Effective Antenatal Education: Strategies Recommended by Expectant and New Parents

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ABSTRACT

Antenatal education is a crucial component of antenatal care, yet practice and research demonstrate that women and men now seek far more than the traditional approach of a birth and parenting program attended in the final weeks of pregnancy. Indeed, women and men participating in this study recommended a range of strategies to be provided during the childbearing year, comparable to a ''menu in a restaurant.'' Their strategies included three program types: ''Hearing Detail and Asking Questions,'' ''Learning and Discussing,'' and ''Sharing and Supporting Each Other.'' The characteristics of each type of program are identified in this article. The actual learning methods the study participants recommended to be incorporated into the programs were ''Time to Catch Up and Focus,'' ''Seeing and Hearing the Real Experience,'' ''Practicing,'' and ''Discovering.''

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Antenatal education, recognized as an essential component of antenatal care (Health Department Victoria, 1990; NSW [New South Wales] Department of Health, 1989; Simkin & Enkin, 1989), has traditionally been labor and birth focused, developed by health professionals, and restricted to programs offered in the final weeks of pregnancy. Based on the theories of Lamaze (1956), Dick-Read (1944), and others (Simkin & Enkin, 1989), many of the early programs had the educators, typically physiotherapists/physical therapists, teaching methods, such as psychoprophylaxis, to their patients and insisting the women gain their doctor's permission prior to attending their antenatal classes (Reiger, 2001). The actual process used was typically that of large group teaching.

By the late 1970s, in Australia and overseas, midwives began to seek a more holistic approach to maternal care and, consequently, greater involvement in antenatal education (Reiger, 2001; Simkin & Enkin, 1989). During the 1980s in Australia, the pursuit of midwives to reclaim their territory became even more evident, with an increasing number becoming involved in hospital-based antenatal education,

often as part of a team with physiotherapists/physical therapists (D. Rogers, personal communication, May 8, 1991).

The early 1990s became a pivotal time for hospital-based antenatal education in Australia with the release of three statewide ministerial reviews of maternity services (Department of Health Western Australia, 1990; Health Department Victoria, 1990; NSW Department of Health, 1989). An examination of these reviews revealed little variation in antenatal education practice in these three states, and it was not uncommon to have groups of 30–40 couples in the antenatal classes provided by the larger public hospitals (Health Department Victoria, 1990; NSW Department of Health, 1989).

To rectify deficiencies, many hospitals changed their antenatal education practice somewhat by attempting small-group interactive learning. However, experience demonstrated that the educator continued to have control of the learning that occurred, and minimal change took place in the range and scope of antenatal education. The learning opportunities that arise during the childbearing year continued to be underutilized.

Today, the principles of health promotion are seen as critical in the development of antenatal education. There is an understanding that information transfer by itself should no longer be the focus of antenatal education; rather, it should provide opportunities for people to learn skills in order to practice desired behaviors (Nutbeam, 2000). Self-responsibility for health is assuming greater importance, as are the principles of adult learning in antenatal education. Adult learners have life experience and prior knowledge, and they can benefit from being actively involved in their learning. Experts suggest that educators need to become facilitators and adopt an outcomes-based approach, which shifts the emphasis from the educator to the learner (Brookfield, 1996; Knowles, Holton, & Swanson, 1998). This approach aims to help learners develop into lifelong learners who are able to use knowledge in new ways, problem solve, and adapt to their ever-changing life situations.

To date, a lack of research has investigated the learning processes parents use and prefer during pregnancy and early parenthood (Renkert & Nutbeam, 2001). In the study reported in this article, we aimed to address this gap in knowledge by undertaking a comprehensive needs assessment involving expectant and new parents. Specifically, our aim was to ascertain the learning processes that best suited expectant and new parents and to plan antenatal education based the findings of the study.

Information transfer by itself should no longer be the focus of antenatal education; rather, it should provide opportunities for people to learn skills in order to practice desired behaviors.

METHOD

Design

A longitudinal, mixed-methods needs assessment was conducted to gain data from first-time expectant and new parents (251 women and 251 male partners). Data collection methods were in-depth interviews, focus groups, surveys, and participant observation. Ethics approval was obtained from hospital and university ethics committees prior to commencement of this research. Informed written consent was obtained from all participants.

Setting

Two large, metropolitan, referral hospitals in Sydney, Australia, were selected for this study. The maternity services, annual birth rate, and antenatal education programs of both hospitals were similar. Approximately 1,500 women and partners attended antenatal classes at each hospital annually.

Sample

A total of 251 women and their male partners participated in the research (see Table 1). They were all first-time expectant and new parents scheduled to have their baby at one of the two participating hospitals. The method of recruitment, number of participants, and time of data collection were dependent on the data collection methods and are described below.

Data Collection Methods

Interviews. In-depth interviews were conducted over a 12-month period with a small sample of expectant and new parents who attended the two participating hospitals. In-depth interviews were deemed the optimal method by which to obtain the depth and dynamic nature of the participants' preferred learning processes during the childbearing year. The first author, a competent and experienced interviewer, conducted the interviews.

To obtain a sample as early in the childbearing year as possible, the first author contacted general practitioners in the local community and advertised

TABLE 1
Expectant and New Parents – Data Collection Methods and Samples

Data Collection Method	Time Data Collected	Sample
Repeated in-depth interviews	Early weeks: <12 weeks	9 women and their partners
	Middle weeks: 12–28 weeks	Cohort followed from early pregnancy
	Final weeks: 28–40 weeks	to early weeks at home
	Postbirth: 8 weeks after birth	
Focus groups	Middle weeks	15 women and partners
	Final weeks	16 women and partners
	Postbirth	15 women and partners
		(Different samples used at each period)
Surveys	Middle weeks	52 women and partners
	Final weeks	46 women and partners
	Postbirth	48 women and partners
		(Different samples used each period)
Participant observation of antenatal education sessions	Final weeks	50 women and partners
Total number of participants		**251 women and partners**

in the community newspaper. These methods produced a convenience sample of 9 couples having their first baby in the participating research hospitals. The small sample size was deemed to be sufficient because of triangulation with focus-group and survey data. Nevertheless, data saturation, as described by Strauss and Corbin (1998), was reached with no new issues, themes, or concerns emerging after the completion of nine interviews at each time period. An open-ended, unstructured questioning process was used (e.g., ''How are you satisfying your information needs at this stage of pregnancy?'' and ''How do you think information and skill development should be provided during the childbearing year?''), with probing used to obtain more detail, if necessary.

The women and men were interviewed together, rather than separately, at each of the four times they were interviewed (see Table 1). Previous exploratory research by the first author had demonstrated that when male and female parents are given equal time to provide their own responses, they are able to identify similarities and differences between their learning needs and preferences. This ability in itself was useful to observe. Time was allocated at the end of each interview for the women and their partners to ask questions and for the researcher to summarize the discussion. The formality of the interviews decreased over time as trust developed between the first author and the expectant parents.

All interviews were audiotaped, with the permission of the participants. The first author kept field notes, recording nonverbal actions and reactions that occurred during each interview. The participants' salient expressions were briefly recorded in these notes at the completion of the interview.

Focus groups. Focus groups conducted during and after the birth were used to obtain data from a larger sample of expectant and new parents receiving antenatal care at the two hospitals. These groups enabled us to further explore the experiences and ideas identified in the interviews described above. An understanding of similarities and differences between individuals in groups was also obtained. Participants' insights, comments, and questions provided valuable information to help identify preferred learning processes and strategies to improve antenatal education. Questions and prompts used in the focus groups were similar to those applied in the interviews. The first author moderated the focus groups.

Six focus groups were conducted, three at each of the participating hospitals (see Table 1), with different samples used at each time period, leading to a total sample of 46 couples. No focus groups were conducted early in pregnancy, because the participants had not yet made contact with the hospitals, and it was difficult to recruit numbers of couples at this stage of pregnancy. Convenience samples of expectant and new parents were recruited from the antenatal clinic and birth center for the midpregnancy focus groups, from the antenatal classes for the late-pregnancy focus groups, and from the Early Childhood Health Center for the after-birth focus groups.

The focus groups were conducted with both women and men present and took place in the

participating hospitals' meeting rooms used for antenatal education. Each group session was approximately 1½ hours in duration and held in the evening, with refreshments provided. Participants completed a consent form at the beginning of the focus group. The groups were audiotaped with the permission of the participants. An independent observer was present during each group meeting. The first author and an observer kept field notes, recording nonverbal actions and reactions that occurred during each of the six focus groups.

The first author transcribed the tapes of each session before starting the next focus group. The synchronization of focus groups with in-depth interview transcriptions made it possible to check the data collected from interview participants. The themes extracted from the data were similar in each time period. In addition, information provided by focus-group members allowed follow-up of important issues with other participants, with this amplifying the data.

Surveys. In order to obtain a larger sample of expectant and new parents for this mixed-methods needs assessment, three surveys were distributed to convenience samples of 146 women and their partners who attended the antenatal education programs at the two participating hospitals. Samples were obtained from both hospitals, and at each time period different samples were used.

- Survey 1 was distributed with the participants' program booking confirmation letter and returned by post.
- Survey 2 was distributed and completed by women and their partners during the final session of an antenatal education program.
- Survey 3 was distributed approximately 6 weeks after the birth of the baby. Participants were asked to return their completed survey by post or give it to the educator at their antenatal class reunion.

The survey questions elicited a range of data, including how the participants preferred to learn information and skills and how they thought education should be provided during the childbearing year—that is, before, during, and after pregnancy.

Participant observation. Participant observation of a cross section of 50 expectant parents (see Table 1) attending the antenatal education programs at the two hospitals allowed further triangulation of research methods. Field notes were collected on the participants' questions, the facilitator's style, processes used, reaction of participants, discussion topics, and timing.

Data Analysis

Data were categorized according to the method used to collect it. Audiotapes from interviews and focus groups were transcribed verbatim. Text from transcriptions of the parents' interviews and focus groups was examined for recurring themes, with significant words and phrases highlighted. The words and phrases were then examined more closely for related patterns and the development of subthemes. A card index system organized these themes and subthemes, which were allocated a code, and combinations of codes were retrieved and cross-linked. These were continually checked, rechecked, and revised with additional data as a deeper understanding, confirmation, or variation was identified.

The actual words used by participants in this needs assessment have been retained and identified using quotation marks. A pseudonym in parentheses follows longer comments and questions that capture important views of the majority of participants, or those that are polarized. A number after the pseudonym indicates the individual's week in pregnancy (e.g., 8wks) or postnatal period (e.g., 9wksPn) at the time. The codes identify data collected from focus groups (FG), participant observation (PO), and survey (S).

RESULTS

Demographic Details

The 251 women who participated in this needs assessment ranged in age from 24 to 37 years. A majority of participants had completed postsecondary education, had a family income in excess of $60,000, and were of Australian or English descent. The women's partners were male, educated, and employed, and they ranged in ages from 26 to 38 years. An examination of the demographic data from the participating hospitals revealed that the characteristics of this sample were similar to the population attending each hospital.

Strategies to Improve Antenatal Education

The majority of expectant and new parents who participated in this research stated that if antenatal

education is to be effective, it must be broadened from the current situation—that is, from programs provided only in the final weeks of pregnancy. They clearly stated that "one size does not fit all," and they recommended a range of "programs" that they believed should be offered by a hospital, or such organization, during the childbearing year. They likened their recommended program types to that of "dishes on a menu in a café. . .you can choose what is best for you. . .what is tasty" (Sue, 36wks, FG).

The types of programs that these women and men recommended divided into three categories, each with its own "essential ingredients." These categories were:

- "Hearing Detail and Asking Questions"
- "Learning and Discussing"
- "Sharing and Supporting Each Other"

The characteristic that defined each program was its level of formality, as described below and summarized in Table 2.

"Hearing Detail and Asking Questions." The programs in the "Hearing Detail and Asking Questions" category had the most formal structure because, as participants in one of the postnatal focus groups described, they should be like "a series of lectures" with a "guest speaker talking about his or her speciality and answering questions." The participants recommended that "a timetable of lecture topics and presenters would be available [from the hospital] and we could decide which we at-

TABLE 2
"Essential Ingredients" of Antenatal Programs

	Characteristics of Each Type of Program, as Identified by Expectant and New Parents		
Program Development Terms	"Hearing Detail and Asking Questions"	"Learning and Discussing"	"Sharing and Supporting Each Other"
Structure	Formal structure – A timetable of preset topics, with topics rotating every 6–9 months.	Closed group, with defined beginning and end. Topic areas preset, with flexibility in order of presentation and actual topics covered negotiated with participants.	Informal, with own momentum. Participants have ownership of the program.
Leadership style	Autocratic – Lecture style, with time for questions and answers.	Democratic – Mini-lectures, with small and large group discussions.	Laissez-faire, with facilitator being part of the group.
Program length	Dependent on number of topics on the timetable. Attended as series or independent sessions.	Dependent on content and process (e.g., birth and parenting program to be 6–8 sessions).	Ongoing (e.g., a weekly prenatal yoga session or a weekly postnatal coffee morning).
Session length and frequency	Length and frequency dependent on number of topics to be covered (e.g., a monthly information evening with a guest presenter—2 hours duration).	Session length for evening programs to be no more than 3 hours, with sessions offered weekly for duration of program. Weekend condensed sessions to be offered.	At least ½ hour for yoga and exercise sessions and 1½–2 hours for coffee mornings. Sessions offered weekly or monthly.
Group composition	Different cohort attending each session. Participants can attend as many sessions as they like.	Same people attend each session of the program.	Majority of same people will attend each session, with new members joining each time.
Group size	Determined by venue (e.g., 40–50, if large lecture in a lecture theater).	Not more than 12 couples, preferably 10.	Determined by purpose of the group. No more than 20 people recommended.
Facilitator	Guest speaker with presentation skills: able to communicate, nonjudgmental, competent and intelligent, approachable, and flexible.	Experienced group leader: nonjudgmental, up-to-date on content and topical issues, and flexible.	Role determined by group (i.e., leads or mingles). Experienced group leader: flexible, able to answer questions. Expert could be included to present specific information.
Venue	Hospital or in community	Hospital or in community	Hospital or in community

tended.'' The topics on the timetable would rotate, with the frequency of rotation depending on the number of topics on the timetable. Topics of interest to women and men included ''growth and development of an infant,'' ''drug choices in labor,'' ''first aid,'' and ''medical intervention in labor.''

An examination of the other ''essential ingredients'' revealed that the ''Hearing Detail and Asking Questions'' program structure was similar to the lectures of yesteryear (see Table 2). A significant difference, however, was that this type of program was to be only one program type on the ''menu.'' The program could be a type that some would choose to complement the others they attended, but also it ''could be of particular interest to those with a really strong dislike of groups'' (FG). As Sue (7wksPn) said, ''Attendance at one of these sessions permits anonymity.''

''Learning and Discussing.'' The programs in the ''Learning and Discussing'' category were less formal because, rather than having an expert lecturing, the expectant and new parents in this study identified a need for programs ''where an educator gives information and teaches skills which we all discuss and practice, and it [the program] goes over several weeks.'' This description was like that of a closed-group program (Yalom, 1995), with a defined number of sessions and group members remaining constant.

An examination of the ''essential ingredients'' revealed that the ''Learning and Discussing'' type of program was indeed that which has become accepted as antenatal education in Australia and elsewhere (see Table 2). The study's women and men were adamant that this type of program should continue as the key to antenatal education, but they were critical of current practice limiting classes to the final weeks of pregnancy. In fact, the women and men recommended that ''Learning and Discussing'' programs should be available, either as independent programs or as a series, at the following times:

- ''**Before you are pregnant**... held at the hospital to open the doors to a place many don't know. Hospitals with maternity units should provide sessions in the evening or on weekends for women and men thinking of becoming pregnant. There are so many things you have to think about, and when you may have only one or two kids you want to do your best.'' (Jim: 38wks)
- ''**When you are just pregnant**... like an interactive Web site, but much better. This is the really risky time for the development of the baby.'' The program should be accessible to ''anyone...not only those planning on going to hospital.'' (Emma: 6wksPn)
- **''Around the middle weeks of pregnancy** when you expect more...more problems, I guess. Now we are confident our pregnancy will continue, we're interested in a whole lot of practical information and tips on how to care for the baby. It would be good to talk them through with a professional.'' (Angela: 7wksPn)
- **''Towards the end**...must not be birth focused...birth is one day... being a parent is for life. It would be even better if some was before the birth and some after...say 70% to 30%.'' (Paul: 8wksPn)
- **''After the birth**...about 4 weeks after, then around 6 months when junior begins solids, then 12 months to know what to do with play and maybe more.'' (Sarah: 6wksPn)

The number of sessions in each of these programs varied and depended on the structure, content, and process of the program. For example, a middle-pregnancy program focusing on breastfeeding and early parenting—topics found to be of interest at that time (Svensson, Barclay, & Cooke, 2006)—could take two sessions; whereas a comprehensive labor, birth, and parenting program offered toward the end of pregnancy could be six to eight sessions. Indeed, some study participants suggested that this latter type of program ''straddle the birth'' experience, in which case the program may need to be a total of eight to nine sessions. The participants generally recommended that evening sessions be no more than 3 hours duration, and they identified the need for hospitals to offer full-day workshops on weekends.

''Sharing and Supporting Each Other.'' Many participants thought a regular, informal meeting, such as a monthly or second-monthly informal coffee morning/meeting, would be ''such a good idea'' during the childbearing year. ''Sharing and Supporting Each Other'' was the least formal type of program the women and men recommended (see Table 2). They likened it to a ''tennis club, aerobics, aquarobics, or a book club...women sharing wis-

dom like they used to.'' This program had ''to be fluid, with its own momentum.'' Brad (38wks) echoed the sentiments of other men in the study: ''When your partner is okay, you are okay. Stress tends to transfer from one to another. I think a second monthly group is more for the girls, so they can chat and work out problems.'' The men preferred to network ''amongst the guys at a barbecue'' or ''with mates at the footy [football game]'' (FG). The women and men recommended the following programs within the ''Sharing and Supporting Each Other'' category:

- pre- and postnatal yoga;
- pre- and postnatal exercise classes;
- coffee mornings for expectant and new mothers;
- a ''boys'' night for expectant and new fathers; and
- informal question-and-answer sessions held every week at the hospital.

Pregnancy Support Telephone Line

During the year that data were collected for this needs assessment, study participants discussed the need for a 24-hour pregnancy support telephone line, which they referred to as the ''Pregnancy Hotline,'' as another strategy for improving antenatal education. As Paul (8wksPn) stated, ''I would have liked a professional available to answer our questions on a 24-hour basis. . .. as a bloke, I would have preferred a doctor or someone like them on the end. When your partner is looking for comfort. . .looking for answers to even simple questions, you need to be able to do something.'' In fact, with the Internet becoming recognized as a ''great place to get information,'' the expectant and new parents in this study saw ''a need for large hospitals to have their own [Web] site.''

Learning Processes Preferred During the Childbearing Year

In addition to defining the types of programs they believed should be offered during the childbearing year, the women and men in this study identified actual methods by which they preferred to learn. Indeed, the phrase ''one size does not fit all'' recurred. Their preferences fell into four interrelated categories: ''Time to Catch Up and Focus,'' ''Seeing and Hearing the Real Experience,'' ''Practicing,'' and ''Discovering.'' The interrelationship of these preferences to the programs the participants recommended is described below.

''Time To Catch Up and Focus.'' Study participants considered the ''Time to Catch Up and Focus'' learning method of greatest importance in programs with the less formal program structure—that is, in the ''Learning and Discussing'' programs and in the ''Sharing and Supporting Each Other'' programs—because, in most instances, the program participants knew each other. As Lyn (8wksPn) said, ''[T]ime to catch up on friends at the beginning of each session allows you to chill out of work mode. . .then you can concentrate.'' In recommending that this time be allocated as such, the women and men thought that each session should begin with an icebreaker or a small-group activity. They warned, however, that care should be taken in deciding on the type of icebreaker to use, with some saying they ''hated the icebreaker where you have to introduce another person,'' because, as Anna (7wksPn) said, ''I spent so much time trying to remember what I had to say about Pete, that I didn't hear what others were saying.'' They preferred ''innocent ones [icebreakers], like what are your hobbies or interests.''

''Seeing and Hearing the Real Experience.'' Study participants described the ''Seeing and Hearing the Real Experience'' method of learning as a ''powerful way to learn'' and of importance within each program type. Women who attended a pregnancy yoga or exercise program described with enthusiasm how they felt when a ''new mum came along with her baby. It was so good to see Alex again with her bub. We had a real connection. . .it was unreal to think it would be me soon'' (Sue: 39wks).

Expectant and new parents who experienced a couple coming to their antenatal class with their baby to talk about their experience described it as a ''really valuable'' learning activity. Indeed, some were shocked to hear ''that this did not happen in all classes'' (FG). Watching a baby being bathed in the postnatal ward was also described as an ''unreal experience'' by those who had seen it in their birth and parenting program.

These expectant and new parents recognized the benefits of ''watching birth videos and others'' during and after pregnancy; however, the videos and others only provided a ''glimpse of what it is really like.'' Many preferred ''seeing and hearing what really happened'' because they could ''chat,'' ''ask questions, bounce around ideas and see what Liz's [yoga instructor's] response was'' (Sarah: 37wks). Through this interaction, they were also able to

get a ''true feeling of the time involved,'' whereas the ''editing of videos prevented this.''

"Practicing." Parents' concern around the baby being a ''very dependent being'' and their reluctance to ''just do it [parenting tasks] any old way'' (concerns that were identified in a larger study by Svensson et al., 2006) created mistrust in their ''ability to perform skills.'' As Robert (24wks) stated, ''I think any birth or parenting program should have practical skills, as you want to be able to help at home. Bathing and showering baby, massage, ways to get her to sleep, playtime, burping. . .I'm sure there are many more to learn.'' Practicing was important because ''it seemed to stick more if we were shown how to do it [wrap a baby] and then we had a go'' (Emma: 6wksPn).

Practice in solving scenarios that described real-world issues, such as an unsettled baby at 2:00 a.m., encouraged the women and men to ''think beyond the square'' and use their well-developed problem-solving abilities. Nevertheless, many of the expectant parents perceived parenthood as being a ''new job,'' which ''requires much study,'' rather than the reapplication and development of skills they already possessed.

"Discovering." With their ''eyes and ears wide open,'' the study's expectant and new parents liked to ''discover the facts from our educator. . .kind of a mini-lecture. . .not chalk and talk.'' Their vision was to have factual and topical information provided and discussed in ''the large group,'' with ''small-group exercises to focus on. . . find out what others feel about these issues.'' For example, many found it interesting to know the ''fears and concerns in relation to labor'' from the small group so ''you don't feel as alone'' (Emma: 38wks). They emphasized a need for an exchange of information and ideas, not ''one person taking over. . .pushing their own barrow'' (Angela: 37wks).

The participants debated the value of single-gender discussion groups in antenatal education programs. Many had encountered small-group, single-gender discussions, which they found ''interesting. . .to hear another slant on it [pain in labor]'' (Tim: 39wks). However, not all parents were keen on single-gender discussions. ''I don't think that you should have separate groups for men and women. . .. It's important to be able to talk together. It really depends on the guys, I guess, and it also depends on the aim of the group'' (Greg: FG). The majority of parents recommended that feedback from any group discussion or activity was vital because ''you were left in limbo wondering what the others thought if this did not occur.''

Take-home activities were recognized as useful because it was interesting ''to focus on our baby and what we need to get.'' Home study is not a frequently used strategy in Australia but, as Brookfield (1996) outlines, participants in a program can gain as much, and sometimes more, from a take-home activity as learning the information in a workshop.

DISCUSSION

The aim of this study was to identify the learning processes that best suited expectant and new parents and to plan antenatal education based on the findings. Data were collected from women and men during the childbearing year, as one component of a comprehensive needs assessment involving first-time expectant and new parents.

The women in this study were predominantly middle-class, English-speaking, educated women with a male partner. Although the sample was representative of the majority population attending the two hospitals selected for this study for the birth of their first baby, the generalizability of the study's results is limited. Many groups within our multicultural society may have special needs that have not been identified in this research (e.g., adolescents, single women, and women from minority cultures). The teaching and learning methods identified may or may not be suitable for such groups. It is recommended that the needs of minority groups be examined, and that effective antenatal education be developed based on these needs.

The results of this study challenge the current approach to antenatal education of many hospitals in Australia—that is, the provision of programs only in the final weeks of pregnancy. The participants of this study were emphatic that a variety of programs and processes are required to provide birthing and parenting education in a way that meets the needs of new parents. The whole childbearing year, and indeed beyond the year, is a critical time of learning, not just the latter weeks of pregnancy, as many childbirth educators believe. This finding supports the earlier work of Anderson (1994) and of Farrell, Bushnell, and Haag-Heitman (1998). The participants in this research identified programs with different levels of formality that cover both pre- and postbirth as the key to effective antenatal education.

Indeed, the expectant and new parents in this study recommended three program types, each with clearly identified "essential ingredients":

1. "Hearing Detail and Asking Questions" – Analogous to the delivery of lectures "by experts," with the aim of providing information to a large number of participants in a short period of time;
2. "Learning and Discussing" – Analogous to small-group, closed programs with the primary focus being in-depth exploration of issues, as well as problem solving and skill development; and
3. "Sharing and Supporting Each Other" – Analogous to peer support and social groups. The primary aim is social, allowing an examination of expectations, what is normal, and the development of peer support networks.

The parents in this study thought that not every hospital has to provide the wide range of programs they identified. Rather, they envisioned a collaboration between hospital and community organizations, with a "menu" style brochure listing the "dishes" available from both sectors. They recommended that the menu be produced and kept updated by the coordinator of antenatal education at the hospital, and that it be distributed to general practitioners and antenatal clinic midwives. Ideally, expectant women and their partners should receive this "menu" before conception or in the early weeks of pregnancy, so that they can meet their own learning needs during the childbearing year. With the Internet being used increasingly as a transmitter of information (Romano, 2007), the need for a Web-based menu must be investigated.

In addition to identifying three types of programs, the expectant and new parents in this study identified specific activities that could be used to promote learning during the childbearing year. The importance of experiential learning was clearly identified; for example, new parents attending an antenatal session to describe and discuss their experience. Also deemed important was cooperative learning, such as discussing their fears and concerns of being a mother and a father. Adult learners have life experience and prior knowledge, so their learning needs to be relevant and goal oriented (Brookfield, 1996; Noel-Weiss, Bassett, & Cragg, 2006).

Problem-solving activities have been demonstrated as being effective in the uptake and retention of concepts (Clouse, Goodwin, Davey, & Burgoyne, 2003; Kemp, Stewart, Fung, & Orban, 2002). Additionally, when performed as a small-group learning activity, problem-solving encourages self-directed learning, group exchange, and relation of theory to practice (Lee, Wong, & Mok, 2004). In this study, problem-solving activities were identified as another preferred learning process and, as such, are of importance in planning antenatal education programs.

The childbearing year, both before and after the birth, is a time of immense change that offers numerous learning opportunities.

The need for support during the childbearing year was clearly evident from the study participants' recommendations, with the amount required varying among individuals. This finding appears to reflect the fact that women and men have diverse and distinctive interests and concerns (Homer, Farrell, Davis, & Brown, 2002), and that they require answers from experts as well as from peers (Svensson et al., 2006). Participants in the present study emphasized the importance of information and skills obtained from both peers and experts. However, educators have described a fear that peers may provide "incorrect" information and are sometimes anxious about laissez-faire groups. This concern requires investigation.

IMPLICATIONS FOR PRACTICE

The childbearing year, both before and after the birth, is a time of immense change that offers numerous learning opportunities. Traditional antenatal education provided as programs to be attended in the final weeks of pregnancy is not meeting the current need. Educative programs are the key to effective antenatal education, but they need to be greatly improved upon in terms of number offered, timing, structure, process, and purpose. A menu approach is required.

At the time of this research, consideration was being given to designing a comprehensive birth and parenting program that straddled the birth experience—that is, the program would provide five or six prenatal and two or three postnatal sessions. This structure proved to be difficult to implement for logistical and financial reasons, so it did not proceed. The results of this research demonstrate that further work is required with this concept.

Finally, findings from this study add to the increasing amount of research reporting on educative strategies that meet men's needs during the child-

bearing year (Friedewald, Fletcher, & Fairbairn, 2005; Lee & Schmied, 2001; Schott, 2002). Men should no longer be seen as adjuncts but as an integral part of the childbearing experience. Their needs require consideration.

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