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Nurses' Perceptions of Critical Issues Requiring Consideration in the Development of *Guidelines for Professional Registered Nurse Staffing for Perinatal Units*

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Abstract

Objective—To solicit input from registered nurse members of the Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN) on critical considerations for review and revision of existing nurse staffing guidelines.

Design—Thematic analysis of responses to a cross-sectional on-line survey question: "Please give the staffing task force your input on what they should consider in the development of recommendations for staffing of perinatal units."

Participants—N = 884 AWHONN members.

Main Outcome Measure—Descriptions of staffing concerns that should be considered when evaluating and revising existing perinatal nurse staffing guidelines.

Results—Consistent themes identified included the need for revision of nurse staffing guidelines due to requirements for safe care, increases in patient acuity and complexity, invisibility of the fetus and newborn as separate and distinct patients, difficulties in providing comprehensive care during labor and for mother-baby couplets under current conditions, challenges in staffing small volume units, and the negative effect of inadequate staffing on nurse satisfaction and retention.

Conclusion—Participants overwhelmingly indicated current nurse staffing guidelines were inadequate to meet the needs of contemporary perinatal clinical practice and required revision based on significant changes that had occurred since 1983 when the original staffing guidelines were published.

Keywords

Nurse staffing; staffing guidelines; perinatal care; patient acuity; nurse burnout; nurse retention; nurse satisfaction

Background

Over the past three decades, numerous factors in the provision of in-patient perinatal care changed including, but not limited to, increases in patient acuity related to more women with

comorbidities and older women with associated medical complications, prevalence of morbid obesity among childbearing women, more preterm births, multiple gestations, and cesarean births, and requirements for maternal and fetal assessments in the context of shortened inpatient hospital stays. There have also been increases in elective procedures, regulatory requirements and use of electronic medical records. All of these factors have implications for nurse staffing, however, the original 1983 staffing guidelines included in the first edition of *Guidelines for Perinatal Care* (American Academy of Pediatrics [AAP] & American College of Obstetricians and Gynecologists [ACOG], 1983) in which recommendations for the ratio of registered nurses to patients in various perinatal clinical situations were issued by AAP and ACOG in consultation with the Nurses' Association of the American College of Obstetricians and Gynecologists (NAACOG, now known as Association of Women's Health, Obstetric and Neonatal Nurses [AWHONN]) had not been updated to reflect these changes. Therefore, based on recommendations from the AWHONN Perinatal Patient Safety Advisory Panel, the AWHONN Board of Directors convened a task force in 2009 to evaluate the original nurse staffing guidelines for perinatal units and to revise as necessary. The task force was charged with identifying issues of most concern regarding present staffing patterns, evaluating ratio based staffing and principle based staffing, recommending AWHONN's approach to different methods of determining staffing, and creating a position statement or guideline that clarified the recommended staffing that results in safe and effective nursing care. Members of the task force included those with administrative, organizational, clinical practice and risk management expertise to insure that each of these factors were fully considered.

In September 2010, the AWHONN published *Guidelines for Professional Registered Nurse Staffing for Perinatal Units* as an update to the original staffing guidelines included in the first edition of *Guidelines for Perinatal Care* (AAP & ACOG, 1983). As part of evaluation and revision process, an extensive review of the literature related to nurse staffing and patient outcomes was conducted. The majority of the research focused on patient outcomes associated with nurse staffing on medical, surgical and intensive care units. A summary of that review is included in the Guidelines. Additional supportive evidence in the form of existing standards and guidelines that affect nursing roles, responsibilities and therefore staffing requirements, from other related professional organizations and regulatory agencies were also reviewed and summarized in the Guidelines. An analysis of the distribution of births among United States (US) hospitals was performed to determine the potential implications of nurse staffing guidelines in small volume perinatal units and in rural hospitals (Simpson, 2011). Further, AWHONN member feedback via an on-line survey was sought regarding what factors related to the current state of staffing in perinatal units should be carefully evaluated by the task force when reviewing and revising the existing nurse staffing guidelines. The goal was to solicit suggestions on any staffing issues that members felt had merit and needed consideration by the task force. All of the responses were reviewed and used by the staffing task force to insure that every pertinent area of concern related to staffing were addressed in the Guidelines, however a formal thematic analysis of survey responses was not conducted.

After the Guidelines were published, a research team including three members of the task force and an external reviewer was assembled to conduct a secondary analysis of the AWHONN member survey data set. The task force members felt that these rich data with nurses' own words about their concerns regarding staffing warranted giving them voice in a more detailed analysis and dissemination of these important findings. The purpose of this paper is to report the thematic analysis of data from the AWHONN member survey on nurse staffing. As there has been scant research on perinatal nurse staffing, these data offer an important first view of the staffing realities experienced by nurses providing care to mothers and babies in contemporary perinatal settings.

Methods

Design

This study is a secondary analysis of data from the AWHONN staffing survey. AWHONN members were invited by email to respond to an on-line survey posted to the AWHONN website over a two week period from June 1 to June 15, 2010. The invitation to participate was included in the June 2010 issue of the monthly AWHONN electronic newsletter *AWHONN Vitals*. The newsletter embedded in the email included a link to the survey for easy access by members. The survey included one open-ended question to avoid the potential bias inherent in predetermined content of structured survey items: "Please give the staffing task force your input on what they should consider in the development of recommendations for staffing of perinatal units." Responses were automatically sent to a database where they were coded by numbers without any identifying information in the order received. Survey participants were advised on the website prior to submission that their responses were confidential and would not include identifying information. Response to the survey implied consent to participate. The Institutional Review Board at Mercy Hospital in St. Louis, MO granted exempt status for the secondary data analysis on the basis of retrospective review of de-identified data.

Setting and Participants

An on-line survey of AWHONN members was conducted to obtain input regarding nurse staffing issues to be considered in evaluating and revising the staffing guidelines. In June 2010, there were 23,698 AWHONN members, 19,440 of whom provided their email address to AWHONN. The email of the AWHONN monthly electronic newsletter that included the invitation to participate in the survey was successfully delivered to 18,843 members. Of this group, 4,386 opened the email, 1,147 clicked on the staffing survey link and 897 submitted responses. Thirteen were determined to be duplicates, resulting in a final sample of 884.

Although no identifying information was solicited, many of the participants took the opportunity to preface their comments with details of their current nursing role and/or years of experience. For example, "I am an administrator, manager, educator, or staff nurse" was a common inclusion, as well as "I have been in the field for 30+ years" or "I have five years experience." These additional data suggested a wide range of perinatal nursing roles and years of experience among the respondents and lent credibility to the findings that a diverse group of AWHONN members had participated.

Data Analysis

All participant responses were reviewed by the research team verbatim in the order originally received at the time of the survey. Data were analyzed using inductive coding methods (Hesse-Biber & Leavy, 2004) and thematic analysis of the open-ended text responses across the data set (Braun & Clarke, 2006) to gain understanding from the perspective of those directly involved in nurse staffing what they believed were the most critical issues that should be considered in evaluating and revising the existing nurse staffing guidelines. The key ideas and quotations generated by the research team were pooled. Themes were identified, reviewed, and refined in an iterative process until consensus was reached on the analysis. Credibility of findings was supported by consistency of themes identified independently by the researchers based on participant responses.

Main Outcomes

The main outcomes of the staffing survey were descriptions of AWHONN member concerns related to nurse staffing in perinatal units that they wanted the staffing task force to consider when evaluating and revising the existing nurse staffing guidelines.

Results

Prevalent themes identified are listed in Table 1. A central theme across the data set of participant responses was the passion perinatal nurses felt for providing the safest and best care possible, as well as the challenges of doing so under current staffing conditions. It was clear from the responses that nurses knew what type of care represented quality and met the needs of their patients, but were frustrated that they could not always provide this level of care. Increased acuity and the complexity of care now required for childbearing women and families was a dominant theme throughout the responses. Nurses described in detail the number of co-morbidities and complex patients they are seeing in their clinical setting. Within the acuity theme there were several subthemes: safe care during labor is one nurse to one woman, the “invisibility” of the fetus and the newborn as separate and distinct patients when considering staffing needs, and the real work of mother-baby nursing (four mother-baby couplets are too many). Other themes identified were increased demands on nurses’ time unrelated to direct hands-on patient care including the impact of the electronic medical record, regulatory requirements and non-nursing responsibilities, challenges of staffing small volume perinatal units and the effect of “doing more with less” on nursing satisfaction and retention. Each of these themes will be discussed with exemplar comments from participants. The sheer volume of participant responses (N = 884) provided a rich data set for analysis. Consistency in these major themes was evident throughout the data set. In essence, data saturation occurred after the first 100 responses. No new themes emerged from data generated from the subsequent participant comments.

Passion to Provide Safest and Best Care Possible and Challenges of Doing So Under Current Staffing Conditions

The overall feel of the dataset can perhaps best be summarized by two quotations. The first presenting the “ideal,” and the second, reality:

As a staff nurse for 30 yrs., I would like to say I love nurses and I love being a nurse. And from studies that have been done and also recent reports from the Institute of Medicine, it is recognized the impact that nurses have on the well-being of patients and the outcome of their care. Nursing care is always patient focused. Nurses are patient advocates. Nurses are the ones with the knowledge and intuition for knowing what their patients need.

In my unit, we are running so much when we’re busy that we just go from patient to patient, getting things done as fast as we can, with no real connection with the patients. We are so concentrated on getting all the documentation done, the every-15-minute assessments, etc, that we can’t help our laboring patients with personal attention. Even when we know that one-on-one attention can reduce the cesarean birth rate and increase patient satisfaction, not to mention enhancing safety, we are staffed at the bare minimum. I think that, if anything, staffing needs to be more toward the one-on-one than away from it. On the mother-baby unit, sure, one nurse can take care of 6 couplets--on the run and not very well!. I can labor 2 patients, on the run and not very well. I want to connect with my patients. I want them to remember me as someone who had the time to care, not just as a blurry figure who popped in and out of the room.

Patient Safety is at Risk Due to Inadequate Staffing—Many participants mentioned their concerns about providing safe care under current staffing conditions. There were numerous comments about budgetary limitations and what nurses considered safe compared with actual routine staffing circumstances. There also was an appreciation that staffing guidelines have been helpful in the past in gaining administrative backing for financial

resources to support adequate nurse staffing and hope that revised guidelines would have a similar impact.

We are labor nurses because we are passionate about empowering women and their families for a positive, well supported childbirth experience. A delay in care because of lack of staff is inexcusable.

I believe that the current staffing recommendations are unrealistic in providing safe patient care. I would like to see the organization look into realistic practice that identifies the numerous needs of this population.

I want to go home knowing that I've done my best for each patient and often it doesn't feel that way.

Safe care is a goal often not attainable; especially when staffing with these skimpy guidelines.

I find myself nervous and afraid sometimes when working L&D because staffing is not what it should be and patients require more time and care than I am able to give.

There always seems to be a disparity between what is the "right" thing to do and what is in the budget. Budgets should never trump safety.

Maternity units are notoriously difficult to staff since census is difficult to predict and often nurses are forced to work understaffed and provide care in unsafe conditions. Maternity units should be staffed for the unexpected instead of playing the odds and incurring an unfortunate outcome.

Staffing levels in perinatal units need to be considered which reflect the increased level of vigilance needed for safe practice.

Nurse patient ratios are very important. They have been very helpful in my ability to demonstrate to administration the need for nursing staff.

Increased Acuity and the Complexity of Care Required for Childbearing Women and Families

Nearly all respondents reported that ratios in place at the time of the survey did not support provision of safe, quality nursing care to childbearing women and families in the context of higher acuity and increased complexity of care required for the current perinatal patient population. Nurses pointed to the increasing age of mothers, increasing obesity rates, other co-morbidities, and the increasing cesarean rate as strongly affecting patient care requirements, creating a situation where they are not able to effectively care for mothers and babies.

Co-morbidities should be included as a factor in staffing the units. More patients are waiting to have children when they are well into their forties; the obese population is increasing, and we are seeing more women with diabetes, chronic hypertension and cardiac disease. Consider the higher acuity of postpartum patients who have had a cesarean birth.

There is need to quantify/value the time staff are engaged in providing emotional support and coordinating the care needs of women with issues of substance use, child protection, child apprehension, homelessness, domestic violence, perinatal loss etc.

When it comes to bedside care, today's obstetrical patients are of higher acuity, require more frequent monitoring and interventions, and need and desire more

personalized attention and care. To meet all of these needs, and do their job safely, nurses need more resources than ever before. Additionally, hospitals need to provide resources that can support and educate the nurses in providing optimal care.

Please consider how many couplets one RN can be assigned and then take into account if the newborn is a late preterm, on a sepsis protocol, on blood sugar protocol, all the jaundice screening and phototherapy done in the mom's room. This does not take the mother's condition into account. The mother baby nurse is overwhelmed with all that needs to be accomplished within 48 hours from admission.

I am also concerned about the lack of non-productive time coverage. Nurse to patient ratios are to be supplemented with break relief nurses... not just add together two assignments and handed to one individual for the two sixty minutes of break time (1/2 lunch and two 15 breaks for the 12 hour RNs). An example is the 1 RN to 2 active OB patients covering for a peer's break gives her 4 active OB patients.

Safe Care During Labor is One Nurse to One Woman—There was an overwhelming consensus among participants that safe intrapartum care requires a ratio of one nurse to one laboring woman. There was frustration about the inability to adequately assess more than one woman in labor, especially those with medical or obstetric complications including those receiving intravenous oxytocin or magnesium sulfate. Labor support, both emotional and physical was an often mentioned goal, but not always able to be accomplished when nurses had an assignment that included more than one woman in labor.

The 1 RN to 2 laboring women on oxytocin seems to indicate oxytocin is a “normal” process. It is not! It is a high risk event that carries significant consequences for mother and fetus if not carefully monitored.

We need 1:1 nursing care for active labor patients. Currently, units are staffed by either the Guidelines for Perinatal Care or by market comparison. “Low Risk” is recommended as a 1:2 ratio, but events occur rapidly. How can a nurse effectively watch more than one patient, and keep an eye on 2 tracings, at the same time, and yet not miss any details?

I feel it is critical to insist on 1:1 staffing for any woman in active labor. There are two patients (mama, fetus) to consider during this time of incredible physiologic and emotional stress. The need for assessment and intervention, both physically and emotionally, is constant. Certainly any unmedicated woman needs committed 1:1 support for adequate labor support and surveillance of fetal well being.

Please include assessment of CURRENT trends in standards for assessment, support, and intervention with laboring women. For example, both low-risk/low-intervention and high-risk/high intervention women require substantial commitment of nursing time at the bedside for safe care. Really there are two patients embedded in this ratio, so it is 1 RN:1 maternal-fetal pair. Women receiving oxytocin require q-15 min assessments and are receiving a high-risk medication. They should also be 1:1; likewise laboring patients on magnesium 1:1, second stage 1:1 etc.

How in the world can you be at the bedside supporting the labor of two patients at once? I can tell you, it's impossible.

“Invisibility” of the Fetus and Newborn as Separate and Distinct Patients when Considering Staffing Needs—

There were numerous comments about the inadvisability of ignoring the fetus as the second patient during labor when considering staffing needs and not counting babies in the postpartum census that often lead to a disregard for the entirety of the nurse’s workload and responsibilities and therefore inability to provide comprehensive care. Participants wanted to make sure the fetus and the baby were included as separate and distinct patients and the staffing guidelines reflected acknowledgment of the required care in this context.

Please consider that a pregnant mother is two patients, not one. Nowhere else in the hospital do two patients only count as one.

The fetus is often ignored as a patient. Despite the fact that an L&D RN is responsible for a patient s/he cannot see, who cannot communicate and is totally dependent on another individual for all life sustaining functions, we do not “count” the fetus when we say there should be a 1:2 nurse to patient ratio. However, if there are any problems with that invisible patient, we are held accountable.

In L/D two patients are being cared for - can you imagine a Critical Care Unit where a patient is ‘resuscitated’ up to 8 or more times in a shift? What kind of staffing would that require? ... Please advocate for the safe care for our mothers and fetuses by recommending staffing that reflects the care provided to both patients.”

What I can’t understand is that we do not count the baby as a patient!!! What’s that about? These babies need vitals, TCBs, circ. checks, labs, weights, hearing screens and a tremendous amount of time spent with feeding issues.

The Real Work of Mother-Baby Nursing (Four Mother-Baby Couplets are Too Many)—Many nurses commented on the invisibility of their workload in mother-baby care, where the amount of attention each mother, baby, or mother-baby couplet needs to successfully initiate breastfeeding, newborn care, and all of the teaching requirements prior to discharge within a very short length of stay is not fully appreciated. Increased needs of mothers recovering from cesarean birth were mentioned often. There was a general sense that four mother-baby couplets were too many to provide adequate care, as this actually represents a ratio of one nurse to eight patients.

In the short time we have contact with these mom’s and babies, it is impossible to assist with breastfeeding issues, do teaching, support their emotional needs and bonding as new parents, do all the documentation on 8 patients, deal with drug screenings, various children’s services issues, etc.; plus be available for additional emergencies in the department, be the baby nurse for deliveries, answer the phone, let visitors in and out of the unit because we have 24 hour lock down and no other person to do this but staff. I could go on and on!

These MB couplets may include twins, late preterm infants, breastfeeding issues, and/or phototherapy. We have been receiving a 5th couplet on night shift, even when there is a nurse at home on call. This is TEN patients, and in my opinion, not safe. Optimal care may be achieved when staffed with 3 couplets. We have minimal time to teach and get parents on the road to success with infant care and nursing. If all we can provide is very basic care, everyone loses.

Please look at acuity and risk factors of each patient (mother and newborn(s) “couplet” care as two patients (mother and newborn) and the amount of education needed per individual mother. This includes first time mother needs vs experienced mothers, single teen mother needs, first time breastfeeding mother vs bottle feeding

mother, other health issues with new mothers such as diabetes, hypertension, obesity, etc, surrogate mother needs, adoptive family needs and perinatal bereavement needs.

So many of our postpartum unit provide couplet care but don't consider the difference in acuity for a C/S patient and her baby (day one) compared to a vaginal delivery patient and her baby. I believe a day one c/section patient and her baby should count for 1.5 couplets.

Four couplets are too many. You have 8 patients. If the mother is post surgical, you have to provide her post-surgical care. ... If the baby is not doing fine, then you have a very serious situation and 7 other patients on your hands.

Increased Demands on Nurses' Time Unrelated to Direct Hands-On Patient Care

Nurses discussed multiple additional responsibilities unrelated to direct hands-on patient care, particularly the impact of the electronic medical record (EMR) and associated documentation requirements. The lack of ancillary personnel to assist with clerical tasks and non-nursing duties was evident in many of the responses. There was a general sense of ever-growing expectations of perinatal nurses without appreciation that these additional tasks take nurses away from the bedside. Nurses were pragmatic about the need for EMRs, more detailed documentation and compliance with regulatory requirements; however they felt under present staffing guidelines, they were put in a difficult situation that contributed to less time available for hands-on nursing care.

I see time demands and issues of time compression growing exponentially as badly needed patient-safety initiatives are implemented, documentation requirements have expanded, but staffing ratios have often deteriorated due to nursing shortages, cost-containment requirements and more complex patient needs and problems are confronted.

We should also consider the computer as an additional patient as it now takes forever to chart.

Nursing are spending more time at the computer which actually takes more time than the paper charting did. Also, we are dealing with so many more social issues, lack of resources for patients, knowledge deficits, issues related to health issues of the babies and mothers let alone the other requirements nurses have. When I am required to provide safe patient care, meet productivity numbers and patient satisfaction---it is very difficult with guidelines that need less number of nurses for more tasks.

Over the last decade, multiple additional procedures have been added to routine newborn care such as hearing screening, transcutaneous bilirubin testing, hepatitis immunizations, and additional security measures. Nursing routines which used to be fairly quick such as a discharge now take significantly more time due to computer charting (typing in discharge instructions, updating medication lists, printing forms after all data has been entered by the nurse--tasks which used to be done by clerical staff or on preprinted forms), more responsibilities surrounding car seats, and security measures.

The advances in technology (such as computerized charting, EMAR, scanning counts in the OR, etc) have not resulted in streamlined workflow; in fact the opposite is true. I spend an unprecedented amount of time managing technology rather than being at the bedside providing support. While some of these things enhance patient safety, they take more time. Add to that the many regulatory and other requirements that our processes and documentation must capture. The task

force needs to consider the fact that actual patient care is only ONE part of what RN's are being asked to do on a regular basis.

Consider the hours of patient care that go unseen when you only count "heads in the bed" at midnight, and miss the patients that are processed through inductions and c-sections during the day in L&D, then sent on to Post Partum. Those patients are unseen on the L&D census for staffing.

We do not have unit secretary or tech support. Please make it abundantly clear if any guidelines assume tech/secretary support when assigning RN to patient ratios.

Challenges of Staffing Small Volume Perinatal Units

The challenges inherent in staffing any perinatal unit adequately at all times considering normal fluctuations in census and acuity was often mentioned by participants, however the challenges of staffing small volume perinatal units was a specific concern that was prevalent throughout the dataset. This was not unexpected as approximately 58% of perinatal services in the US have less than 1,000 births per year and 37% have less than 500 births per year (Simpson, 2011). The lack of in-house resources and the need to respond to emergencies in a timely manner were discussed in detail as were requirements for nurses skilled in perinatal care present on-site at all times even when there are no perinatal patients.

Please give consideration of the small units with what should be minimal staffing, and the amount of time needed to get in additional staff. Is 30 minutes enough when you need to do a crash C-section with only 2 nurses available on the premises? What should be minimal staffing on a unit at all times?

Consideration for units that function in rural facilities that deliver small numbers, the nurses who are the labor nurse, order the labs, and clean the room. These areas do not have ancillary staff to do all the other things that larger facilities have.

Please consider small rural hospitals. We need direction on how the patient/staff ratio should be with re: to how many mother/baby couples you can safely care for and have laboring patients in your care. Also consider that the hospital may be 2 hours or more from a NICU and that the LDRP staff is the NICU until transport is made.

Recommendations for staffing smaller "women's centers" that include GYN/peds/med-surg patients as well as maternal newborn patients should be considered. We very often run into staffing issues that involve many types of patients, which fit no current staffing guidelines.

Even with no patients, 2 qualified RNs should be on the unit at all times--labor patients can walk in and deliver or be in an emergency situation in a very short time.

Nursing Under Siege: The Effect of "Doing More with Less" on Nurse Satisfaction and Retention

When asking participants to provide input into the review and revision of the existing staffing guidelines, the task force was not seeking comments regarding nurse burn-out and the implications of the increased workload on nurse satisfaction and retention. Yet given the overwhelming consensus that existing staffing guidelines were significantly inadequate to meet the needs of the current perinatal patient population or allow nurses to provide care within present responsibilities and regulatory requirements, this topic was not unexpected. Overburdened nurses expressed sadness at their perceived inability to provide quality care

on a consistent basis and dissatisfaction and disappointment in the trend away from bedside nursing care due to multiple other tasks required.

Frankly some days it is a nightmare. Our nurses really have become efficient and they break their backs to provide high quality AND safe care under these circumstances. However these circumstances do wear down morale and cause well seasoned and experienced nurses to leave OB and sometimes nursing. That's the real shame.

Please move swiftly as many nurses are leaving the jobs of their lives related to much demands on nursing.

I have heard many of my coworkers discussing leaving the field due to staffing, pt safety and liability issues. I am back in school to explore other opportunities for the same reasons.

Nurses are burning out due to the stress they are feeling from what is asked of them and feeling that they are not giving enough "nursing" care to their patients.

We all went in to this profession to help people and now we rush from room to room and things are getting missed. Bedside nursing seems like it's fading away.

I have been a perinatal nurse for 20 years. It is astounding how more and more has been added to our responsibilities, in terms of tasks, documentation and acuity of patients, over the years.

Thirty years ago, I moved to the L&D unit which was so rewarding. I would leave work and feel good. Now it is "hurry up retirement; not 65, but sooner." I understand we must contain costs, however when costs are more important than care, I think "how sad." Each day it seems we must do more, more, and more. I am only scheduled for 12 hours and sometimes it is not enough time to complete what the hospital requires and what I require of myself.

Discussion

Research regarding perinatal nurse staffing has been limited. There is great need for large scale studies linking perinatal nurse staffing to maternal and infant health outcomes. In the interim, these rich data from perinatal nurses in their own words demonstrate the ongoing challenges of providing safe and effective care that meets the myriad of needs of new mothers and babies within the context of staffing guidelines that had not been updated since 1983. There were numerous poignant comments describing in detail the issues perinatal nurses confront on a routine basis related to inadequate staffing. The resilience revealed by the many participants in attempting to do their best in sometimes unfavorable conditions is a testament to their strength, perseverance, and commitment to quality nursing care and their patients. The general tone of the comments was not complaints, but rather practical, concrete and thoughtful suggestions supported by rationales regarding what aspects of the existing staffing guidelines needed revision.

The task force expected some of the themes that emerged from the dataset including the issue of one-to-one care for women in labor and the significant changes in patient acuity over the last three decades. Increases in intrapartum procedures (Martin et al., 2011; Podulka, Stranges, & Steiner, 2011) are well documented and the designation of oxytocin as a high alert medication by the Institute for Safe Medication Practices (2007) has served to highlight safety requirements when using oxytocin during labor. Conditions complicating pregnancy and childbirth have also increased since the original staffing guidelines were published (Elixhauser & Wier, 2011; Kuklina, Ayala, & Callaghan, 2009; Martin et al.,

2011). However, the majority of the comments included some mention of the difficulties in caring for four or more mother-baby couplets with all of their clinical, emotional, breastfeeding and learning needs within the very short inpatient length of stay and the comprehensive, time-consuming nature of documenting this care. Much of the attention in the literature related to perinatal nursing has focused on intrapartum care. The real work of mother-baby care has sometimes been overlooked. This study documented the numerous responsibilities facing mother-baby nurses and the often lean resources devoted to postpartum women and their newborns.

Another aspect of nursing that has not well studied is the role of rural and small volume perinatal units in providing care to childbearing women and families who live far from hospitals offering perinatal services. These units may experience several days or even weeks without patients, but need to be staffed at all times with nurses skilled to care for any pregnant women who present for care. A number of participants specifically requested recommendations for minimal staffing in small volume units.

The toll of working with less than ideal numbers of nurses was noted by many of the participants. It was clear that nurses did not always feel they were able to meet all of the needs of their individual patients and they expressed the frustration with increased demands on their time unrelated to direct bedside care. While there are reports of nurse burn-out and dissatisfaction related to inadequate staffing in other nursing specialty areas (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002; Garrett, 2008; Leiter, & Spence Laschinger, 2006), this issue had not been previously identified among perinatal nurses and must be successfully addressed to prevent experienced perinatal nurses from leaving the field.

Limitations of this analysis include inability to determine the nature and direction of any non-response bias, inability to follow-up on responses obtained in a survey format, and other limitations inherent in secondary data analysis. Perinatal nurses who did not respond may have different priorities and concerns regarding perinatal staffing ratios. However, non-response rates are less concerning when measurements or estimates of population characteristics are not being made (Archer, 2008; Cook, Heath, & Thompson, 2000), and the consistency of responses within a relatively large group of respondents lends credibility to the findings, as does the independent coding of themes by four analysts. Each participant potentially may have had different views as to what constituted quality care, however consistency of responses suggests they were quite similar for all aspects of perinatal nursing care that were described and included as concerns.

Conclusion

Participants overwhelmingly indicated that current nurse staffing guidelines were inadequate to meet the needs of contemporary perinatal clinical practice and required revision based on the significant changes that had occurred since 1983 when the original staffing guidelines were published. There was a general consensus that mothers and babies would be better served by ratios that included more nurses to fewer patients. Responses reflected nurses' appreciation for being asked for their input and anticipation that their concerns would be considered in reviewing and revising the nurse staffing guidelines.

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Callouts

- It was clear that nurses knew what type of care represented quality, but were frustrated that they could not always provide this level of care.
- There was an overwhelming consensus among participants that safe intrapartum care requires a ratio of one nurse to one laboring woman.
- Participants wanted to make sure the fetus and baby were included as separate and distinct patients and staffing guidelines reflected care required in this context.

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Table 1

Prevalent Themes	
<ul style="list-style-type: none">• Passion to provide safest and best care possible and the challenges of doing so under current staffing conditions: Patient safety is at risk due to inadequate staffing• Increased acuity and the complexity of care now required<ul style="list-style-type: none">– Safe care during labor is one nurse to one woman,– “Invisibility” of the fetus and the newborn as separate and distinct patients when considering staffing needs– The real work of mother-baby nursing: Four mother-baby couplets are too many• Increased demands on nurses’ time unrelated to direct hands-on patient care: Impact of the electronic medical record, regulatory requirements and non-nursing responsibilities• Challenges of staffing small volume perinatal units• Effect of “doing more with less” on nursing satisfaction and retention	