Nursing Care for Postpartum Depression, Part 1: Do Nurses Think they should offer both Screening and Counseling?

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Abstract

Purpose—To assess nurses’ views of a nursing model in which nurses screen and also treat new mothers who exhibit symptoms of depression.

Study Design and Methods—This is Part 1 of this descriptive survey (Part 2 in MCN 35(4)), in which nurses (n=520) completed a statewide survey assessing nurses’ views of a model of nursing care which both screens and treats postpartum depression.

Results—The majority “strongly agreed” or “agreed” with the statement “having nurses screen for depression using a brief screening tool is a good idea”. Most (67.1%) chose the Ob-Gyn Clinic as the appropriate site for such screening. Regarding treatment by nurses, the vast majority of nurses (93.7%) “agreed” or “strongly agreed” with the statement “nurse-delivered counseling with mildly depressed women is a good idea.” Almost one-half of the nurses already regularly provided some form of counseling and approximately three quarters were willing to participate in a counseling skills training program. Less than 1.0% (n=3) indicated that nurse-delivered counseling should not be implemented. The most frequently chosen setting for a nurse-delivered counseling program was home visits (70.6%, n=367).

Clinical Implications—Our results indicate nurse-delivered screening and treatment of postpartum women is overwhelmingly supported by this segment of US nursing professionals, and indeed, is already occurring in many instances. Nurses who have frequent contact with women during the perinatal period are well positioned to provide screening and treatment for PPD. To implement the 2 part UK model (both screening and treatment), it is necessary to develop educational programs for staff and patients, and establish screening and treatment protocols as well as referral resources for those with such a need.

MeSH Key Words

Postpartum Depression; Nurses’ Role; Counseling
Callouts

1. The UK model of postpartum care includes both screening and treatment (counseling) for postpartum women with PPD.
2. This study sought to discover whether the UK model would be acceptable to nurses in the US.
3. Results indicated that nurse-delivered screening and treatment of postpartum women is strongly supported by this group of randomly selected US nursing professionals.

Introduction

Nurses specializing in maternal and child health are poised to play a pivotal role in the early identification and prompt treatment of perinatal depression. In the United Kingdom (UK), nurse-delivered postpartum mental health care is well established. The results of a recent national survey of current practices of public health nurses (called health visitors) indicate that 98% provide a new birth visit and that 73% screen and treat postpartum women for depression as a part of their practice (Cowley, Caan, Dowling, & Weir, 2007). The use of an evidence-based practice in one country, however, does not guarantee successful use in another, particularly when the underlying health care systems vastly differ. Indeed, the well accepted “Rogers' diffusion of innovation model” asserts that any innovation is generally adopted in five stages: knowledge, persuasion, decision, implementation, and confirmation (Rogers, 2003), and actual implementation requires that at least some providers “buy-in” to the idea: if the US nurses involved do not agree that they can deliver mental health care, it is unlikely that the UK model of care will be successful.

This article, the first in a two-part series, describes the nurse-delivered model and assesses the views of a sample of American nurses on whether they would accept such a clinical practice. The second paper in this series will describe the views of the patients themselves regarding whether they would accept receiving mental health services from a nurse.

Postpartum Depression: Scope and Negative Effects

Depression is a serious disorder that affects 19% of all new mothers (Gavin, et al., 2005) and up to 37% of low-income mothers (Segre, O'Hara, Arndt, & Stuart, 2007). Even more striking are the pervasive negative sequelae of depression. Depressed pregnant women are more likely than nondepressed women to use drugs or alcohol, smoke, have poor nutritional habits, and are less likely to adhere to prenatal care regimens (Newport, Wilcox, & Stowe, 2001).

Postpartum depression, with its associated fatigue, cognitive impairment, loss of interest and motivation, makes it difficult to be a responsive parent. Depression diminishes emotional involvement with the infant, impairs communication, and increases hostility and resentment (Lovejoy, Graczyk, O'Hare, & Neuman, 2000). In infants, prenatal exposure to maternal depression is associated with delayed fetal growth, increased obstetric complications (including operative births and admission to the neonatal unit), low birthweight, and an increased risk of preterm birth (Newport, et al., 2001). In children, this exposure significantly compromises social, cognitive, and emotional development (Beck, 1998). The negative effects are long lasting: teens exposed to depression as infants are more likely themselves to be diagnosed as depressed (Halligan, Herbert, Goodyear, & Murray, 2004), perpetuating an intergenerational pattern. Therefore, identifying and treating depression early is a well recognized, public health priority (National Association of Pediatric Nurse Practitioners, 2003).
Effectiveness of Screening in Primary Care

Screening for maternal depression has proven feasible in primary care settings (Chaudron, Szilagyi, Kitzman, Wadkins, & Conwell, 2004). Moreover, we know that affected patients are more likely to be identified by systematic screening at the postpartum visit than by clinical observation alone (Georgiopoulos, Bryan, Wollan, & Yawn, 2001). Indeed, a recent state of the science report on the contributions of nurses to recognition of PPD recognized that, “routine screening for postpartum depression is the responsibility of not only clinicians in obstetrics but also clinicians in pediatric and family practice” (Beck, 2008, p.155). Screening for depression in the general population is recommended when supports are in place for follow-up diagnosis and effective treatment (U.S. Preventive Services Task Force, 2009). Screening for depression in pregnant and postpartum women is strongly encouraged (ACOG, 2010). However, very few large-scale maternal depression screening programs have been established in the U.S (Segre & O'Hara, 2005).

Screening is only a first step, because once depression is identified, treatment is necessary but may not be obtained. In one study for example, of women identified at their prenatal visit as possibly depressed, only 13.8% were treated (Marcus, Flynn, Blow, & Barry, 2003). Nurses’ frequent contact with women during the postpartum period positions them to provide a continuum of services, including educating about depression, making referrals (Horowitz & Goodman, 2004), and providing counseling. In the United Kingdom, these services have been routinely provided by British nurses for over twenty years.

The British Model of Nurse-Delivered Postpartum Mental Health Care

In the UK, health visitors (professionals who have three years of university-level generalist nursing education and one year of specialist training and are roughly the equivalent of a US bachelor’s degree) provide a new birth visit to all women as part of universal child health surveillance (Cowley, Caan, Dowling, & Weir, 2007). As part of this care, health visitors routinely screen all new mothers for depression and provide home-based treatment to any identified as mildly to moderately depressed. The Edinburgh Postnatal Depression Scale (EPDS), a 10-item self-report depression screening tool, was developed for health visitors to identify possible depression in new mothers (Cox & Holden, 2003). Depressed mothers are then offered an intervention called “Listening Visit”, which is a 4 week program in the home (each session lasting one hour) that combines active reflective listening with problem solving. Such screening improves detection of PPD (Davies, Howells, & Jenkins, 2003). This program has been successful in identifying women with PPD. In one study, evaluation of this routine screening by health visitors using the EPDS revealed an exceptionally high rate of depression (44%) in women screened for the first time at 12 months postpartum because they had missed earlier screenings. The rate of depression in women screened both at 12 months and earlier was 23%. These results suggest that at least half of these missed women would have been identified as depressed earlier if they had been screened. Additionally Listening Visits effectively treat mild to moderate depression The first (now classic) evaluation of Listening Visits found that 18 of the 26 (69%) depressed women in the Listening Visits group recovered from depression compared to 9 of the 24 (38%) women in the control group (Holden, Sagovsky, & Cox, 1989). These statistically significant differences have been replicated in three subsequent randomized controlled trials of Listening Visits (Cooper, Murray, Wilson, & Romaniuk, 2003; Morrell, et al., 2009; & Wickberg & Hwang, 1996).

Acceptability of Nurse-Delivered Screening and Counseling: Prior Research

There are two parts to the UK program which nurses use to help women postpartum. The first is the screening, and the second is the treatment at home. Although postpartum depression screening by British health visitors is an established clinical practice, no published reports have
directly examined how well the health visitors themselves accept the practice. A recent focus group study in Scandinavia, however, interviewed six health visitors and one midwife, and found that they considered screening with the EPDS helpful in assessing for depression. Before the tool was introduced these nurses felt that they lacked reliable ways to determine whether some of their clients were depressed. With the routine use of the EPDS the nurses felt more secure and no longer had to speculate about their patients’ mood, or wonder how to assess (Vik, Inger, Willumsen, & Hafting, 2009).

In the context of an Australian national screening-implementation effort, Buist et al (2006) found that 83% of the 230 child healthcare nurse respondents believed the EPDS was easy to use, 85% were comfortable explaining the EPDS to patients, 75% believed it was “useful” or “very useful”, and 99% reported they would continue to use it, indicating they valued the method. The empirical evidence available from Scandinavia and Australia suggests nurses there have positive views of depression screening during the postpartum period. In the United States, nurse-delivered screening for PPD, is supported by US nursing organizations and has been effective and feasible in the US primary care setting (Chaudron, et al., 2004).

The American system has not tried the second part of the British model—counseling by maternal child health nurses. This practice, however, has been integrated into both British home health visiting and Swedish primary healthcare clinics, suggesting it can be implemented in different contexts. Because the US health care system differs from that in the UK, where nurses have different education and training, assessing the acceptability of nurse-delivered screening and counseling in the US is a necessary first step to implementation, and is the purpose of this study.

### Study Design and Methods

#### Study Design and Power

We surveyed a large and diverse sample of nurses (n = 520) to assess their acceptance of nurse-delivered postpartum mental health care. The power was sufficient (> 80%) to detect small to moderate effects. With categorical variables, we had >80% power to detect fairly small effects with 1 and 2 df chi-square tables, Cohen’s W = 0.12 and 0.14, respectively. For ordinal measures, the power was 80% for omega-squared of 0.06 or above, a relatively small effect. Thus this study has sufficient power for effects of all meaningful sizes.

#### Instrument

The survey instrument described the prevalence of postpartum depression; described the UK model of screening and treatment by health visitors; and introduced the idea of implementing nurse-delivered screening and counseling in the US. To establish content validity, the survey was reviewed by senior nursing research faculty; and the format was developed by measurement specialists. The first nine survey questions assessed demographics of the sample as well as the percentage of their patients who are pregnant or postpartum. A four-point Likert-type scale was used for items that assessed current counseling practices (never, occasionally, usually, always), as well as attitudes toward nurse-delivered depression screening and counseling, and willingness to be trained for counseling (strongly agree, agree, disagree, and strongly disagree). The remaining items assessed their views of which nurse specialties should implement screening and counseling programs and in which settings.

#### Sample and Data Collection Procedures

The University’s Institutional Review Board approved the procedures for this study. The PI purchased, from The Board of Nursing, a mailing list of nurses who met these eligibility requirements: an active RN license in Iowa; a minimum BSN level of education; and currently...
working in Iowa within in women's health, pediatrics, community health, general practice, or psychiatric health. Bachelor's level nurses, or above, were chosen because their education was similar to that of the British health visitor. Because of the large number of nurses represented on this list, we selected every third from a listing that was sorted by zip code, to assure an even geographic distribution. Selected nurses were sent a cover letter, survey, and an anonymous return envelope. The cover letter identified the survey as a research project and indicated that by returning the completed survey, respondents gave their informed consent. All surveys were mailed in August 2004 and returned over the next three months. Participants were not compensated.

Data Analysis

Descriptive statistics were used to summarize the demographic characteristics of the sample and the nurses' views. Chi-square and Mann-Whitney tests were used to examine differences in views among subgroups of the sample.

Results

Of the 1258 nurses in a Midwestern state who received the survey, 520 returned a completed form: a response rate of 41%. The majority of nurse respondents were female (98.9%, n=514), white (98.5%, n=512), and in the age category of 36 to 55 years (64.6%, n=336). While all participants had a BSN, 28.3% (n=147) also had a master's degree and 1.2% (n=6) had a doctorate. Most nurses worked full-time (66.9%, n=347), in obstetrics and women's health (17.3%, n=90), in pediatrics (13.1%, n=68), family practice (11.7%, n=61), internal medicine (3.3%, n=17), schools (11.4%, n=59), home health and community (6.4%, n=33), psychiatry (3.5%, n=18), and administration (0.8%, n=4). A few (6.2%, n=32) worked in more than one setting while 26.5% (n=138) responded “other.” Approximately half (48.5%, n=251) reported “some” or “almost all” of their patients were pregnant or postpartum, while 51.5% (n=267) reported having “none” or “very few” postpartum women in their practice.

Of the nurses in our survey, approximately one-half (48.5%, n=251) reported that some or nearly all of their patients were pregnant or postpartum; the remainder reported limited contact with postpartum women. Comparing the views of nurses based on whether or not they had contact with postpartum women (e.g. some or all most all vs. none or very few), analyses revealed only one significant difference in the views of these two subgroups of nurses. Contact with postpartum women correlated with an increased willingness to participate in counseling training (Mann-Whitney $\chi^2 = 18.86; df=1; p < .0001$). Our sample of nurses worked in a variety of different types of clinics (e.g., Pediatric vs. Ob-gyn Clinics), but chi-square analyses did not reveal any associated differences in nurses' views of screening and counseling.

Table 1 demonstrates the nurses' views from the survey. The majority “strongly agreed” or “agreed” with the statement “having nurses screen for depression using a brief screening tool is a good idea”. When asked to identify possible settings for a nurse-delivered depression screening program (respondents could choose more than one setting), 67.1% (n=349) selected the Ob-Gyn Clinic, followed by the Family Practice Clinic (60.0%, n=312), home visits (58.5%, n=304) and the Pediatric Clinic (35.0%, n=182).

The results in Table 1 also indicate that nurses endorsed nurse-delivered counseling. The vast majority of nurses (93.7%) “agreed” or “strongly agreed” with the statement “nurse-delivered counseling with mildly depressed women is a good idea.” Almost one-half of the nurses already regularly provided some form of counseling and approximately three quarters were willing to participate in a counseling skills training program. Respondents were evenly divided regarding whether nurse-delivered counseling should be taught to all nurses working with pregnant and postpartum women or whether it should be a specialty area for those nurses who would provide
this treatment. Less than 1.0% (n=3) indicated that nurse-delivered counseling should not be implemented. The most frequently chosen setting for a nurse-delivered counseling program was home visits (70.6%, n=367) followed by the Ob-Gyn Clinic (48.5%, n=252), the Family Practice Clinic (46.0%, n=239), and the Pediatric Clinic (22.5%, n=117). The extent to which the nurses in this sample already provided counseling differed significantly according to employment setting ($\chi^2 = 63.39; df=9, p < .0001$), with three distinct groups emerging: 1) administrators rated themselves as “never” providing counseling; 2) nurses in clinics frequented by postpartum women rated themselves as “occasionally” providing counseling, and 3) psychiatric nurses rated themselves as “usually” providing counseling.

**Study Limitations**

A critical evaluation of the survey sample suggests several limitations. First, the generalizability of our results to all nurses in clinical practice is not possible, for there was a lack of sample diversity (predominately white, bachelor’s level nurses from one geographic region). Replication in a more diverse sample is warranted. Second, return rate was relatively low (41%). Although in a unique study of return rates among nurses conducted 2 decades ago response rates to mail surveys among nurses ranged from 26.0% to 43.3%, depending on the type of stamp used on the return envelope (Choi, Pak, & Purdham, 1990). For metered return envelopes (the type used in the current survey), the predicted return rate (37.3%) is consistent with the rate observed in this study (41%). Also, a study of non-response bias in patients' perception of healthcare found that using follow-up procedures to increase the response rate from 30% to 70% did not alter the general conclusions (Perneger, Chamot, & Bovier, 2005). In contrast, the strengths of this survey include a relatively large quasi-random statewide sample of nurses from diverse clinical settings.

**Discussion and Clinical Nursing Implications**

Our results indicate nurse-delivered screening and treatment of postpartum women is supported by this segment of US nursing professionals. Respondents overwhelmingly endorsed maternal depression screening and counseling by nurses. Moreover, many nurses were either already occasionally providing counseling or were willing to participate in a brief counseling skills training program. The support by survey respondents is bolstered by the demonstrated feasibility of postpartum maternal depression screening programs in primary care settings (Chaudron, et al., 2004), including an innovative phone screening program by nurses (Mitchell, Mittelstaedt, & Schott-Baer, 2006).

The acceptance of nurse-delivered postpartum depression screening and treatment, as demonstrated here, is a necessary but not sufficient precursor to implementation. Establishing screening programs requires many steps, including educating staff, selecting a screening tool, and establishing a screening protocol and referral sources. In one study, even when all these resources were in place, screening mothers for depression during pediatric well-child visits was not immediately implemented by all staff; only 46% of eligible charts included a completed EPDS over the first three months of that program (Chaudron, et al., 2004). The identification of treatment resources often poses another significant challenge. Although a full discussion of this issue is beyond the scope of this article, the nurses’ views of nurse-delivered counseling are relevant. In this sample, nurses believed that they could effectively counsel depressed postpartum women, although they were evenly divided as to who should counsel—everyone or specialized nurses. The UK intervention seems feasible because it was specifically developed for nurses with little or no previous counseling experience and the training is brief and capitalizes on nurses’ strong communication skills.

In conclusion, the results of this study demonstrate that the nurses we surveyed hold positive views about nurse-delivered depression screening and counseling for postpartum women. In
accordance with the theory of innovation (Rogers, 2003), persuasion is necessary for adoption of a new practice. However there are many differences between the US and UK healthcare model including the lack of a universal home visiting program in the US. Although the Listening Visits intervention is delivered in the context of home visits in the UK, it has been successfully adapted to delivery in primary care in Sweden (Wickberg and Hwang, 1996), suggesting that modifications to new health care systems are possible. Recently, a clinical nurse researcher from outside the UK endorsed this nurse-delivered care as a feasible and effective alternative to specialist services (Dennis, 2009). While such an expansion of nurses’ roles has both professional and policy implications, this model of nursing practice has considerable potential to enhance the care of postpartum women and is therefore worthy of further consideration.

Suggested Clinical Implications

- Nurses in perinatal settings should screen their patients for depression, both as a part of a woman’s care and during pediatric care for their children.
- Depression screening tools tailored to perinatal women are available and include the Postpartum Depression Screening Scale (Beck & Gable, 2002) and the Edinburgh Postnatal Depression Scale (Cox & Holden, 2003).
- Implementation of a nurse-delivered perinatal screening will require educational programs for staff as well as the establishment of a screening protocol and referral sources. Several notable websites provide educational resources including: “Support and Training to Enhance Primary Care for Postpartum Depression” (STEP-PPD) (www.step-ppd.com) and MedEdPPD (www.mededppd.org/).
- Screening and referral often highlight the lack of treatment resources and/or reluctance on the part of women to see a mental health professional. Nurse-delivered counseling, which has been effectively implemented in the UK and is viewed positively by some US nurses, is a possible next step in the US for nursing care of women in the perinatal period.

Acknowledgments

Disclosure of financial support: financial support was provided by the National Institute of Mental Health grants (NIMH -Supplement to NIMH R01MH59668) and (NIMH K-23 MH075964).

References


Beck, CT.; Gable, RK. Postpartum Depression Screening Scale (PDSS). Los Angeles: Western Psychological Services; 2002.


### Table 1
Nurses' Views of Screening and Counseling for Maternal Depression

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nurse-delivered screening is a good idea</strong></td>
<td></td>
</tr>
<tr>
<td>Strongly agree</td>
<td>281 (54.3)</td>
</tr>
<tr>
<td>Agree</td>
<td>217 (41.9)</td>
</tr>
<tr>
<td>Disagree</td>
<td>5 (1.0)</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>15 (2.9)</td>
</tr>
<tr>
<td><strong>Nurse-delivered counseling is a good idea</strong></td>
<td></td>
</tr>
<tr>
<td>Strongly agree</td>
<td>238 (45.9)</td>
</tr>
<tr>
<td>Agree</td>
<td>248 (47.8)</td>
</tr>
<tr>
<td>Disagree</td>
<td>18 (3.5)</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>15 (2.9)</td>
</tr>
<tr>
<td><strong>Current Use of Counseling</strong></td>
<td></td>
</tr>
<tr>
<td>Always</td>
<td>89 (17.5)</td>
</tr>
<tr>
<td>Usually</td>
<td>118 (23.2)</td>
</tr>
<tr>
<td>Occasionally</td>
<td>210 (41.3)</td>
</tr>
<tr>
<td>Never</td>
<td>92 (18.1)</td>
</tr>
<tr>
<td><strong>Willingness to Participate in Counseling Training</strong></td>
<td></td>
</tr>
<tr>
<td>Strongly agree</td>
<td>158 (32.1)</td>
</tr>
<tr>
<td>Agree</td>
<td>198 (40.2)</td>
</tr>
<tr>
<td>Disagree</td>
<td>90 (18.3)</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>47 (9.5)</td>
</tr>
<tr>
<td><strong>Counseling by all nurses, specialty nurses, or none</strong></td>
<td></td>
</tr>
<tr>
<td>All nurses</td>
<td>247 (47.8)</td>
</tr>
<tr>
<td>Specialty area of some nurses</td>
<td>234 (45.5)</td>
</tr>
<tr>
<td>Not implemented</td>
<td>3 (0.6)</td>
</tr>
<tr>
<td>All nurses and specialty nurses</td>
<td>16 (3.1)</td>
</tr>
<tr>
<td>Other</td>
<td>17 (3.3)</td>
</tr>
</tbody>
</table>

*Note.* A cover letter accompanied the survey which described the Listening Visits intervention and referred to it as nurse-delivered counseling. Those who completed the survey were thus oriented to the term “counseling” as referring to brief psychological counseling similar to the British Listening Visits intervention.