

Nurse Communication Regarding Position During Second Stage Labor of Nulliparous Women

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Abstract

In maternal nursing, there is much research about positioning and pushing in second stage labor. There is less literature about the translation of evidence based practice (EBP) regarding positioning into actual practice. This study explored nursing communication around positioning during second stage labor to identify if there is a lack of translation between EBP and actual practice. The study also investigated nursing rationale and clinical indicators that influence nursing communication during second stage labor.

The methods involved coding transcripts that were transcribed verbatim from audiotapes of second stage labor and applying content analysis to identify themes present in the transcripts. Overall themes that were identified were as follows. First, there was emphasis on patient comfort and control. Second, the woman made decisions regarding desired position, but that once the decision was made the nurse took a directive role in the act of positioning. Third, the nurse gave clinical rationale when offering position choices. Finally, when pain became a significant issue, communication from the nurse became more directive.

The study concluded that many of the themes identified were congruent with EBP, but the data showed that there are still limitations to the translation of EBP into actual practice.

Introduction

Healthcare providers are encouraged to use the best evidence based practices (EBP) in the care they provide to their patients. Translation of the best available research into best practices at the unit level presents challenges and opportunities for health care nurses, who are put in a unique position between promoting patient self care and having the knowledge of best practice in regard to healthcare choices. There is a rising atmosphere of encouraging mothers to guide their own labors and respond to their body's natural cues for positioning, particularly during second stage labor (Roberts & Hanson, 2007). Women can labor in a variety of positions including lying on their side, squatting in the bed, on hands and knees, and in a traditional lithotomy (supine with legs in stirrups) position (Zwelling, 2010). There have been several clinical investigations exploring the issue of what the best position for second stage labor is to promote the best outcomes for both mother and baby as well as what best practice is regarding management of second stage labor (e.g. Schaffer et al., 2005; Simpson, Kortz, & Knox, 2010). Additionally, some investigations have explored the role of nurse communication with women during 2nd stage labor and how it may change through the course of delivery (Roberts et al., 2007).

Models have been developed through studies that illustrate the steps and barriers to the translation of research application in practice (Logan & Graham, 1998). Using these models, administrators can implement policies based on research and researchers can explore the application of research at the unit level. Management of second stage labor is an area of nursing practice that has recently come under scrutiny with regards to implementing best care practices, which counter many of the traditional models of care previously used in clinical practice (Simpson, Knox, Martin, George, & Watson, 2011). In particular, the use of specific positions

and breathing patterns are being advocated by professional maternity care organizations (Association of Women's Health, Obstetric and Neonatal Nurses [AWHONN], 2008), yet their actual application in practice is not yet consistent or universally applied (Simpson et al., 2011). This phenomenon must continue to be analyzed and studied to optimize nursing care.

Problem

There are several studies about best methods for positioning in second stage labor, but there is a lack of data regarding how nurses translate that information into practice. The state of the science provides evidence that spontaneous bearing down and frequent position changes based on maternal preference are the best practices (Roberts & Hanson, 2007; Zwelling, 2010). In addition, communication should primarily be non-directive and supportive instead of directive (Bergstrom et al., 2009; Sampsel, Miller, Luecha, Fischer, & Rosten, 2005). Professional nurse organizations have taken these practices and formally advocated for their application in clinical practice as the standard of care for second stage labor management (AWHONN, 2008). To date, evidence suggests there is a gap between what is known to be best practices and what actually occurs in clinical practice. Yet it is unclear why there is limited translation of evidence into practice for second stage labor management. If such a gap exists, based on the state of the science, maternal and fetal outcomes may be compromised.

Purpose

The purpose of this study was to examine the relationship between mother and nurse communication during second stage labor to analyze what evidence based practice (EBP) is implemented regarding management of second stage labor. The focus was on the interaction between the nurse, who is the direct bedside care provider, and the woman in order to answer the question of whether EBP is being supported or not and who is the leader in communication. The

study evaluated nurse communication in the management of second stage labor to ascertain if there is a gap between research supporting best practice and what actually happens at the bedside. Investigators analyzed what clinical indicators nurses use to rationalize their communication regarding what the woman should or should not do during second stage labor to identify potential gaps between EBP recommendations and actual practice.

Specific Aims

- Explore nurse communication during second stage labor regarding maternal positioning for pushing and compare to best practice to identify if there is a lack of translation between EBP and actual practice.
- Investigate maternity care nurses' rationale and description of clinical indicators that influence how they instruct women regarding position during 2nd stage labor and document what indicators influence how nurse verbal instruction may change in second stage labor.

Literature Review

In the past few years, the best practices for positioning and pushing during second stage labor have been investigated. For decades, coached pushing was the preferred method of managing labor. However, recent studies provide evidence that uncoached, spontaneous pushing provides better maternal and fetal outcomes (Roberts & Hanson, 2007; Schaffer et al., 2005; Simpson & James, 2005). In addition, there have been articles published addressing the issue of positioning in second stage labor that assert that best practice is to let the laboring woman follow her body's cues and position herself as she prefers (Gupta, Hofmeyr, & Smyth, 2009; Roberts, Gonzales, & Sampselle, 2007; Zwelling, 2010)

Schaffer et al. (2005) specifically investigated the effects of coached versus uncoached pushing on pelvic floor outcomes in a randomized control trial of 128 women. They found that uncoached pushing resulted in fewer pelvic floor complications than coached pushing. They concluded by recommending nurses refrain from using coached pushing to manage 2nd stage labor unless clinical factors (e.g. nonreassuring fetal heart rate) indicate otherwise.

Maternal pelvic floor outcomes are not the only aspect that has been shown to be negatively impacted by directed and sustained bearing down efforts. Simpson and James (2005) studied the effects of directed sustained, strenuous bearing down efforts as opposed to delayed, spontaneous pushing on fetal well being. However, their study included women with epidurals whereas the Schaffer et al. (2005) study did not. They found that delayed second stage pushing was more favorable in regards to fetal well being as measured by fetal oxygen desaturation. They asserted that the fetal benefit of delayed pushing outweighed potential disadvantages of a longer second stage.

Roberts and Hanson (2007) executed a systematic review of current research regarding maternal bearing down and positioning in second stage labor in order to provide a summary of best practice as the current state of the science stands. They synthesized common findings into recommendations for practice. They concluded that bearing down should be delayed until the urge is felt by the woman, valsalva maneuvers and maternal breath holding should be avoided, and that allowing women the freedom to chose their own positions for laboring facilitates labor progress. Ultimately, the authority when managing second stage labor should, according to the authors, fall with the laboring woman herself. In summary, the recommendation for pushing in the second stage of labor according to the state of the science leads to self directed management.

While the state of the science suggests spontaneous pushing and maternal self direction as evidence based practice, the literature is less clear on how to implement this practice. In a search of the Cochrane database, a systematic review of clinical trials in the positioning in the second stage of labor without epidurals was retrieved. Gupta, Hofmeyr and Smyth (2009) reviewed randomized or quasi-randomized trials to compare positions' influences on outcomes such as length of second stage, tearing, women's experience of pain, blood loss and fetal heart rate. They primarily compared the traditional lithotomy position with upright positions (e.g. squatting, sitting in a birth chair). They concluded that when women gave birth in the traditional lithotomy position it was more painful and resulted in negative effects on fetal heart tones, though there was less blood loss. In women who delivered in an upright position, the length of the second stage was shorter, there was less tearing, and fewer women required assisted deliveries with forceps and/or suction. Ultimately, they stated that in light of the evidence provided by the trials reviewed, women should be encouraged to make informed decisions regarding the position in which they are most comfortable delivering; however, they did not investigate this specifically.

In another study, de Jonge, Rijnders, van Diem, Scheepers, and Lagro-Janssen (2009) investigated which factors are associated with positioning in the second stage and at the time of delivery. In a retrospective cohort study, they found that women over the age of 36 and those who were more highly educated were less likely to give birth in a supine position. They state that women are more likely to use various positions if they feel they are allowed to make their own choices. It is important that the woman is able to get into positions that are comfortable for her, perhaps more so than the positions themselves. De Jonge et al. (2009) express the need for further study on various factors that influence a women's ability to choose her own position.

De Jonge, Teunissen, van Diem, Scheepers, and Lagro-Janssen (2008) conducted another study on the views of primary care midwives on positioning in second stage labor through a series of focus groups. They found that midwives use two different approaches when dealing with positioning: informed consent and informed choice. Informed consent involves providing information about the health care nurse's choice of position and giving the woman the option to opt out, though this is viewed as noncompliance. In informed consent, the woman takes a passive role in her positioning. A different approach is informed choice, which is defined as actively giving the woman a choice in birthing position, but taking control if medically indicated. In this approach, the woman's preference is the primary objective, but midwives may suggest other positions if they are medically indicated and in the woman's best interest. Between the two approaches, informed choice provides more control for the woman and is considered a better option than informed consent.

Zwelling (2010) has published an article that provides a historical review of the research regarding the effect of frequent position changes on maternal-fetal outcomes such as maternal pain, maternal-fetal circulation, quality of contractions, length of labor, fetal descent, and perineal trauma. She provides many options of positions in which to labor that have been shown to facilitate pain relief, fetal descent, circulation, etc. Based on her review, she recommends that nurses assist the mother in frequent changes in position during labor by giving instruction and information about their options and helping her into positions that increase comfort and labor progression.

Based on the state of the science, women should make frequent changes in position during labor; they should have the freedom to make their own choice with the support of the nurse, though the nurse may be required to intervene if medically indicated. Given this

information, it is important to explore the communication that occurs at the bedside that would facilitate the application of these best practices. Sampsel et al. (2005) explored the link between nurse communication and maternal pushing. They found that the nurse's communication style (directive or non-directive) significantly influenced the manner of maternal pushing during labor. That is, nurses who provided communication supportive of spontaneous pushing facilitated a high level of spontaneous pushing in the woman. However, there was not a single birth attendant that solely supported spontaneous pushing, though this is to be expected. When a woman requests information and direction regarding pushing, the nurse should communicate that. This should be done in a way that affirms the woman's progress and the cues from her body to enhance confidence. An important point Sampsel et al. (2005) makes is that in order to align actual practice with best practice and cease the use of directed pushing, verbal cues used by nurses must be altered.

Roberts, Gonzales, and Sampsel (2007) performed a descriptive, exploratory secondary analysis that aimed to answer the question of why communication from birth attendants changes from being supportive to directive in second stage labor. In a qualitative analysis of 10 video tapes during the second stage labor, they found that communication style changed based on maternal responses to labor such as fatigue and pain, and fetal responses such as fetal distress. Different types of communication were identified as well; caregivers used supportive direction and supportive praise. Supportive direction allowed the attendant to provide direction, but in a way that supported and affirmed the laboring woman's ability to push. Caregivers helped to identify what the woman perceived as effective strategies to pushing and used those to facilitate positions that the woman preferred. Roberts et al. (2007) summarize that there are situations that indicate a need for a more directive communication style, but that this direction should be

coupled with praise and support. This small study has yet to be replicated in more diverse or larger settings.

In another investigation focused on communication during second stage, Bergstrom, Richards, Morse, and Roberts (2010) conducted a secondary qualitative analysis that examined how nurses manage severe pain and distress in second stage labor. They found that when women were in severe pain and distress, supportive birth talk was not enough to calm the woman. Nurses took on communication strategies that were directive. Though directive communication is generally not preferred, in situations when the woman is in severe pain and losing control, providing directive statements she can focus on completing is effective. In addition, some nurses practiced “talking down”; in this approach, the caregiver forced the woman to focus by calling out, positioning herself close to the woman’s face, and talking in a low tone that required the woman be quiet in order to hear. The nurse then talks the woman through her contractions until she is under control and can handle them herself. Bergstrom et al. (2010) concluded that nurses must have a variety of communication techniques to provide comfort and support during labor and that in some cases, directive communication is indicated and beneficial.

Bergstrom et al. (2009) conducted another study that analyzed video-tapes and transcripts using linguistic and observational methods to explore birth talk in the second stage of labor. This study is helpful in laying a foundation for communication that normally occurs during labor. The researchers identified phrases and words that were frequently used. They also identified two styles: directed toward forced bearing down and supportive of physiologic bearing down. They categorized the commonly used phrases into these two styles. This provides a framework for

additional study in communication to be able to identify directive and supportive communication.

In summary, there have been multiple investigations, including randomized controlled trials, regarding best practice for pushing and positioning during labor as well as what communication styles are beneficial. The state of the science recommends spontaneous pushing with frequent position changes that are based on maternal preference. Communication should primarily be supportive of physiologic bearing down, but there are clinical situations that may require more directive approaches. In light of this EBP, what is not clear is what the role of the nurse is and whether these practices are being applied at the bedside. This study will add to the state of science by focusing on nurse communication related to positioning during second stage labor and will analyze who takes direction in the communication regarding position to ascertain whether research supported EBP is actually being applied.

Theoretical Framework

The theoretical framework used for this study was the Ottawa Model of Research Use (Logan & Graham, 1998). An illustration of this model is found in Figure 1. This is a model that was developed to increase the use of research by health care providers. It outlines the steps involved in applied research to practice, as well as what each step requires. This study focused on the adoption aspect of research application. It explored what influences the decision to apply and use EPB in nursing care during second stage labor regarding maternal positioning.

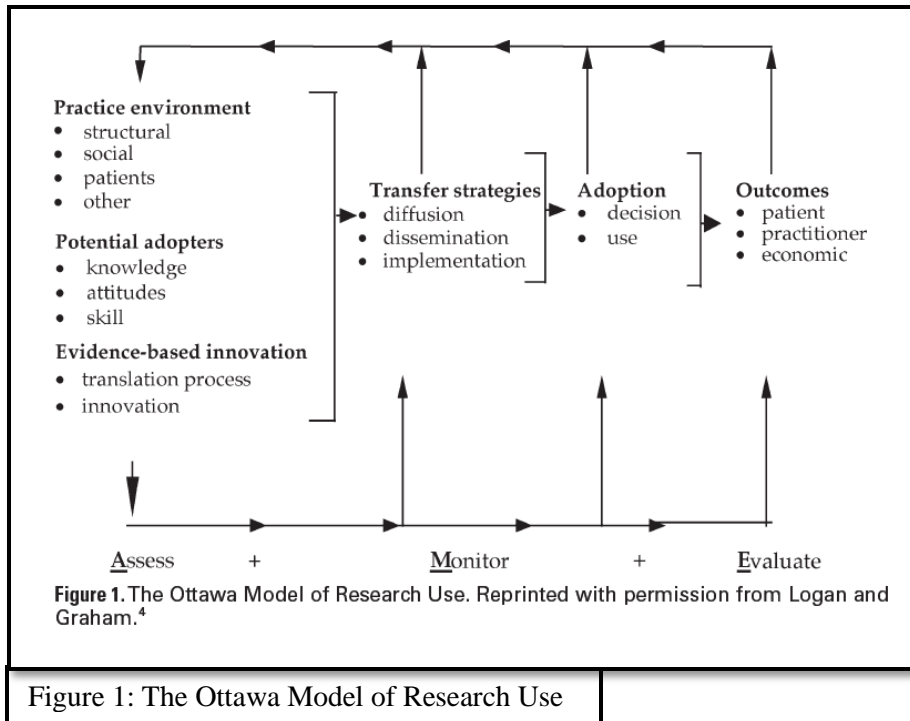


Figure 1: The Ottawa Model of Research Use

Methods

Design

This is an exploratory descriptive study using a framework to conduct content analysis of transcripts to explore the nurse’s communication during second stage labor management regarding positioning with women having their first birth.

Sample

The purpose of the original parent study used was to assess if the use of spontaneous pushing and perineal massage would reduce incontinence post partum as opposed to women who experienced directed pushing in the second stage of labor. It is from this study that the data and audiotapes were acquired.

In the original study, women were recruited from prenatal clinics between the years of 2000-2006. To be eligible, they had to be planning on having their first birth (nullipara) at the University of Michigan Women’s Hospital. Participants also had to be at least 18 years of age,

no history of genitor-urinary pathology, continent during the first 20 weeks of pregnancy by self report and continent less than 20 weeks gestation by negative standing stress test. If women demonstrated stress incontinence were excluded from the study. This was confirmed by standing stress test performed at the first visit: a paper towel was held against the perineum to capture any urine loss during hard coughing and/or valsalva. There were 252 women initially involved in the original study.

There were 130 audiotapes of second stage labors from the parent study of which 35 were completed transcribed verbatim. For the purpose of this investigation, a subset of the available transcripts were randomly selected to ensure a sample of at least 10 nulliparous women who delivered vaginally.

Measurements

Data was collected using a coding framework. The researcher read transcripts of the audiotapes and recorded when communication occurred, what type (directive or supportive), when position changes occurred and who initiated them. When directed communication occurred, the context and clinical situation were recorded. There were transcripts available of the tapes to provide direct quotes from both nurse and woman.

Procedure

In the original parent study, participants were randomized by a computer-generated table into four groups: coached pushing using the valsalva maneuver, spontaneous pushing, prenatal perineal massage, and combined spontaneous pushing with perineal massage. When the women came to the University of Michigan Women's Hospital to deliver, the nurses were informed the woman was a part of the study and to which group they were assigned. In the groups with

spontaneous pushing, any statements directive of pushing, position, and breathing were discouraged.

Data Analysis

Audiotapes of second stage labor from the parent study were transcribed verbatim. The communication regarding positioning was coded using an adaptation of a preexisting framework for scoring (See appendix A) that was based on the state of the science noting types of communication categories previously identified. The framework included categories for nurse, woman, and partner communication. The coding categories used included the following in Table 1.

Table 1: Coding Categories	
Nurse Communication	
BS1	Responding/listening to woman's preferences/feelings
BS2	Gives positive/supportive remarks regarding position
BS3	Offers information/explanation regarding positions
BS4	Offers position choices
BS5d	Directive communication
BS5s	Supportive communication
Woman Communication	
BWS1	Tells nurse what she wants/needs/feels
BWS2	Asks nurse for direction or other questions
Partner communication	
BPS1	Partner involved in positioning decisions
BPS2a	Active communication from partner

Once the transcripts were coded, the frequency of each code was entered into a table. The data was then used to calculate how much communication was coded as directive versus

supportive. The table also recorded whether or not the woman had received an epidural, and if through the course of the labor, the woman’s pain became so unbearable as to cause her to express a loss of control. Using the raw numerical data as a guide, the transcripts were then analyzed using a process of content analysis to identify recurring ideas and communication in order to develop overall themes that emerged from the data.

Results

The final number of transcripts eligible for coding was 11. Of these 11, 3 women received an epidural and 6 experienced unbearable pain causing the woman to express a sense of losing control during second stage. The numerical data from the coded transcripts is found in Table 2. The percent of directive communication was calculated by dividing the number of BS5d codes by the total coded communications in the transcript. The percent of supportive communication was found by dividing the sum of the BS2 and BS5s codes by the total communication coded in the transcript. These values are reflected in the far right columns.

Transcript	Epidural	Pain	BS1	BS2	BS3	BS4	BS5d	BS5s	BWS1	BWS2	BPS1	BPS2a	Total	Directive	Supportive
3	No	Yes	1	0	2	0	4	1	2	0	0	0	10	40.0%	10.0%
19	No	No	2	0	3	0	2	0	0	0	0	0	7	28.6%	0.0%
47	Yes	Yes	2	0	1	0	1	1	2	0	0	0	7	14.2%	14.2%
71	No	Yes	0	0	0	0	1	0	0	0	0	0	1	100.0%	0.0%
168	No	No	11	7	22	4	19	3	8	2	4	9	89	21.3%	11.2%
187	No	Yes	1	0	8	2	8	0	0	0	6	1	26	30.7%	0.0%
277	Yes	No	1	0	3	2	8	0	3	0	0	0	17	47.0%	0.0%
278	Yes	No	14	5	13	5	8	6	15	5	2	0	73	10.9%	15.6%
280	No	No	6	1	7	4	9	5	7	2	0	1	42	21.4%	14.2%
506	No	Yes	0	0	1	0	1	0	0	0	0	0	2	50.0%	0.0%
905	No	Yes	12	7	8	10	24	1	4	1	2	4	73	32.8%	8.2%
Total			50	20	68	27	85	17	41	10	14	15	347	24.5%	10.7%

When interpreting the numerical data, it became apparent that in 9 of the 11 transcripts, there was a high percentage of directive communication from the nurse than supportive. In one transcript, the percentages were equal. In only one transcript, there was a higher percentage of supportive communication than directive. There was a wide range of total across the table, ranging from 1 to 89. There were frequent BS1 and BS3 codes, but few BSW2, BPS1 and BPS2a.

Using the numerical data provided by the coding framework as a guide, the transcripts were analyzed using content analysis and four recurring themes were observed. One was that there was a significant priority on patient comfort and control. Second, the woman made decisions regarding desired position, but that once the decision was made the nurse took a directive role in the act of positioning. Third, the nurse gave clinical rationale when offering position choices. Finally, when pain became a significant issue, communication from the nurse became more directive.

Priority of Patient Comfort and Control

Across the sample, regardless of the type of communication occurring between nurse and woman, there was a consistent emphasis on patient preferences and comfort. This was evidenced by numerous quotes from nurses such as:

- *“You can be however you want to be.”*
- *“Does it feel more comfortable like that?”*
- *“Whatever, you know, just do it your own way. Whatever feels good.”*
- *“Isn’t it nice to be the boss?”*
- *“Whatever is most comfortable for you”.*

This was especially prevalent in transcripts in which the woman was in control of positioning and communication from the nurse was primarily supportive, but it was also a theme in transcripts in which nurses' role was more directive. Despite the nurse taking charge of positioning, it was ultimately up to the woman to decide what was most comfortable for herself. This priority was continually emphasized and supported by the nurse in all transcripts.

Woman Controlled Decisions, Nurse Directed Positioning

In most of the transcripts, the nurse offered position choices and the woman would respond with her preference and input. In this way, the woman could control what position she was in for labor and the nurse offered up supportive communication.

- *Nurse (N): "So, you think you would like the bar?" Woman (W): "Yeah, I think I should at least try it. I do a lot of squats at home."*

However, once the decision about the position change was made, the nurse would often take on a directive role in assisting the woman into said position. The nurse would direct the women in the position she desired by telling the woman what to put where.

- *W: "Can I push from my side?" N: "When you push on your side, the top leg you need to move up and out."*
- *N: "Ok, ready to move?" W: "Yeah, I'm ready to try something else." N: "So we've been sitting up with small stirrups for the feet. We're going to try more flat so the baby can get under the pelvis and we'll help you a little bit too."*

When this directive communication occurred, it took the control away from the woman and made the nurse an authoritative figure.

Clinical Rationale for Position Changes

When the nurse offered choices or collaborated with the woman to come to a decision regarding positioning, there was clinical rationale in keeping with best practice offered. This rationale ranged from patient comfort to factors regarding the progression of labor (eg. using gravity to move the baby).

- *N: "I thought this position to begin with because your back was hurting so much."*
- *N: "I'm thinking if we change the angle a little bit so that baby will have a little bit more room to come around because you're really pushing."*

In these examples, the nurse used clinical judgment and patient indicators to effectively communicate reasoning to the woman.

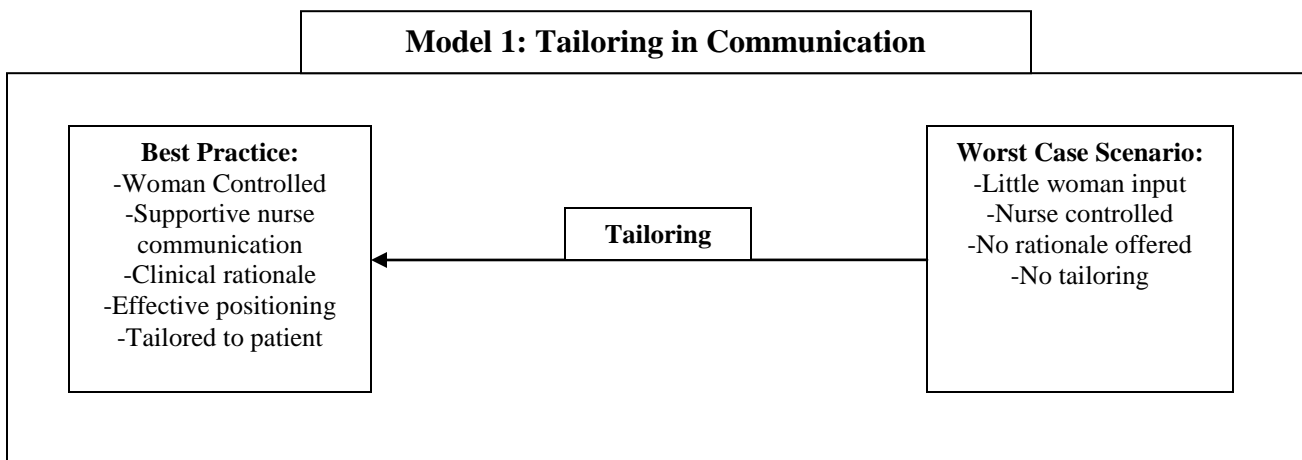
Pain as a Clinical Indicator for Directive Communication

In some of the transcripts in which pain became unbearable for the woman, the nurse adopted a directive role in positioning. During these situations, the woman couldn't focus beyond her pain enough to make decisions or communicate her positioning preferences.

- *N: "We're going to try and turn you to a different position okay? We can try her side and see if she feels okay pushing like that."*
- *N: "Okay, when you can I want you to scoot down to the end of the bed because you are doing so well."*

In both cases, the woman does not communicate with the nurse, but the nurse takes control of the situation regarding positioning. This is an evidence base approach to handling positioning in this situation.

All of these results and themes occur within a spectrum of best practice. There are instances in which the nurses utilize best practice regarding communication and positions as well as situations in which best practice was altered to accommodate clinical conditions that made implementing evidence base practice more challenging. Most of these transcripts fell somewhere in the middle by a process of tailoring to the woman’s unique situation and labor. This is illustrated in Model 1 which demonstrates the range of nurse communication in implementing evidence based practice during second stage labor.



Discussion

As the current state of the science suggests, communication from the nurse should be primarily supportive and allow the woman to assume control to choose what position feels most comfortable. De Jonge et al. (2008) assert that the preferred method of communication is informed choice. This implies that the nurse gives clinically informed choices for positioning through supportive communication and that the decision ultimately lies with the woman.

The raw numerical data in Table 1 suggests that nurses are taking a more directive role in the way they communicate. This may be due in part to the theme of nurse assuming control once a position is decided upon. The transcript in which there was more supportive communication

than directive was an example of best practice in communication. In this transcript, the nurse utilized informed choice, but the woman ultimately was in control of her position. She suggested positions without the prompting of the nurse. The positions decided upon were in keeping with what the literature suggests as best practice and were supported with clinical rationale from the nurse.

Though Table 1 shows a bias toward directive communication from the nurse, the themes identified through content analysis were more congruent with what the state of the science is regarding best practice. The emphasis on patient comfort and choice that was prevalent in the data is in keeping with the recommendations made by Zwelling (2010). The communication regarding this theme was supportive in the way it was centered upon the woman's preferences. The nurse asserted the importance of the woman being comfortable and responding to cues from her body while offering encouraging, supportive communication.

Though there was an emphasis on woman controlled decisions, there was a theme of nurses taking a directive role once the position was decided upon. This change in communication style from supportive to directive is not clinically driven and is not consistent with what is found in the literature. Thus there are exemplars where the nurse moves between and evidence based approach and a non-evidence based approach that is not clinically driven. However, an acceptable clinical indicator for directive communication is pain according to Roberts et al. (2007) and Bergstrom et al. (2010). The communication in 6 transcripts did become more directive where pain became unbearable. In these situations, the nurse used clinical judgment to assess the situation and alter their style of communication to manage the woman's second stage of labor. In this instance, the directive approach is supported by the literature.

The initial theoretical framework used for this study was the Ottawa Model of Research Use (Logan & Graham, 1998). The focus was on the adoption phase of research use; what impacts the decision and use of EBP. In congruence with the model, nurses in the study were adopting EBP, but with some limitations. Further study into this area may need to explore unit policies and procedures and unit management in order to better understand the adoption of research in maternal nursing.

A limitation of this study is the small sample size. In addition, having only transcripts of the second stage labors, it is difficult to understand the nurse's rationale for positions and communication style. It may be beneficial to use video transcripts as an alternative as well as conduct interviews with the nurses that participate to have them explain their management approaches. When looking at Table 1, there is not one dominant method of communication used, thus the communication in the management of second stage labor may be more complex than the current research to date has uncovered.

Conclusion and Clinical Implications

This study set out to ascertain if best practice according to the state of the science is being implemented at the bedside. Though many of the themes identified are congruent with what literature suggests, there are areas in which nurses are not implementing best practice. There is a gap in which nurses assume control in positioning without acceptable clinical indicators such as pain or fetal distress. For the most part, these situations occur after a decision is made and the woman is in transition from one position to another. The current state of the science does not recommend a directive communication style during this transition. By giving too much direction, the nurse can undermine the control of the woman. Though much of the data

suggested that best practice is being implemented at the bedside, in this regard there is a gap between EBP and actual practice.

However, there are themes evident in the data that illustrate clinical indicators that cause a change in communication. The presence of extreme pain caused the nurse to assume a directive role and this is supported by the literature. In this way, nurses implemented best practice at the bedside.

In order to better understand the implementation of EBP at the bedside and nurses' clinical rationale for communication style, more study in this area is needed. Ultimately, this study identified communication styles between the mother and nurse in order to give guidance for maternal nursing.

Appendix A

Framework for scoring:			
Categories	Definitions	Examples	
Support in birthing positions			
Provider's role			
BS1	responding/listening	take sure it is understood what women want	I know you really like this position ... Or is it uncomfortable to do that? You can be in an up position now if you want.
BS2	encouragement	positive remarks towards women with regard to birthing positions	Yeah, so you're ready.
BS3	information	gives information around birthing positions like possibilities, explanations, how to do	It's just you haven't settled in. ... sometimes if you bend your knees and bring them up, curl around your baby it will help to... Sometimes you'll want to just let you legs fall together. Okay, I'm going to put your bed way up.
BS4	offer choices	offer women choices in birthing positions	Do you want to try a different position? Now are you comfortable sitting like this? Okay, is this position okay for you?
BS5	style:	directive supportive neutral	D: Don't pull away. Let your shoulders drop and just rock into that baby. D: Okay, let's try something else. D: You just want to have your chin on your chest. S: You can be however you want to be S: ... you can do whatever you want with them.
Women's role			
BWS1	tells provider what she wants/needs/feels (or not)	use of certain positions	I just want to try. That's comfortable.
BWS2	asking for directions		So, when I'm going to actually start to squat.
BWS3	asking for feedback		My pelvis doesn't want to close.
BWS4	style:	active responsive passive	
Partner's role			
BPS1	involvement in positions		
BPS2	style:	active responsive passive	D: Why don't you stand up and then squat. S: That's great. Try it. It's good.

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