
Self-Efficacy and Postpartum Teaching: A Replication Study

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ABSTRACT

Postpartum depression (PPD) occurs in 13% of new mothers internationally, but many do not receive treatment. In the Western world, hospital-based perinatal nurses have extended contact with new mothers and are in a unique position to teach them to recognize symptoms of and seek treatment for PPD. In this replication study framed by self-efficacy theory, teaching new mothers about PPD was predicted by a nurse's self-efficacy related to PPD teaching, expectations for teaching from supervisor, PPD continuing education, teaching experience on other topics, and experience with observing other nurses teaching patients about PPD. The results of the study demonstrate the importance of the climate created by the nursing supervisor in which teaching about PPD is expected and facilitators of effective patient teaching are available.

The Journal of Perinatal Education, 22(3), 166–170, <http://dx.doi.org/10.1891/1058-1243.22.3.166>

Keywords: nurses, teach, postpartum depression

INTRODUCTION

Postpartum depression (PPD) occurs in 13% of new mothers (Gaynes et al., 2005) with feelings of sadness and difficulty functioning lasting up to one year. Mothering is adversely impacted in women with PPD (Logsdon, Wisner, & Pinto Foltz, 2006; Mercer, 1977) including impaired maternal–infant interaction (Beck, 1995; Field, 1998; Tronick & Weinberg, 1997), diminished gratification in the maternal role (Killien, 1998; Panzarine, Slater, & Sharps, 1995;

Troy, 1999), and lower feelings of self-efficacy (Froman & Owen, 1990; Teti, Gelfand, & Pompa, 1990) leading to long-term and adverse consequences for the mother, baby, and family (Beck, 1998; Grace, Evindar, & Stewart, 2003; Logsdon, Wisner, & Hanusa, 2009). Even so, many new mothers remain untreated (Sobey, 2002) because of lack of knowledge of depression symptoms and lack of available resources (Logsdon, Hines-Martin, & Rakestraw, 2009).

Hospital-based perinatal nurses have extended contact with new mothers and are in a unique position to teach them to recognize symptoms of and seek treatment for PPD that may occur after hospital

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discharge. However, hospital-based perinatal nurses may not feel confident to teach new mothers about PPD (Logsdon, Pinto Foltz, Scheetz, & Myers, 2010). Historically, evidence-based practice recommendations for the care of women with PPD have been very general (Association of Women's Health, Obstetric, and Neonatal Nurses, 2008) or focused on the care of women in the community (e.g., McQueen, Montgomery, Lappan-Gracon, Evans, & Hunter, 2008) and thus have not provided specific guidance for teaching by hospital-based perinatal nurses. Our research team of academic and community partners recently collaborated with international nursing experts to develop evidence-based guidelines to guide screening, teaching, and referral of women related to PPD (Logsdon, Tomasulo, Eckert, Beck, & Dennis, 2012). Before the guidelines can be implemented in a particular hospital, characteristics of the nurses that may impact use of the guidelines need to be understood. Self-efficacy, or confidence, is one such characteristic. In this study, the role of self-efficacy as a predictor of teaching a new mother about PPD was examined in a replication study.

REVIEW OF LITERATURE

Patient teaching is an integral component of international professional nursing practice (Phillips, 1999). Several studies have focused on the nurse's perspectives of barriers and facilitators to teaching patients. In a qualitative study of nurses employed in a general hospital in Norway ($n = 14$), Karlson (1997) found that the nurse's credentials, education in how to teach, and characteristics of the organization all affected patient teaching. Likewise, a qualitative study conducted in Australia with nurses employed in a rehabilitation hospital ($n = 7$) gathered data through a series of focus groups. Barriers to teaching included lack of teaching skills, heavy workloads, and not valuing documentation of teaching (Turner, Wellard, & Bethune, 1999). In the United States, Marcum, Ridenour, Shaff, Hammons, and Taylor (2002) described the top three facilitators (time to teach, guidance sheets, and available resources) and the top three barriers (time, staffing, and patient receptiveness to teaching) in 124 hospital-based acute care nurses that were randomly selected from a State Board of Nursing list and surveyed by mail. In a qualitative study of direct care nurses employed in an oncology unit in Massachusetts, Barber-Parker (2002) determined the important role of nurse managers in overcoming barriers to teaching and in

emphasizing the importance of patient teaching and education to enhance the nurse's confidence with teaching.

ORIGINAL STUDY

A nurse's self-efficacy, or confidence, is critical to effective teaching. According to Bandura (1995), self-efficacy is predicted by *social persuasion*, *vicarious experience*, and *mastery* as well as variables such as self-esteem. These variables were measured in a research study conducted in a community hospital in the Southern United States by the first author (Logsdon et al., 2010). Forty-three (out of 150 or 29%) hospital-based perinatal nurses completed and returned the questionnaires. The perinatal nurses were experienced in direct care with the average years in practice greater than 16 years. Although most perinatal nurses had received education about PPD in nursing school, few nurses had personal experience with PPD or had chosen to pursue continuing education related to PPD. Thirty-four percent of the perinatal nurses reported that they teach new mothers about PPD (e.g., replied that they taught new mothers about PPD either always, most of the time, or occasionally). Sixty-six percent of the sample did not teach new mothers about PPD. As expected, mother-baby nurses taught new mothers about PPD more frequently than labor and delivery nurses ($\chi^2 = 16.9, p = .002$).

Unfortunately, many participants (42%) had never been told by their supervisor that they were expected to teach new mothers about PPD. Teaching new mothers about PPD was related to nurse's self-efficacy related to PPD teaching ($r = .51, p = .001$); expectations for teaching from their supervisor or *social persuasion* ($r = .41, p = .009$); self-esteem ($r = .35, p = .001$); PPD continuing education or *mastery* ($r = .35, p = .020$); teaching experience on other topics or *mastery* ($r = .72, p = .01$); and experience with observing other nurses teach patients about PPD or *vicarious experience* ($r = .31, p = .040$). Thus, the use of self-efficacy theory to guide the study was supported. However, with the limitation of a low response rate and data collection from only one facility, further research is needed to confirm or refute study findings. The replication study is described next.

Though most perinatal nurses had received education about PPD in nursing school, few nurses had personal experience with PPD or had chosen to pursue continuing education related to PPD.

REPLICATION STUDY

Methods

In this cross-sectional, descriptive, replication study of predictors of a nurse's self-efficacy (confidence) in teaching new mothers about PPD, the sample ($n = 93$) included hospital-based perinatal nurses from an academic health sciences center (1960 deliveries per year) in the Southern United States. Instruments included a research-team-developed measure of self-efficacy related to confidence and PPD teaching (Bandura, 1995) and Rosenberg's Self-Esteem instrument (Rosenberg, 1965). Because self-efficacy is situation-specific, a global measure of self-efficacy was not appropriate. Thus, the self-efficacy measure consisted of four questions related to a perinatal nurse's confidence in performing the following activities: assessing a new mother's baseline knowledge about PPD, assessing a new mother's symptoms of PPD, counseling a new mother about PPD, and teaching a new mother about PPD. Content of the questions were based on self-efficacy literature and clinical experience by the first author with pregnant and postpartum women. The internal consistency reliability scores (alpha coefficient) for study instruments ranged from 0.79 to 0.90 (see Table 1).

After receiving institutional and institutional review board approval, all registered nurses who were employed full time in labor and delivery or the mother-baby unit were invited to participate in the study. A cover letter and the questionnaire were placed into each registered nurse's mailbox. Tape-wrapped boxes were available on the units for return of completed instruments. The nurses were allowed 7 days to return the instruments. No demographic information was collected to assure anonymity. Study participants were not compensated for participation.

TABLE 1
Instrument Items Related to Teaching About PPD by Hospital Based Perinatal Nurses

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1. My supervisor tells me that I am capable of teaching a new mother about postpartum depression.
 2. I teach new mothers about episiotomy care.
 3. I teach new mothers about postpartum depression.
 4. I have observed other nurses teach new mothers about postpartum depression.
 5. I feel confident about teaching a new mother about postpartum depression.
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Results

The response rate was 63.0%. Fifty-nine (out of 93) nurses completed the surveys. Fewer nurses employed in labor and delivery had more than 16 years of experience (31.0%) as compared to mother-baby nurses (50.0%). Although most nurses who work in this academic health sciences center hospital received education about PPD in nursing school (86.7%), few nurses (11.9%) had personal experience with PPD or had chosen to pursue continuing education related to PPD (29.0%). Eighty-three percent of the mother-baby nurses and 41.0% of the labor and delivery nurses reported that they teach new mothers about PPD (e.g., replied that they taught new mothers about PPD either always, most of the time, or occasionally). As expected, mother-baby nurses taught new mothers about PPD more than labor and delivery nurses ($\chi^2 = 19.4, p < .001$).

Unfortunately, many participants (44.1%) had never been told by their supervisor that they were expected to teach new mothers about PPD. In agreement with self-efficacy theory, teaching new mothers about PPD was predicted by a nurse's self-efficacy related to PPD teaching ($r = .86, p = .001$); expectations for teaching from their supervisor (*social persuasion*; $r = .55, p = .001$); PPD continuing education ($r = .29, p = .02$; *mastery*); teaching experience on other topics (*mastery*; $r = .50, p = .001$); and experience with observing other nurses teaching patients about PPD ($r = .49, p = .001$; *vicarious experience*). Predictors of PPD teaching did not include self-esteem.

Discussion

It is not clear why self-esteem was not a predictor of teaching about PPD in this study, as compared to the original study. However, it is possible that characteristics of the patient population resulted in differences in study findings. Although low-income and ethnically diverse mothers deliver their babies at each hospital, the rate is higher at the academic health sciences center. Nurses employed in the academic health sciences center may be more sensitive to the effects of environmental stresses on their patient population that might add to the risk of PPD. Callister, Beckstrand, and Corbett (2010) caution that nurses should be sensitive to the varied ways that culturally diverse women perceive, explain, and report symptoms of PPD.

Although the small sample size and data collection from one institution limit the generalizability

of study results, the research adds to the science of PPD. Clearly, there are characteristics of nurses and patients (or their interaction) that impact the teaching that women receive related to PPD. These contextual factors should be taken into consideration when planning interventions.

In further replications of this study, it would be helpful to collect data on characteristics of both the nurses and the patient population so that interactions of patient and nurse characteristics can be determined. Research findings from a single study must be replicated before results can be accepted as well established, can be generalized to other participants and circumstances, and provide an evidence base for nursing practice (Beck, 1994). Unique characteristics of the sample or setting, or the interaction of sample and setting, may lead to variations in study findings even if study procedures are exactly replicated. Research that includes samples of nurses is not an exception. For example, nurses who chose to work in academic health sciences centers may have different personalities, skills, or perspectives compared to nurses who work in community hospitals. The unique missions of academic health sciences centers (e.g., education of medical and nursing students, promotion of biomedical research, and the maintenance of capacity for highly specialized complex patient care [Commonwealth Fund, 1997]) are attractive to some nurses. There is a body of literature to establish that personality type influences the choice of occupation including nursing specialty (e.g., Bean & Holcombe, 1993; Levine, Wilson, & Guido, 1988; Sand, 2003). Thus, research results from studies of nurses that were conducted in community settings may not generalize to nurses employed in academic health sciences centers and need further testing.

Implications for Perinatal Education

In describing “nurse caring” as perceived by women experiencing PPD, Beck’s (2006) themes included the following: the nurse has sufficient knowledge about PPD, the nurse shares her time, the nurse makes appropriate referrals, and the nurse understands what the new mother is experiencing. Nurses who care for women with PPD should remain current in the science of PPD and adopt the behaviors described by Beck. Segre, O’Hara, Arndt, and Beck (2010a, 2010b) have demonstrated that both nurses and patients are comfortable with nurses who have a larger role in the care of women with PPD.

Results of two studies indicate that nursing supervisors have a powerful role to play in ensuring that nursing staff teach new mothers about PPD. Nursing supervisors should also ensure that nursing staff have options to remain current in their knowledge of the science of PPD as well as to ensure they are exposed to current professional guidelines and practice to the full extent of their education and training (Committee on the Robert Wood Johnson Foundation Initiative on the Future of Nursing, at the Institute of Medicine, 2010).

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