look forward to speaking with you and hope you will consider participation in this project. Your time and involvement are greatly appreciated.

Sincerely,

Kyla Avis xxx-xxxx Angela Bowen yyy-yyyy

Appendix C. Letter of Introduction to Minimal Participants.

12 May 2003

Dear Postpartum Depression Support Program Participant,

Our names are Angela Bowen and Kyla Avis. We are graduate students at the University of Saskatchewan and Registered Nurses. The Postpartum Depression Support Program has hired us to carry out an evaluation of their services. They would like to know how well the Support Program is working to help women cope with depression or other concerns after the birth of their baby.

It is our understanding that your involvement in the program lasted approximately 1 to 2 sessions. Therefore, your impression of the program is of particular interest to us, as we would like to better understand the factors that contribute to women leaving the program early. Starting May 26th and continuing through June 2003, we will be contacting you by phone to participate in this research project. If you decide to take part in the study, we will set up a convenient time for one of us to interview you over the phone. We understand that you are probably quite busy so we have designed the interview should to take approximately 15 to 20 minutes.

If you are concerned about us calling your home, please contact us directly within one week of your receiving this letter.

Participation in the project is voluntary and you have the right to stop the interview at any time. We also recognize that you may not wish to answer one or two of the questions. If this applies to you, you may simply state that you do not wish to answer and we will move on to the next question. Sample questions are included with this letter to give you an idea of the type of questions we will be asking. All responses to the questions will be kept in strict confidence. We anticipate the results of study will be ready by the Fall of 2003.

Should you have any questions or concerns, please contact Dr Louise Alexitch at the University of Saskatchewan (xxx-xxxx) or Helen Irwin (xxx-xxxx) from the Postpartum Depression Support Program. Study responses will compiled in a report for the Saskatoon Health Region and may be presented at future conferences. If you wish see them you can contact Dr Louise Alexitch at that time.

We look forward to speaking with you and hope you will consider participation in this project. Your time and involvement are greatly appreciated.

Sincerely,

Kyla Avis xxx-xxxx Angela Bowen xxx-xxxx

Appendix D. Examples of Some Interview Questions.

3. After the birth of which child did you first come in contact with the Program? (Circle more than one if needed)

First Second Third Fourth Fifth Other _____

4. Do you remember experiencing any of these symptoms after the birth of your baby or just before your involvement with the program? Please answer yes or no.

Disturbed sleep pattern	Y	N
Appetite Changes	Y	N
Mood Swings	Y	N
Difficulties with Concentration	Y	N
Anxiety/Panic Symptoms	Y	N
Thoughts of Harming Self or Baby	Y	N
Hearing or seeing things	Y	N
Feelings of Guilt	Y	N
Excessive Crying/Sadness	Y	N
Difficulty Making Decisions	Y	N
Feelings of little Support	Y	N
Other:	Y	N

10. Overall, did your health improve after participating in the support program?

Yes No

13. Do you feel you have fully recovered from your postpartum depression?

Yes No

14. If **No**, what symptoms remain and what services/therapies are you currently using, if any.

Symptoms: Services:

15. If **Yes**, please rate on a 3-point scale how influential each of the following factors were in your recovery (1 being not very influential and 3 being very influen tial):

	not very influential	somewhat influential	very influential	
Husband	1	2	3	N/A
Friends	1	2	3	N/A
Family	1	2	3	N/A
Doctor	1	2	3	N/A
Postpartum Depression Support Group	1	2	3	N/A
Medications	1	2	3	N/A
Individual Counseling	1	2	3	N/A
Time	1	2	3	N/A
Church/Spiritual Support	1	2	3	N/A
Other: _____	1	2	3	N/A

18. Did you use telephone support or individuals support sessions during your involve ment with the program?

Telephone support	Y	N
Individual Support Sessions	Y	N

19. If yes, on a five point scale how satisfied where you with these services?

	Not satisfied				extremely satisfied
Telephone support	1	2	3	4	5
Individual Support	1	2	3	4	5

Appendix E. Service List Accompanying Letters of Introduction.

If you are presently experiencing any problems with depression or your mood, there are agencies available in Saskatoon to help you:

- Your family doctor
- Mental Health Services, Saskatoon
  655-7950
- Mobile Crisis Service
  933-6200
- Catholic Family Services
  244-7773
- Family Support Services
  933-7751

Appendix F. Telephone Interview Script.

Hello, may I speak to _____?

Wrong number: Terminate the call with, "I am sorry to have bothered you".

Answering machine message: Hello, this is a message for_____. This is _____calling on behalf of the Saskatoon Health Region. We are doing a survey of some of our public health programs, could you please call me at _____ to set up a convenient time. Thank you.

Correct number: My name is ____. I am an interviewer for the Postpartum Depression Support Program. A letter was mailed to you recently introducing the evaluation project to you and requesting your participation in this survey. Did you receive the letter?

Yes: Do you have 15-20 minutes right now to do the interview? (Go to Section I)

No: I am a graduate student at the University of Saskatchewan and a Registered Nurse. I have been hired by the Postpartum Depression Support Program to carry out an evaluation of their services. They would like to know how well the Support Program is working to help women cope with depression or other concerns after the birth of their baby. It is hoped that this evaluation will show what the Program is doing right and how it might be improved in the future. We are interested in exploring your general health status just before entering and following completion of the program to determine the value of the program in helping women overcome their postpartum depression. The interview will take about 15-20 minutes. I would like to stress that the participation is completely voluntary, you have the right to terminate the interview at any time, and all responses will be held in the strictest confidence. Do you wish to participate in the study? (See section II)

Section I

Yes: Just to review, we are conducting an evaluation to help determine the value of the Postpartum Depression Support program in helping women overcome their postpartum depression. The reason I am phoning today is to find out whether or not you would be willing to participate in this survey. I would like to stress that the participation is completely voluntary, you have the right to terminate the interview at any time, and all responses will be held in the strictest confidence. You can also skip any questions that you do not feel comfortable answering. Do you still wish to participate? (If yes, go to survey. If no, go to section II)

No: Is there a time we can arrange that will be better for you and I can call you back? (Record appointment on calendar)

Section II

Yes: Do you have 15-20 minutes right now to do the interview? (If yes, go to survey. If no, set up an appointment for a later date and time – see calendar).

No Participation: May I ask your reasons for not participating in the study? (If yes, note the reason, and use an appropriate fall back statement and follow with termination statement, If 'no' finish call with the termination statement.

Reason: _____ Note on call sheet_____

Terminate call with: Thank you for your time. I am sorry to have bothered you.

Section III: The Survey

During the interview, please be patient if I pause between questions, I will be trying to write down your responses as accurately as possible in the interest of presenting your opinions correctly. I will also be referring to the Postpartum Depression Support Program as "The Program" from this point on.

Insert survey questionnaire

Thank you very much for participating in this survey. If you have any questions about the study please contact Dr Louise Alexitch at the University of Saskatchewan (xxx-xxxx) or Helen Irwin (yyy-yyyy) from the Postpartum Depression Support Group. Again, I would also like to reassure you that your responses will be kept strictly confidential. Thank you again for your participation. Good-bye.

Appendix G. Postpartum Depression Support Group Survey Call Sheet.

Respondent: _____ Telephone number: _____

Contact attempts	Date	Time	Result code	Interviewer ID	Notes
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

Result Codes:
Disc = Disconnected (note new number)
IA = Interview arranged (note date and time)
NA = No Answer (after 7 rings)
NH = Not Home (specific individual)
Ref = Refused (note when and why)
IC = Interview completed
IPC = Interview completed partially (why stopped and if/when can complete)
WN = Wrong number
BZ = Busy signal
AM = Answering Machine

Appendix H. Outcome Evaluation for Postpartum Depression Program Survey Questionnaire.

First, I would like to ask you a few questions about your child/children.

1. How many children do you have? 1 2 3 4 5 6 7 8 9 10

2. Age of Child/Children _____ _____ _____
_____ _____ _____

3. After the birth of which child did you first come in contact with the Program? (Circle more than 1 if needed)

First Second Third Fourth Fifth Other _____

The following questions will refer to the birth that led you to participate in the Postpartum Depression Support Program. If you have attended the program more than once, please choose *one* of your postpartum experiences to answer the following questions.

Pre-Program Health Status

The next questions are about your health status just before you came to the program

4. Do you remember experiencing any of these symptoms after the birth of your baby or just before your involvement with the program? Please answer yes or no.

Disturbed sleep pattern	Y	N
Appetite Changes	Y	N
Mood Swings	Y	N
Difficulties with Concentration	Y	N
Anxiety/Panic Symptoms	Y	N
Thoughts of Harming Self or Baby	Y	N
Hearing or seeing things	Y	N
Feelings of Guilt	Y	N
Excessive Crying/Sadness	Y	N
Difficulty Making Decisions	Y	N
Feelings of little Support	Y	N
Other:	Y	N

5. Were you experiencing any of the following physical symptoms before joining the program?

Weight loss or gain	Y	N
Headaches	Y	N
Muscle aches and pains	Y	N
Bloating	Y	N
Constipation or diarrhea	Y	N
Cramps, tiredness (after activity)	Y	N
Fatigue (tired without effort)	Y	N
Other:	Y	N

6. Please indicate which of these symptoms, mentioned previously, improved following your involvement with the program and to what degree (1 being no/minimal improvement and 3 being a lot of improvement).

	No Improvement	Some	A Lot of Improvement	
Disturbed sleep pattern	1	2	3	N/A
Appetite Changes	1	2	3	N/A
Mood Swings	1	2	3	N/A
Difficulties with Concentration	1	2	3	N/A
Anxiety/Panic Symptoms	1	2	3	N/A
Thoughts of Harming Self or Baby	1	2	3	N/A
Hearing or seeing things	1	2	3	N/A
Feelings of Guilt	1	2	3	N/A
Excessive Crying/Sadness	1	2	3	N/A
Difficulty Making Decisions	1	2	3	N/A
Feelings of little Support	1	2	3	N/A
Other:	1	2	3	N/A

7. Please indicate which of these physical symptoms, mentioned previously, improved following your involvement with the program and to what degree (1 being no/ minimal improvement and 3 being a lot of improvement).

Weight loss or gain	1	2	3	N/A
Headaches	1	2	3	N/A
Muscle aches and pains	1	2	3	N/A
Bloating	1	2	3	N/A
Constipation or diarrhea	1	2	3	N/A
Cramps	1	2	3	N/A
Tiredness (after activity)	1	2	3	N/A
Fatigue (tired without effort)	1	2	3	N/A
Other:	1	2	3	N/A

8. Had you ever had a problem with depression or any emotional problems before becoming pregnant?

Yes No

9. Were you on any medications for depression or any other emotional problem before pregnancy?

Yes No

Postprogram Health Status

Now, I would like to know a little about your health status following your involvement with the program.

10. Overall, did your health improve after participating in the support program?

Yes No

11. Did you begin taking anti-depressants or any other mood stabilizing medication during or following involvement in the program?

Yes No

Current Health Status

12. Are you taking anti-depressants or mood stabilizing medications now?
    Yes No

13. Do you feel you have fully recovered from your postpartum depression?
    Yes No

14. If **No**, what symptoms remain and what services/therapies are you currently using, if any.

    Symptoms: Services:

15. If **Yes**, please rate on a 3-point scale how influential each of the following factors were in your recovery (1 being not very influential and 3 being very influential):

	not very influential	somewhat influential	very influential	
Partner	1	2	3	N/A
Friends	1	2	3	N/A
Family	1	2	3	N/A
Doctor	1	2	3	N/A
Postpartum Depression Support Group	1	2	3	N/A
Medications	1	2	3	N/A
Individual Counseling	1	2	3	N/A
Time	1	2	3	N/A
Church/Spiritual Support	1	2	3	N/A
Other: _____	1	2	3	N/A

Participation in the Program

16. Were you involved in any programs or therapies outside of the Postpartum Depression Support Program after the birth of your baby (e.g. therapist, community agency, psychiatrist, etc)?

    Yes No

17. If yes, what other services did you use?

18. Did you use telephone support or individuals support sessions during your involvement with the program?

			Not Satisfied		extremely satisfied
Telephone support	Y	N	1	2	3
Individual Support Sessions	Y	N	1	2	3

19. Overall, what were you hoping to gain from joining this Program?

20. How closely did the Program meet your expectations?
    Not at all Somewhat close Very close

21. If it **did not** meet your expectations, how was it different from what you expected?

22. What aspects of the program did you feel were the most helpful?

23. What aspects of the program did you feel were the least helpful?

24. How did your family/friends respond to you joining the Program?
    They did not know
    Not supportive
    Somewhat supportive
    Supportive
    Very Supportive

Summary

25. Would you recommend the Program to others?
    Yes No

26. What are your reasons for recommending/not recommending it to others?

27. Is there anything else that you would like to tell me about your experiences in the Postpartum Depression Support Program?

Demographic Information

These last few questions are for demographic purposes only. If you do not feel comfortable answering, please tell me and I will skip over it.

28. How old are you: _____ 29. Identifier_____

30. What is the highest level of education that you have completed?
< high school
high school diploma
some post-secondary
post-secondary degree/diploma
graduate degree

31. What was your household income at the time of entering the program?
<20,000 20-40,000 40,000-60,000 >60,000

32. What was your marital status at time of program?
married single divorced common-law separated

33. What is your current marital status?
married single divorced common-law separated

34. Are you:

First Nations	Y	N
Metis	Y	N
Visible Minority	Y	N
Other _____		

Interviewer: _____ Date:_____

Comments:

Appendix I. Minimal Participation Interview.

First, I would like to ask you a few questions about your child/children.

1. How many children do you have? 1 2 3 4 5 6 7 8 9 10

2. Age of Child/Children _____ _____ _____
_____ _____ _____

3. After the birth of which child did you first come in contact with the Program? (Circle more than 1 if needed)
First Second Third Fourth Fifth Other _____

Pre-Program Health Status

The following questions will refer to the birth that led you to participate in the Postpartum Depression Support Program. If you have attended the program more than once, please choose **one** of your postpartum experiences to answer the following questions.

4. Do you remember experiencing any of these symptoms after the birth of your baby or just before your involvement with the program? Please answer yes or no.

Disturbed sleep pattern	Y	N
Appetite Changes	Y	N
Mood Swings	Y	N
Difficulties with Concentration	Y	N
Anxiety/Panic Symptoms	Y	N
Thoughts of Harming Self or Baby	Y	N
Hearing or seeing things	Y	N
Feelings of Guilt	Y	N
Excessive Crying/Sadness	Y	N
Difficulty Making Decisions	Y	N
Feelings of little Support	Y	N
Other:	Y	N

5. Were you experiencing any of the following physical symptoms before joining the program?

Weight loss or gain	Y	N
Headaches	Y	N
Muscle aches and pains	Y	N
Bloating	Y	N
Constipation or diarrhea	Y	N
Cramps, tiredness (after activity)	Y	N
Fatigue (tired without effort)	Y	N
Other:	Y	N

6. Had you ever had a problem with depression or any emotional problems before becoming pregnant?

Yes No

7. Were you on any medications for depression or any other emotional problem before pregnancy?

Yes No

Participation in the Program

The following questions will refer to the birth that led you to the program. If you have attended the program more than once, please choose **one** of your postpartum experiences to answer the following questions:

8. Were you involved in any programs or therapies outside of the Postpartum Depression Support Program after the birth of your baby (e.g. therapist, community agency, psychiatrist, etc)?

Yes No

9. If yes, what other services did you use?

10. Did you use telephone support or individuals support sessions during your involvement with the program?

			Not Satisfied		Extremely Satisfied
Telephone support	Y	N	1	2	3
Individual Support Sessions	Y	N	1	2	3

11. Overall, what were you hoping to gain from joining this Program?

12. How closely did the Program meet your expectations?
Not at all Somewhat close Very close

13. If it **did not** meet your expectations, how was it different from what you expected?

14. What aspects of the program did you feel were the most helpful?

15. What aspects of the program did you feel were the least helpful?

16. How did your family/friends respond to you joining the Program?
They did not know
Not supportive
Somewhat supportive
Supportive
Very Supportive

17. What factors led you to discontinue involvement with the Program?

Current Health Status

18. Do you feel you have fully recovered from your postpartum depression?
Yes No

19. If **No**, what symptoms remain and what services/therapies are you currently using, if any?

Symptoms: Services:

20. If **Yes**, please rate on a scale of 1 to 3 how influential the following factors were in your recovery (1 being minimally influential and 3 being very influential).

Partner	1	2	3
Friends	1	2	3
Family	1	2	3
Doctor	1	2	3
Postpartum Depression Support Group	1	2	3
Medications	1	2	3
Individual Counseling	1	2	3
Time	1	2	3
Church/Spiritual Support	1	2	3
Other: _____	1	2	3

21. Are you taking anti-depressants or mood stabilizing medications now?
Yes No

Summary

22. Would you recommend the Program to others?
Yes No

23. What are your reasons for recommending/not recommending it to others?

24. Is there anything else that you would like to tell me about your experiences in the Postpartum Depression Support Program?

Demographic Information

These last few questions are for demographic purposes only. If you do not feel comfortable answering, please tell me and I will skip over it.

28. How old are you: _____ 29. Identifier_____

30. What is the highest level of education that you have completed?
< high school
high school diploma
some post-secondary
post-secondary degree/diploma
graduate degree

31. What was your household income at the time of entering the program?
<20,000 20-40,000 40,000-60,000 >60,000

32. What was your marital status at time of program?
married single divorced common-law separated

33. What is your current marital status?
married single divorced common-law separated

34. Are you:

First Nations	Y	N
Metis	Y	N
Visible Minority	Y	N
Other	_____	

Interviewer: _____ Date:_____

Comments:

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