Prenatal Parent Education for First-Time Expectant Parents: “Making It Through Labor Is Just the Beginning…”

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ABSTRACT

Introduction: The purpose of this pilot project was to determine first-time expectant parents’ perceptions of a parent education intervention, their education needs, and preferred sources and modes of such education.

Method: The intervention was carried out during the last class of a public health prenatal education series. A total of 31 first-time expectant parents participated and included both women (N = 16) and men (N = 15; mean, 29 years). The intervention was an in-person session on the topics of a safe sleeping environment, shaken baby syndrome, physical punishment risks and positive parenting, and expected development and safety. Participants completed the Infant Safety Education Project Questionnaire after the intervention.

Results: Overall, most participants in this study found the content useful, planned to use it in caring for their infant, and indicated that this information should be shared with all expectant parents.

Discussion: Findings support a larger scale study to determine parent education needs of expectant parents and the development, implementation, and evaluation of programming. Pediatric nurse practitioners and other primary care practitioners should be aware of the education needs of expectant parents and be prepared to provide anticipatory guidance and resources as appropriate. J Pediatr Health Care. (2013) 27, 91-97.

KEY WORDS

Parent education, infant care, prenatal education, infant and child safety

Infants’ physical, psychological, and social needs are met primarily through parents. Being prepared to provide safe care to infants and in a manner that promotes healthy growth and development requires knowledge on a number of key topics. Such topics include expected growth and development, how to promote healthy parent-infant relationships, and evidence-based information on such issues as safe sleeping environments and the risks of shaking an infant. Where do first-time parents get the information they need to adjust to the roles and responsibilities of parenthood and to provide safe care to infants?

Historically, knowledge about childbirth and parenting was gained informally through extended family members; however, changes in family structure and societies have resulted in an increased reliance on more formal forms of education for childbirth and parenting (Zwelling, 1996). Ideally, parents should be
knowledgeable about expected infant and child behaviors and their meaning. For example, the knowledge that crying is how infants communicate their needs can help parents appreciate that infants cannot be “spoiled” by frequent holding and that in fact by responding appropriately to infants, they are encouraging the development of a key trusting relationship. Subsequently, parenting behaviors are more likely to be empathetic and appropriately responsive when parents have an understanding about infant behavior (Corwin, 1998). Healthy attachment is considered key for future healthy relationships. Attachment is facilitated by such parental behaviors as being available to the child emotionally and physically, providing sensitivity and warmth, being consistent, and being responsive to infant cues (McElwain & Booth-LaForce, 2006).

No wide-scale prenatal parent education programs are available in Canada or the United States. The prenatal classes that are currently available focus primarily on pregnancy, fetal development, and labor and delivery, and it is unknown how many parents attend such prenatal classes (Corwin, 1998; Invest in Kids, 2004). However, a recent U.S. survey found that the number of new mothers attending prenatal classes has decreased from 70% in 2002 to 53% in 2009 (Nichols Guttuso, 2010).

It is not uncommon for prenatal classes to spend in the range of 10 hours preparing for labor and delivery and little to no time preparing for the demanding roles of parenting (Corwin, 1998). The usual prenatal course curriculum includes a detailed listing of information related to pregnancy, labor, and delivery (e.g., fetal development, normal labor and birth, and common medical interventions) but only brief and general items related to the infant, specifically, characteristics and behavior of an infant, care of the infant, and early warning signs of complications for the infant. Additionally, short hospital stays after childbirth limit the time for parent education in hospital settings. A U.S. study of new mothers identified a lack of education on how to care for a new baby as one of the concerns of new mothers, who suggested topics such as “What to do when baby cries so much....” (Kanotra et al., 2007). Early parent education, which includes a focus on parent-child relations, has been suggested as a viable modality with the potential to help parents cope with the demands of their role and improve the health and welfare of children (Fonagy, 1998).

Prenatal and/or early parent education programs covering newborn care (including topics such as shaken baby syndrome and safe sleeping environments), expected growth and development and related child safety, and sensitive/responsive parenting behaviors and strategies are not readily available to expectant or new parents. In a survey of parents of young children, parents were asked which topics they thought should be made available on a wide-scale basis to all parents of young children. The two most frequent responses were expected child development and behavior and age-appropriate disciplinary responses (91% and 90%, respectively; Ateah, 2003).

A Canadian study reported that mothers who had attended prenatal classes noted that content missing from the prenatal classes included information about infant care and parent resources (Peel Health Status Report, 2003). A question that must be asked is, “Why is there a lack of prenatal parent education, particularly for first-time parents, given the significant importance of the parenting role and its responsibilities?” One reason proposed by Wiener and Rogers (2008) in their United Kingdom survey of midwives is the perception that women are not interested in postnatal topics and are unrealistic about the changes and difficulties that an infant may bring.

A Cochrane review/meta-analysis of individual or group antenatal education was inconclusive because of the variety of interventions and outcomes studied, which prevented the combination of small studies to increase statistical power (Gagnon & Sandall, 2008). However, an article published after the Cochrane review was conducted describes a randomized clinical trial of an Australian prenatal education program that included an increase in parenting content compared with the regular prenatal content. Findings from that study concluded that women who attended the prenatal classes with additional parenting content scored significantly higher in parenting self-efficacy scores and perceived parenting knowledge scores than did women who attended the regular prenatal classes (Svensson, Barclay, & Cooke, 2009).

In a meta-analysis of qualitative studies examining the transition to parenting, Nelson (2003) discovered that women are largely unprepared to deal with the transition to motherhood and experience feelings of being overwhelmed. This finding was further supported by an Australian study that concluded that women expecting their first child may feel unprepared for this role despite being described overall as “well resourced and educated” (Barnes et al., 2008). Fewer than 15% of those women indicated that they felt quite prepared to care for their infants. Renkert and Nutbeam (2001) also concluded that women desire more content on parenting in prenatal classes yet acknowledged the difficulties in providing it because of the time factor and the likelihood that expectant parents do not appreciate their parent education needs beyond labor and delivery.

In summary, no wide-scale prenatal parent programs are available for expectant parents. Prenatal classes...
generally focus on pregnancy, labor, and delivery and include only a small amount of information about caring for the newborn. Expectant parents, particularly mothers, have indicated that minimal education is provided to prepare them for the roles and responsibilities of parenthood. However, little is known about the actual information needs of expectant parents, particularly first-time parents, specifically regarding their need for other/further information, how they currently are receiving information about infant care, and preferred formats for learning.

PURPOSE
The purpose of this research was to determine expectant parents’ education needs and current and/or preferred sources and modes of obtaining such information through administration of a brief parent education pilot intervention. The specific aims of this study were to determine the information needs of expectant parents regarding infant care and safety, the sources expectant parents are using to obtain information on infant safety, and expectant parents’ preferred time frames and methods for obtaining information on infant safety.

METHODS
Design and Sample
The prenatal parent education pilot intervention was carried out during the last class of a series of six prenatal classes offered through public health and by public health nurses in a Midwestern Canadian city. Permission was granted through the city health authority to access interested expectant parents who were enrolled in two sections of prenatal classes. The researcher attended two prenatal classes and invited expectant parents to participate. Potential participants were informed that participation would consist of listening to a 1-hour education session following the last prenatal class of the session, or on a separate date according to majority wishes, followed by the completion of a questionnaire regarding the education intervention and prenatal parent education more generally. In addition, potential participants were informed that they would receive $25 to compensate for their time and participation should they choose to take part in the study. Only participants who could read and write in English were able to participate. The study received approval by the University Research Ethics Board. A total of 31 first-time expectant parents agreed to participate, which consisted of all registrants of the two sections of prenatal class offerings. Participants were almost equally divided between (pregnant) women ($N = 16$) and men ($N = 15$), and except for one participant, all were married or were in a common-law relationship. Their ages ranged from 17 to 56 years (mean, 29 years). They were a highly educated group, with approximately one third of participants (32.3%) having up to a high school education and two thirds (67.7%) having completed some post-secondary education. All participants were expecting their first child, and none had attended prenatal classes previously.

All participants indicated their preference for the education session to be offered following the last prenatal class rather than on a separate day. The researcher attended the last class of both sections and presented the content, using a PowerPoint presentation and primarily a lecture format, inviting questions and encouraging discussion at any time. The Box provides an outline of the content provided in the 1-hour class. The information was based on expected growth and development, published research, and current professional position statements. The content focused on the topics of safe sleeping environments (Canadian Paediatric Society, 2007; Health Canada, 2008), shaken baby syndrome (Canadian Paediatric Society, 2001, 2009a) and use of physical punishment (Canadian Paediatric Society, 2004; Durrant, Ensom, & Coalition on Physical Punishment of Children and Youth, 2004), responsive and positive parenting (Canadian Paediatric Society, 2004), and expected infant development (Ateah, Kail, & Cavanaugh, 2009) and related safety considerations (Canadian Paediatric Society, 2009b).

Measures
Following the presentation, participants completed a questionnaire on infant safety developed by the researcher. The questionnaire included basic demographic information questions such as age, marital/relationship status, family income, and experience taking any previous prenatal classes prior to this session. In addition, a general question was included for each of the topics presented in which participants were asked for their recollection of the material presented; whether they had been aware of the information prior to the education session, and if yes, from which source (e.g., family, health care professional, or media); whether the information should be shared with all expectant parents; and whether they were planning to use this information when caring for their infant. In addition, questions were included at the end of the questionnaire regarding the information session overall, whether the information presented was important, if it should be made widely available to expectant parents, and the best formats for learning this information. An open-ended question inviting additional comments was included as well.

The questionnaire was pilot tested with five parents to determine ease of reading and comprehension, after which only minor changes were made. The questions were formulated to consider the information needs of expectant parents on infant care and safety, the sources expectant parents use to obtain information on infant safety, and the expectant parents’ preferred time frames and methods to obtain such information. Univariate descriptive statistics were used to summarize participants’
RESULTS

Safe Sleeping Environment
Following the educational session, all participants correctly identified that the safest sleeping environment for infants is on their back, alone, in their crib. Ninety percent of participants (N = 28) indicated that prior to this information session they were aware of the recommendation to place infants on their backs to sleep, and all participants indicated that they were aware that a crib or separate sleep surface was safest. Health care professionals were identified as the most common source of information regarding sleep position (61.3%), and family and/or friends (58.1%) were the most common source of information regarding sleep surface (Table). All participants indicated that this information should be shared with new parents and that they would use this information. Some of the comments expressed by participants related to this topic are, “Getting up-to-date information regarding safe sleeping was very helpful,” and “This will reduce risks of SIDS.”

Shaken Baby Syndrome
All participants correctly responded that the risks of shaken baby syndrome for infants included severe injury and death. Nearly 81% of participants (80.6%, N = 25) indicated that they were previously aware of this information. Family and/or friends were identified as the most common source of information (58.1%) on shaken baby syndrome. All participants indicated that this information should be shared with all new parents and that they would use this information.

Physical Punishment Risks and Positive Parenting
All participants were able to identify a risk to infants/children associated with use of physical punishment, such as injury or childhood aggression, and 87.1% of participants (N = 27) indicated that they were previously aware of this information. Family and/or friends (58.1%) were identified as the most common source of information on the risks of physical punishment use. All but two participants (93.5%, N = 29) indicated that this information should be shared with all expectant parents and that they planned to use this information.

Expected Development and Safety Concerns
All participants correctly identified a safety concern related to an expected developmental stage such as rolling off a change table or risk of drowning, and 87.1% of participants (N = 27) indicated that they were aware of this information prior to the information session. The most common source of this information identified by...
participants was from family and/or friends (64.5%). All
participants agreed that this information should be
shared with all expectant parents and that they them-
selves would use this information. Some of the com-
ments expressed by participants related to this
content are, “I didn’t realize how dangerous blinds
can be...it was an eye opener with all the dangers out
there for children,” “Baby safety should be a parent’s
ultimate concern short of meeting the child’s basic
needs,” and “There are so many topics that could be
expanded, such as infant development.”

Sources of Information Overall
Participants were asked to indicate sources from which
they obtained information on safe infant care if they had
been previously aware of this information. Participants
could indicate as many sources as applied to them.
When averaging all the responses for all five areas of
information, the most frequently cited source of this type
of information was from family and/or friends (57.4%),
followed by parenting books (52.2%), health care pro-
fessionals (46.5%), pamphlets (30.9%), television
(30.9%), magazines (31.6%), and posters (8.4%).

Overall Perspectives
Regarding the overall information on providing safe in-
fant care that was delivered in the education session, al-
most all respondents (96.8%, N = 30) indicated that the
information provided in the session should be made
widely available to expectant parents and that in-
person presentations are the best format for sharing
this type of information. The following additional com-
ments were provided:

- “This format encourages questions which furthers
  learning.”
- “In-person is best so that questions may be asked.
  Pamphlets would also be better than nothing.”
- “First person is best for clearing up misunderstand-
ings, encountering prejudices, and to get an overall
understanding of the issues.”
- “It could save many babies’ lives.”
- “This would be critical information for those who
  have not been around other infants.”
- “I personally know a lot of new parents who know
  less than half of this information and practice the
  opposite of what is being taught.”
- “This information is very important for first-time
  parents who may not be aware of the information.
  Making it through labor is the beginning, but
  proper care is a lifetime.”

DISCUSSION
From the literature and resources reviewed, it was de-
termined that no wide-scale prenatal parent education
programs are available and that parents surveyed have
indicated that such programming is needed. It is to be
expected that first-time expectant parents, particularly
those who may not have had much experience or edu-
cation related to caring for infants and/or parents with-
out a knowledgeable support network, would require
information and guidance to learn how to care for their
infant and young child. New research findings result in
changes to recommendations regarding provision of
safe care for infants, and this information should be con-
veyed to new parents. In par-
ticular, findings and
recommendations re-
garding placing infants
to sleep on their back
on separate sleep sur-
faces and the risks
and consequences of
shaken baby syndrome
are relatively new, and
family and friends
may not always have the most up-to-date information.
As indicated, family and/or friends were identified
most frequently as the source of information by partic-
ipants in this study. In addition, basic information
regarding bathing, breast feeding/nutrition, and car
seats may or may not be covered in prenatal classes,
during hospitalization after delivery, or by the public
health nurse at a postpartum home visit or phone call.
Parents indicated that health care professionals
ranked third, after family and/or friends or books, as

<table>
<thead>
<tr>
<th>Source</th>
<th>Sleep position %</th>
<th>Sleep surface %</th>
<th>SBS %</th>
<th>PP risks %</th>
<th>Safety %</th>
<th>Mean %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family/friends</td>
<td>48.4</td>
<td>58.1</td>
<td>58.1</td>
<td>58.1</td>
<td>64.5</td>
<td>57.4</td>
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<tr>
<td>Books</td>
<td>54.8</td>
<td>51.6</td>
<td>51.6</td>
<td>48.4</td>
<td>38.7</td>
<td>52.2</td>
</tr>
<tr>
<td>Health care provider</td>
<td>61.3</td>
<td>51.6</td>
<td>48.4</td>
<td>32.3</td>
<td>46.5</td>
<td>52.2</td>
</tr>
<tr>
<td>Magazines</td>
<td>25.8</td>
<td>41.9</td>
<td>22.6</td>
<td>38.7</td>
<td>31.6</td>
<td>52.2</td>
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<tr>
<td>Pamphlets</td>
<td>41.9</td>
<td>38.7</td>
<td>25.8</td>
<td>22.6</td>
<td>30.9</td>
<td>46.5</td>
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<tr>
<td>Television</td>
<td>16.1</td>
<td>48.4</td>
<td>12.4</td>
<td>38.7</td>
<td>30.2</td>
<td>46.5</td>
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<tr>
<td>Posters</td>
<td>9.7</td>
<td>16.1</td>
<td>0</td>
<td>6.5</td>
<td>8.4</td>
<td>46.5</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
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PP, Physical punishment; SBS, shaken baby syndrome.
sources of information on infant care, although each of these sources were identified by approximately half or more than half of respondents (Table). Magazines, pamphlets, and television were each identified by less than a third of respondents (on average) as sources of infant care information, and posters were identified the least as the source of such information. Although Web-based sources were not listed as an option, respondents were given an opportunity to add any additional sources of information on infants, and no additional sources were added. Although this was a small study, it was somewhat surprising that health care professionals were not identified by a larger number as the source of information on infant care and that Internet-based resources were not identified as other sources of information on infant care. Primary care practitioners have many opportunities to provide information on parenting to expectant parents.

**Limitations**

It is important to note that although most respondents indicated they had been previously aware of the information presented, they all agreed that such content should be made widely available to all expectant parents. One issue with self-report measures and a limitation of this study is the issue of validity and accuracy. It is human nature to want to present one’s self in the best light, particularly with respect to behaviors or perspectives that may be controversial or undesirable (Polit, Tatano, & Hungler, 2001). A stronger research design would have been to conduct a pretest and post-test to determine change in knowledge, as well as a postposttest to determine knowledge retention. However, because participants elected to have the session held following their regularly scheduled last 2-hour prenatal class, the decision was made to not include the extra time that a pretest would take. In addition, because the topics were initially selected by the researcher (based on published research and current professional position statements), asking respondents at the conclusion of the education session which additional topics they would have liked to be included in the session might have been useful. A further limitation of this study is the small sample size.

Respondents provided the clear message that the information on providing safe infant care was important and that in-person sessions were the preferred method of presentation. However, respondents of this convenience sample were, overall, highly educated and not representative of the population. Further research with a large and representative sample of expectant parents regarding their knowledge of infant care and parent education needs would be an important step to make the case for wide-scale prenatal education program development.

The results of this study indicate that first-time expectant parents believe that the types of information on infant care that were shared with them in the 1-hour intervention should be available to all expectant parents. Future research on the educational needs of expectant parents should include surveying a representative sample to determine their knowledge level on a number of key infant safety issues and their preferred formats for learning this information. Subsequently, a prenatal education program could be developed and piloted in a pretest, posttest format to determine effectiveness. Additional parent education programming also could be developed and tested with regard to how to begin parent education and support in the prenatal period and follow-through with ongoing support and information appropriate for changing child developmental periods and issues.

Parents want to be able to provide the best care possible for the newest member(s) of their family. Findings from this study indicate that expectant parents agree that parent education is important in the prenatal period and support the need for further research to determine the best ways to reach expectant parents and provide them with the information and resources they need to provide care that promotes healthy growth and development of their children.

**REFERENCES**


