A PILOT STUDY DESCRIBING LABOR PAIN ASSESSMENT AND MANAGEMENT DOCUMENTATION FOR LIMITED ENGLISH SPEAKING PATIENTS IN A COMMUNITY HOSPITAL

BY

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To the Faculty of Washington State University:

The members of the Committee appointed to examine the thesis of Lida

Dekker find it satisfactory and recommend that it be accepted.

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IN A COMMUNITY HOSPITAL

Abstract

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Within this century, the population shift toward a non-white majority in the United States has implications for intrapartum nurses who are among the first to assist families to welcome newborns into society. Literature suggests possible differences in labor pain management based on culture or socio-economic status, but no study has evaluated inconsistency in labor pain assessment and management based on English language proficiency. Andersen's Utilization Model was the theoretical framework for this nonexperimental descriptive study of labor pain assessment and management of limited English proficient (LEP) patients. Data were gathered by retrospective chart review of vaginal deliveries at a community hospital in the Pacific Northwest during January through August of 2006. Results of statistical analysis support a previous study that nurses spend more time in documenting procedures than in documenting supportive care. Lack of documentation of translator presence during labor suggests the possible need for culturally specific visual tools that English-speaking-only nurses may use for communicating about pain management needs with LEP patients.

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Chapter One: Introduction and Background

While the majority of registered nurses in this country today are Caucasian, in the near future one-half of United States children, one-fourth of the elders and a majority of people of all ages will be of non-white ethnic heritages (Grant & Letzring, 2003). Diverse ethnicities and languages are among the challenges to providing culturally supportive and relevant care faced by English speaking nurses with dominant Caucasian American traditional values. Discussing the breadth of the scope of cultural competence for health care providers in a Kaiser Foundation Symposium, Dr. Wanda Jones, Deputy Assistant Secretary at the Department of Health and Human Services and Director of the Office on Women's Health points out that, "When a health professional talks to someone who's not [a health professional], it's a cross-cultural experience, period" (Kaiser Family Foundation, 2005, p.8).

As the health care system begins to meet the Healthy People 2010 goal of eliminating health care disparities based on socioeconomic status and ethnicity, and as global migration shifts continue, there is a resulting increase in diversity of the United States childbearing population (Villarruel, 2004). In the intrapartum setting language interpreters, when necessary (Yeo, 2004), are provided since Executive Order 13166 (Clinton, 2000), to provide assistance in overcoming language barriers between patients and nurses but, as noted by Dr. Jones, language translation does not define the whole scope of providing culturally competent care to any patient, especially a laboring woman. National Standards for Culturally and Linguistically Appropriate Services in Health Care (CLAS), 2000, elaborate for health care organizations the recommended and required services that are to be offered to LEP patients. According to Lindsay, 2005, revised CLAS standards, published in 2003, guide health care providers to assess the immediate impact of direct translation on patient care at any one time. Translation may be deferred to a later time if no immediate harm will be suffered by the LEP patient (Lindsay, 2005). The American

Nurses Association provides a clear guide to applying the nursing process to assess, plan, implement and evaluate pain in all patients. Fifteen standards of practice are delineated to hold all nurses accountable for their pain management practice with patients as well as to demonstrate leadership by influencing peers and institutions to uphold the standards (American Nurses Association [ANA], 2005).

As a clinical instructor of Associate Degree Nursing students for the past three years, the author has been in a position to observe intrapartum care in a busy community hospital family birth center. Random comments heard from staff nurses have suggested that there are challenges associated with providing the expected standard of care for LEP patients. Students have discussed personal experiences in reflective journals that reveal concern about being able to communicate adequately with LEP patients in order to provide and assess for adequate pain relief during labor and in the post partum period. The community hospital has increased translator services to include daily patient teaching rounds by Russian and Spanish speaking professionals, individual interpreters to be called at providers' requests for up to one and onehalf hour periods and in-room speaker phone translator access for use by nurses with LEP patients. These observations have stimulated the desire and pointed to the need for this pilot study in order to begin to assess the efficacy of the CLAS services being offered to an increasingly diverse population. A summary statement from a report of the Institutes of Medicine, 2003, provides a strong case for doing this pilot study, "Bias, stereotyping, prejudice, and clinical uncertainty on the part of the healthcare providers may contribute to racial and ethnic disparities in healthcare. While indirect evidence from several lines of research supports this statement, a greater understanding of the prevalence and influence of these processes is needed and should be sought through research" (Martinez, Green, & Sanudo, 2004, p. 7).

Problem Statement

Laboring women with LEP are at risk for not receiving adequate labor pain assessment or management from English speaking only care providers. The pain management decision making process is a complex dynamic influenced by the patients' and providers' cultural beliefs, communication abilities, and multiple other variables. A description of the current level of pain assessment and management being documented for LEP patients provides information about the adequacy of services for providing CLAS care.

Purpose

The purpose of this study was to describe intrapartum pain assessment documentation and management for women with LEP. The goal of this study was to determine if there was consistency in labor pain assessment and management methods in a community hospital with the expected standards of care.

Conceptual Framework

Andersen and Newman (1973) offer a health services utilization model based on societal and individual determinants that provides a framework for this study. This model is based in the beliefs that all people have a right to adequate health care, that certain minority populations are underserved in this country, that the general population has high expectations that medical care can contribute to improved health, and that research can contribute to development of policies and practice that will overcome barriers to care access and alleviate disparities based on ethnicity and socio-economic status. Individual use of available health care is determined by personal beliefs, enabling conditions such as ability to pay, and the perception of need based on the degree of physical illness. (Andersen & Newman, 1973) Compounding communication challenges are issues that have to do with income level. Based on Andersen and Newman's conceptual guide, socio-economic status was chosen as one of the variables of interest.

Literature Review

A study from the United Arab Emirates, compared scores on three visual analog scales between native Arabic speaking patients and nurses and non-Arabic speaking nurses caring for the same patients in a medical-surgical ward. Pain assessment was the same between all groups. Of interest is that both sets of nurses assessed patients' knowledge to be greater and worry to be less than the patients assessed themselves. (Harrison, Busabir, Al-Kaabi, & Al-awadi, 1996) This supports the statement by Jones that nursing is a culture of its own that may present more of a barrier to cultural competency than language or heritage (Kaiser Family Foundation, 2005).

From a survey of over 1500 United States women, the Maternity Center Association reported that the majority were satisfied with their choice of labor pain management; most chose epidural, but the highest satisfaction rating came from the least commonly used techniques of the immersion tub and taking a shower. Over 90% surveyed reported some type of labor support from a partner or a nurse (Declercq, Sakala, Corry, Applebaum, & Risher, 2002). What is not described in the survey report is any ethnic or cultural information about the respondents.

In a review of eight randomized trials, Rosen (2004) concludes that feeling continuously supported emotionally has a positive effect on reported satisfaction with the labor experience, and different types of support persons may be beneficial at different stages of labor depending on individual women's needs (Rosen, 2004). Labor support and epidural use were not compared. A large national study of 2,355 patients from the pregnancy subcomponent of the Medical Expenditure Panel Survey studies the impact of insurance type and ethnicity on use of epidural intrapartum pain management. The results showed that Hispanics were least likely to receive an epidural, followed by publicly funded insured, non-insured and non-white. Teens, those with complications and those over 35 were more likely to receive epidurals. Language and cultural barriers were cited as obstacles for even the insured Hispanics to receive this form of pain relief

(Atherton, Feeg, & El-Adham, 2004). Other reasons for not using epidural anesthesia are beliefs about childbirth and about one's own efficacy in relationship to the birth process (Heinze & Sleigh, 2003). A secondary analysis of world-wide phenomenological studies of perceptions of pain in childbirth concluded that understanding the cultural meaning of pain to the mother is a fundamental prerequisite if the nurse is to facilitate a satisfying birth experience (Callister, Khalaf, Semenic, Kartchner, & Vehvilainen-Julkunen, 2003).

To summarize the literature review, the majority of women in the United States receive epidural pain management in labor; the majority of those who do not receive epidurals are nonwhite and underinsured; labor support increases a woman's sense of satisfaction with the birth experience and may decrease unnecessary interventions. The literature suggests possible inconsistencies in labor pain management based on culture or socio-economic status, but no study has been found to date that explores possible inconsistencies in labor pain assessment and management type based on a language barrier. Andersen and Newman's key ideas mesh with the current research to point out the appropriateness of describing the intrapartum care of women who are other than the dominant cultural and linguistic population.

Research Question

Is there consistency with established care standards of type of labor pain management and level of pain documented for LEP patients delivering vaginally in a community hospitalbased family birth center?

Definitions of Terms

For this study, intrapartum pain assessment by accepted nursing standards begins at the time of admission and continues throughout labor using a taught numerical scale of zero to ten with zero being no pain and ten being the worst pain imaginable. Other non-verbal signs of pain such a grimacing and postural tension may be used for assessment. Three is considered a

tolerable level of discomfort if the patient agrees (McKinney, James, Murray, & Ashwill, 2005). In the birthing unit at the hospital in this study, graphic charting by exception is done. The intrapartum chart displays a column every fifteen minutes for three aspects of pain assessment, including numerical pain level on a zero to ten scale, whether or not the pain is at an acceptable level to the patient, and relief measures taken. Pre-printed orders for intrapartum patients in this setting list a variety of non-pharmacological pain relief measures as well as a choice of three intravenous (IV) narcotic medications to be given every one to two hours at the discretion of the registered nurse. If a patient requests obstetric regional anesthesia, a separate physician or midwife order must be obtained. The current adult inpatient standards of care for the study setting include the expectation that the patient will be involved in optimal communication in establishing a goal for optimal pain management. Nursing interventions include evaluation of pain and review of pain management plan at least every four hours and before, during and after a known pain producing event and with each new report of pain. Thus, the expectation for nursing is on-going pain assessment with intrapartum patients, as the progress and intensity of labor is unique to each patient.

Labor pain management is defined as obstetric regional anesthesia, intravenous narcotic or non-pharmacologic. Obstetric regional anesthesia is injection of anesthetic agent with or without added opioids into the epidural space to provide partial or complete loss of sensation below thoracic vertebrae eight to ten, T8 to T10, level (Poole, 2003). This is commonly referred to in labor and delivery practice as an epidural. Intravenous narcotic is injection of opioid analgesics for fast acting, short duration action on the brain to reduce the perception of pain (Sloane, James, Murray, & Ashwill, 2005, chap. 19). Fentanyl (Sublimaze) and nalbuphine (Nubain) are most commonly used in the study setting. Non-pharmacologic pain relief methods include whirlpool immersion tub, walking, position changes, sitting on birth ball, patterned breathing, massage, and verbal coaching.

For this study, age is defined as the patient's age documented at the time of hospital admission. Parity is here defined as number of vaginal deliveries prior to the current hospital admission. Pain score is the highest pain level documented during labor based on a one to ten scale with ten being the patient's perception of the worst pain. Payment type is non-insured, privately insured, or publicly insured. Provider type is Certified Nurse-Midwife, or MD, which includes Family Practice Provider, Obstetrician or resident.

English speaking is defined as adequate language ability to be able to communicate and give consent for care without an interpreter. Limited English Proficiency (LEP) is defined by the federal government as the inability to speak English as one's primary language and having a limited ability to read, write, speak, or understand English (Let Everyone Participate, 2005). The operational definition of LEP for this study is labor patients needing a language interpreter in order to obtain informed consent for care or have adequate discharge teaching documented. The interpreter may be a friend, family member or a professional translator.

Many definitions exist for cultural competence and culturally and linguistically sensitive and appropriate patient care. The U.S. Department of Health and Human Services (DHHS) and Health Resources and Services Administration (HRSA) define cultural competence as the level of knowledge-based skills required to provide effective clinical care to patients from a particular ethnic or racial group (Rhymes & Brown, 2005). From the DHHS Office of Minority Health, culturally and linguistically appropriate services (CLAS) are defined as "Health care services that are respectful of and responsive to cultural and linguistic needs" (U.S. Department of Health and Human Services Office of Minority Health, p. 5).

Significance to Nursing

Nurses have traditionally served the underserved and have a responsibility to play a key leadership role in eliminating health disparities. It is important for nursing to evaluate the adequacy of available resources and to be aware of situations other than medical indication that may influence intrapartum pain management. Because nurses are directly involved in making and influencing intrapartum pain management decisions, obstetric nursing practice will benefit from identifying successful practices and potential barriers to offering culturally and linguistically sensitive patient care.

Chapter Two: Method of Study

Introduction

The complex interplay of culture, language, personal preference, individual physical and psycho-social characteristics and current standards of care in hospital childbirth indicates that there is not one best research method to explore and describe current practices. This pilot study attempted to contribute to the body of knowledge upon which nursing can base decisions to evaluate practice, educate practitioners and design future research.

Type of Design

A non-experimental descriptive design was used to investigate consistency with expected standards of care of limited English proficient (LEP) patients. The interplay between patients, nurses, midwives and medical care providers in the labor process is a complex dynamic influenced by protocols, personal preferences, individual circumstances and cultural diversity; thus, it is difficult to describe and measure what factor may have more weight than another in effecting labor pain management. This study described the demographic variables of age, ethnicity, primary language, type of translation used, gravidy, parity, payment type, provider type, and investigates documented pain score, perineal condition and the type of labor pain management received by the LEP patient.

In the original proposal independent variables such as grand multiparity (greater than five deliveries), pregnancy induced hypertension, insulin dependent gestational diabetes, precipitate delivery, and vaginal birth after Cesarean delivery that might have confounded the study by their potential complexity were planned to be controlled by exclusion. During data collection it became evident that exclusion would have resulted in too small a sample size. Thus data were gathered on vaginal deliveries excluding multiple gestation and pre-term labor, and excluding Cesarean delivery.

Setting for Study

The setting for the study was a 360-bed urban hospital established over a century ago as a not-for-profit comprehensive regional health center. The birthing facility is attached as a distinct wing of the hospital and houses fifty labor-delivery-postpartum rooms. Between three-hundred and four-hundred deliveries a month occur in the facility. In 2005, there were 5,053 births and in 2004, there were 5,045 births. At this time there is no published information found about the diversity of languages spoken by birthing mothers at the facility, however there are daily rounds made by Spanish speaking and Russian speaking interpreters to do teaching and interpreter telephones are available in each room for a variety of other languages. In-person professional interpreters may be called in per individual providers' request.

The county has an estimated 2005 population of over four-hundred thousand. Based on 2004 demographics, the population is approximately 90% Caucasian, 4% Asian and Pacific Islander, 2% Black, 2% American Indian and Alaska Native, and 3% reporting mixed race. Latinos make up 5.5 % of the total population. These data, however, may underestimate undocumented persons residing in the study community. Data from 2000 report 8.5% foreign born persons and 11.5% with a language other than English spoken at home (U.S. Census Bureau, 2006).

Population and Sample

The population for this study was adult women with LEP who had labored and delivered vaginally in a community hospital in the Northwest United States. In general it is known that the population served by this hospital is predominantly Caucasian with an increasing number of culturally and linguistically diverse patients in recent years. A sample of patients was selected starting with the month of August 2006 and continuing backwards in time until the sample size of 85 was reached.

Instrumentation: Reliability and Validity or Scientific Rigor

The data collection sheet designed by the researcher in consult with faculty for this study is included in Appendix A. Since this was the first use of this instrument, no psychometric assessment had yet been completed. The tool had face validity by having been reviewed by two nurse experts in the subject matter. Because this was a retrospective chart review of 85 records, a single data sheet for each chart enhanced accuracy of data retrieval by eliminating visual confusion. The tool itself was designed for visual ease to enable accuracy of data documentation. Transfer reliability was further insured by having all data collected by one person who had extensive experience in doing chart reviews of laboring women. Investigator fatigue was prevented by collecting data in four different sessions over a two week period.

Data from individual collection sheets were entered into the Statistical Package for the Social Sciences (SPSS) software in a faculty office in the Nursing Department at the researcher's university. SPSS is made available to graduate students in this secure way for use during thesis research.

A visual checking method was used to clean data by having a qualified volunteer confirm entry accuracy on screen while the researcher read from the data collection sheets. Data collection sheets were stored after data entry in a locked case in the researcher's home study. Computer data were backed up after each entry session on a password encoded USB mass storage device kept in the same locked case. Frequencies of the data were run to check results for outliers that may have indicated errors in transcribing data.

Data Collection Procedure

Data collection began with review of post partum interpreter logs and the delivery log to identify LEP patients who delivered vaginally during a three-month period working back in three month time periods until either a sample of 100 was obtained or January 1, 2006 was reached. On individual chart request forms supplied by the hospital Medical Records Department the patient name, hospital record number and date of discharge were recorded. These request forms were given to the Medical Records Department to retrieve charts for data collection and were kept by Medical Records. No patient identifiers were on the research data collection sheet.

Chart review and data collection on coding sheets took place in the Medical Records office so that records remained secure at all times. Transport of coding sheets to nursing faculty offices and to researcher's locked home file cabinet was accomplished in a locked brief case. No patient identifiers left the hospital at any time.

The strength of this scheme was the large sample size available and the potential for statistically meaningful data analysis using SPSS. Threat of history was limited by obtaining data over an eight month range. Limitations of the study were that the results may not be generalized to other populations in other hospitals and other parts of the country, and the fact that patients' reports of pain level were determined only by what was documented by the nurses. There may have been assessments and interventions that occurred but were not documented. All normal limitations of self report data apply to the demographics. This was a pilot study to determine if chart review using this data collection tool was a valid method for describing nursing care. Future studies may corroborate or explain findings by using qualitative methods in direct patient and provider interviews.

Data Analysis

The research question, is there consistency with established care standards of type of labor pain management and level of pain documented for LEP patients delivering vaginally in a community hospital-based family birth center, was explored by data analysis using SPSS. Demographic variables were described by mean values, frequencies and percentages. A determination of appropriate statistical analyses of the pain score and management variables was made after the initial assessment of the data in consultation with faculty.

The data collection tool was evaluated for how well it behaved in this pilot study. During the initial data collection session several changes were made. Provider type was changed to CNM or MD because the researcher could not distinguish between OB, DO or FP from the delivery record. The category of "none documented" was added to management type. A new category of presence or absence of pain documentation was added to clarify the pain score documentation. Use or not of epidural for pain management was added as a variable separate from type of pain management to account for all epidural use included in the mixed category. *Human Subjects Considerations*

After approval by a three-person faculty committee, the proposal was submitted to the university Institutional Review Board (IRB) for approval. A rapid approval process occurred as there were no human subject interactions in the data collection design. Thus, no consent form was needed. The next step was submission to the IRB of the study hospital for approval. A risk consideration for the study hospital was some added work for the staff of the Medical Records Department in retrieving charts for review. This was minimized by following the department's instructions to submit chart requests on the standard form provided in four groups of twenty-five

charts with a forty-eight hour lead time prior to data collection so charts could be compiled for the researcher at a time convenient for the staff. There was very little risk of HIPPA confidentiality issues as the researcher was the only person doing chart reviews for data retrieval and the data were not connected directly with any patient identifiers. Results of the study were reported to the facility Institutional Review Board using their standard research completion reporting form. All results were presented in non-judgmental language. No individual care provider was identified. The benefit to the institution was a description of practice that documented the progress of efforts to provide linguistically appropriate care. There may be guidance for educational efforts with staff or needed services for clients as management interprets the results. Society at large benefits when hospital and nursing practice is responsive to the needs of the community being served.

Documentation of the researcher's training in human subjects' research is included in Appendix B.

Chapter Three: Findings

In order to assess consistency with established care standards of type of labor pain management and level of pain documented for LEP patients delivering vaginally in a community hospital-based family birth center the data for this study were gathered from the Post Partum Teaching Translator Request Log, the Delivery Log and from retrospective chart review. Onehundred-thirty-two Russian and Spanish speaking listings were retrieved from the daily translator request log. This set of names represented persons confirmed by care providers to be LEP for whom a translator was needed for adequate post partum discharge teaching. These names were then compared to the delivery log to confirm singleton, term, vaginal deliveries. Of the LEP names, thirty had cesarean sections, two had premature deliveries, and seven were not in the delivery log so may have been admitted for diagnoses other than pregnancy. Ninety charts were requested from this pool and twelve were not reviewed due to maternal age less than 18 or unavailability of the chart. Eleven names were retrieved directly from the delivery log that indicated first and last name origin other than Caucasian or Hispanic in an attempt to increase the language diversity of the sample. Of this group four charts of confirmed LEP status were reviewed. The final number of charts reviewed that met the study criteria was eighty-five. *Sample Characteristics*

Chart Review. The sample of 85 charts represented 45 (53%) Hispanic Spanish speakers, 36 (42%) Caucasian Eastern European language speakers, and 4 (5%) Asian language speakers. The Eastern European languages represented were Russian and Ukrainian.

Demographic Findings. Ages ranged from 18 to 42 years old, gravidy ranged from 1 to 10, and parity ranged from 0 to 9 with 13 (15%) grand multiparas. Delivery providers were Certified Nurse-Midwives (CNM) for 44 (52%) and medical doctors (MD) for 41 (48%). The majority of the sample, 73 (86%), had publicly funded health insurance, 11 (13%) had private insurance and 1 patient visiting from her home country had no health insurance.

Descriptive Findings. For the total sample, 26 (31%) had a professional translator present in person, 7 (8%) had a professional telephone translator, 12 (14%) had a family member or friend translate and 40 (47%) had no translator documented as being present for labor or delivery. A pain score was documented for 35 (41%) of the LEP patients, a pain assessment of + or - with no score was documented for 22 (26%), and no pain assessment was documented in labor for 28 (33%). Some type of pain management was documented for 69 (83%) with no documentation for 14 (17%). Epidural use was documented for 30 (36%). Mixed management techniques were documented for 29 (34%), IV narcotics for 13 (15%), nonpharmacological methods for 18 (21%) and 2 (2%) were documented as declining any pain management intervention. These pain management statistics suggest agreement with the results of an earlier

study that found intrapartum nurses spend time in supportive care only sporadically with more time spent in performing procedures (McNiven, Hodnett, & O'Brien-Pallas, 1992).

Seventy-eight (92%) of the LEP patients were delivered without an episiotomy and 28 (33%) had no laceration. A majority of the patients, 50 (59%), sustained a first or second degree laceration. There were 6 (7%) third degree and 1 fourth degree lacerations. There was no statistically significant correlation between degree of laceration and presence of episiotomy. Given the essentially equal distribution of care providers, these results imply a strong influence by the midwifery practitioners on the perineal management by the MDs who have traditionally cut episiotomies. Midwifery research literature suggests that degree of perineal trauma is strongly influenced not only by the skill and experience of the care provider, but also by the rapport established between the provider and the birthing client (Low, Seng, Murtland, & Oakley, 2000). These results are consistent with standard midwifery practice of limited use of episiotomy, but suggest an unexpectedly high rate of perineal trauma consistent with the findings of Low, etal, that training in perineal support must accompany lack of episiotomy.

Correlations. A correlation test was performed using Kendall's tau. There was a statistically significant correlation between language/ethnicity and pain score (-.396) with Caucasian Eastern European language speaking patients having higher pain scores documented. Of the 35 patients for whom a pain score was documented, 17 out of 45 Hispanics were represented (6.50 average score), 15 out of 36 Caucasians (7.80 average score) and 4 out of 4 Asians (3.50 average score). Young age also correlated significantly with documented high pain score. Remarkably, there was no correlation between documentation of pain assessment, epidural use and use of translation. Among the 30 patients receiving epidurals, 2 of the 4 Asians, 11 of the 45 Hispanics and 17 of the 36 Caucasians were represented. This is weakly consistent

with Atherton, etal (2004) who found that Hispanics were less likely than other ethnicities to receive an epidural.

Chapter Four: Discussion, Conclusions, Recommendations

Applying the Andersen model to the study results indicates areas for further research to assess barriers to nurses documenting pain assessment and intrapartum pain management methods for LEP patients. This discussion may be applied specifically to the study setting as well as generally inform hospitals with a linguistically diverse childbearing population. *Discussion*

Data collection by retrospective chart review provides clear information about documentation consistency of nurses, but may not provide complete information about actual nursing practice of providing culturally and linguistically sensitive labor pain assessment and management. Actual use of translation methods was not adequately described by chart review as there was no consistent method of documenting how communication took place. In all cases charts had clear documentation that the patient did not speak or understand English, yet 47% had no documentation of how communication was accomplished. There may have been a hospital staff member such as a nurse, APRN Nurse Anesthetist, or medical resident who spoke the appropriate language and provided at least some translation. However, possibly due to the lack of documentation, there was no correlation between pain assessment, frequency of epidural or other pain management use and use of translation. Comparing the results to an expected standard reveals a lower rate of complete documentation than anticipated with resulting ambiguity of answers to the study question.

Limitations

The limitations of the study include the anticipated normal limitations of self reported demographic data and that assessments and interventions may have occurred but were not

documented. The relatively large numbers of undocumented variables was an unanticipated limitation to answering the study question, is there consistency with expected standards of level of pain reported and type of management offered to LEP patients. The study did reveal that consistency was lacking with expected standards of documentation of pain score and translator presence. While the statistical results may not be generalized to other populations in other hospitals and other parts of the country, there may be guidance suggested for other hospitals with a linguistically diverse childbearing population.

As a pilot study to determine if chart review using this data collection tool was a valid method for describing nursing care, there was the limitation of the untested tool. The relative convenience and low risk to human subjects of a retrospective chart review must be weighed against the limitation of missing actual translator services, nursing assessment and care management that may not have been documented. Due to the inconsistency in documentation of translation services utilized and of pain evaluation, a determination cannot be made of risk to patient well-being related to linguistic barriers. Applying the Andersen model, further research is needed to determine and overcome possible barriers to care access based on ethnicity and lower socio-economic status that were strongly linked to LEP. There may have been more patients with LEP who delivered during the study period, but were not identified in the translator log. Thus, this is not necessarily a complete sample of all LEP patients in this setting. Future research endeavors using a prospective design and a combination of observations of care and patient interviews could better inform the development of best practices in the care of LEP. *Implications*

The results may be interpreted to be consistent with the findings of McNivens, etal. (1992) who found that intrapartum nurses spend more time in procedural behaviors than in labor support behaviors. Documentation of demographic data and medical procedures had a higher consistency than documentation of pain assessment and non-pharmacological supportive activities. Nurses may be reluctant to chart specific pain score assessments when verbal communication is not reliable. This study identifies a need for greater consistency within this setting in nursing documentation of translator presence, pain score assessment and time spent with the patient in supportive activities.

Recommendations

Future research into the question of consistency with expected standards of CLAS nursing assessment and care management provided to intrapartum LEP patients may benefit from a prospective design incorporating on-site observation. An intervention such as use of CLAS visual communication and assessment aids found by Harrison, etal (2000) to be effective could be implemented. Qualitative inquiries could be made into the LEP patient experience and the perceived barriers to communication experienced by English speaking only nurses. In addition, the application of research findings documenting decrease in medical interventions when there is a continuous support person with the laboring mother could be combined with excellent linguistic support for a possible reduction in care management costs (Hodnett, Gates, Hofmeyr, & Sakala, 2005). LEP patients had a lower incidence of documented pain score assessments than expected which may indicate the need to investigate further if these findings are due to inadequate assessment methods by or poor communication with nurses. The frequent use of IV narcotic medications and regional obstetric analgesia should be further investigated to corroborate that this care was based on patient preference and not on lack of labor support or communication barriers with care providers unable to offer verbal support, teaching and encouragement.

In order to consistently document the caring behaviors of intrapartum pain assessment and pain management at a high level of CLAS standards, nurses may need supportive education, and adequate, linguistically diverse visual aids to use when interpreters are not present. Design of such aids could be enhanced by gleaning suggestions about what would be meaningful from informants from target ethnic and linguistic groups. Applying the Andersen health services utilization model that certain minority populations are underserved in this country, yet have a right to adequate health care, the experiences of English speaking only intrapartum nurses caring for LEP patients with whom they cannot verbally communicate needs to be documented and assessed for specific needs. These target areas may include cultural sensitivity training, key phrase language training, and training in current pain assessment, documentation and management standards.

Summary

Responsibility and accountability for providing high standards of intrapartum pain assessment and management is held jointly by nurses, medical care providers and system administrators. Nurses, as patient advocates, should be leaders in setting the highest standard of pain assessment, care and documentation (ANA, 2005). Adequate resources for, appropriate training in and meaningful evaluation of culturally and linguistically appropriate labor and delivery care are integral to meeting expected standards. This study initiated a description of CLAS services provided to intrapartum LEP patients in one hospital setting. What emerged was a clear need for improvement in documentation of intrapartum pain assessment. Further investigation is needed to describe and eliminate barriers to intrapartum nursing documentation of pain assessment, nonpharmacologic labor support methods and translator presence when caring for laboring LEP patients.

Table 1.

Variables	Categories	Frequency	% of Total
Age Group	18-20	18	21%
	21-23	12	14%
	24-26	12	14%
	27-29	13	15%
	30-32	12	14%
	33-35	7	8%
	36-38	9	11%
	39-42	2	2%
Ethnicity	Asian	4	5%
	Caucasian	45	53%
	Hispanic/Latina	36	42%
Language	Other	4	5%
	East European	45	53%
	Spanish	36	42%
Provider Type	CNM	44	52%
	MD	41	48%
Insurance Type	Private	11	13%
	Public	73	86%
	No Insurance	1	1%

Variables	Categories	Frequency	% of Total
Gravida	1	23	27%
	2	26	31%
	3	13	15%
	4	8	9%
	5	4	5%
	6	7	8%
	7	1	1%
	9	2	2%
	10	1	1%
Para	0	30	35%
	1	24	28%
	2	12	14%
	3	6	7%
	4	7	8%
	5	3	4%
	6	1	1%
	8	1	1%
	9	1	1%

Table 2.

Frequencies and Percents of Assessment and Management Descriptors

		Pain As	sessment		
0-10 Pain So	cale Documente	d	Is Any Pain Asso	essment Documo	ented?
Categories	Frequency	% of Total	Categories	Frequency	% of Total
No # Documented	50	59%	No	28	33%
0	3	4%	Yes, but no score	22	26%
3	4	5%	Yes, with score	35	41%
4	1	1%			
5	2	2%			
6	2	2%			
7	7	8%			
8	3	4%			
9	6	7%			
10	7	8%			
		Pain Ma	nagement		
	Туре		Epidural In	cluded in Meth	od

Туре			Epidural In	cluded in Met	hod
Epidural only	9	11%	No	55	65%
IV Narcotic	13	15%	Yes	30	35%
Nonpharmacological	18	21%			
Mixed Methods	29	34%			
None Documented	14	17%			
Declined	2	2%			

	Ν	Aanagement of	Perineum		
Degree o	of Laceration		Had	Episiotomy?	
No Laceration	28	33%	No	78	92%
First Degree	30	35%	Yes	7	8%
Second Degree	20	24%			
Third Degree	6	7%			
Fourth Degree	1	1%			

	Tra	nslator Service	es Documented		
Type of Tra	anslation		Presence of 7	Franslation Se	ervice
Telephone	7	8%	No	40	47%
In person Professional	26	31%	Yes	45	53%
Family/Friend	12	14%			
No Documentation	40	47%			

Appendix A

Data Collection Tool developed for Masters Thesis

WSUV April, 2006

ID
AGE
GRAVIDA
PARA
INS
1. Private
2. Public
3. No Ins
PROVIDER
1. CNM
2. FP
3. OB
ETHNICITY
1. AA
2. Asian
3. AIAN
4. Hisp/Lat
5. Cauc
6. other
TRANS
1. Telephone
2. In-person Pro
3. Fam/friend
LANG
1. East Euro
2. Spanish
3. Other

PAINSCORE
LAC degree
0. intact
1. 1 st
2. 2 nd
3. 3 rd 4. 4 th
4. 4 th
EPIS
0. no
1. yes
MGMT
1. epidural
2. IV narcotic
3. non-pharm
4. mixed
5. none documented
6. declined

WSUV October, 2006

ID
AGE
GRAVIDA
PARA
INS
1. Private
2. Public
3. No Ins
PROVIDER
1. CNM
2. MD
ETHNICITY
1. AA
2. Asian
3. AIAN
4. Hisp/Lat
5. Cauc
6. other
TRANS
1. Telephone
2. In-person Pro
3. Fam/friend
4. None Documented
1. East Euro
2. Spanish
3. Other

PAIN ASSESSMENT
0. none
1. +/-
PAINSCORE
LAC degree
0. intact
1. 1 st
2. 2 nd
3. 3 rd 4. 4 th
4. 4 th
EPIS
0. no
1. yes
MGMT
1. epidural
2. IV narcotic
3. non-pharm
4. mixed
5. none documented
6. declined

Appendix B



Completion Certificate

This is to certify that

Lida Dekker

has completed the **Human Participants Protection Education for Research Teams** online course, sponsored by the National Institutes of Health (NIH), on 01/12/2006.

This course included the following:

- key historical events and current issues that impact guidelines and legislation on human participant protection in research.
- ethical principles and guidelines that should assist in resolving the ethical issues inherent in the conduct of research with human participants.
- the use of key ethical principles and federal regulations to protect human participants at various stages in the research process.
- a description of guidelines for the protection of special populations in research.
- a definition of informed consent and components necessary for a valid consent.
- a description of the role of the IRB in the research process.
- the roles, responsibilities, and interactions of federal agencies, institutions, and researchers in conducting research with human participants.

National Institutes of Health

http://www.nih.gov/

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MEMORANDUM

TO: Lida Dekker Nursing, WSU, Vancouver

FROM: Malathi Jandhyala (for) Kris Miller, Chair, WSU Institutional Review Board (3140)

DATE: 28 September 2006

SUBJECT: Approved Human Subjects Protocol - New Protocol

Your Human Subjects Review Summary Form and additional information provided for the proposal titled "A Pilot Study Describing Labor Pain Assessment and Management Documentation for Limited English Speaking Patients in a Community Hospital," IRB File Number 9319-a was reviewed for the protection of the subjects participating in the study. Based on the information received from you, the WSU-IRB approved your human subjects protocol on 27 September 2006.

IRB approval indicates that the study protocol as presented in the Human Subjects Form by the investigator, is designed to adequately protect the subjects participating in the study. This approval does not relieve the investigator from the responsibility of providing continuing attention to ethical considerations involved in the utilization of human subjects participating in the study.

This approval expires on 26 September 2007. If any significant changes are made to the study protocol you must notify the IRB before implementation. Request for modification forms are available online at http://www.ogrd.wsu.edu/Forms.asp.

In accordance with federal regulations, this approval letter and a copy of the approved protocol must be kept with any copies of signed consent forms by the principal investigator for THREE years <u>after</u> completion of the project.

Washington State University is covered under Human Subjects Assurance Number FWA00002946 which is on file with the Office for Human Research Protections.

If you have questions, please contact the Institutional Review Board at (509) 335-9661. Any revised materials can be mailed to the Research Comptiance Office (Campus Zip 3140), faxed to (509) 335-1676, or in some cases by electronic mail. to *irb@mail.wsu.edu*.

Review Type: NEW Review Category: XMT Date Received 19 September 2006 OGRD No., NF Agency NA

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SCULIWUS SCULIWUS WASHINGTON MUDICALCENTER

October 2, 2006

Lida Dekker, BS., RN., CNM. 2208 NF 153rd Ave Vancouver, WA 98684

New Study Application titled: A Pilot Study Describing Labor Pain Assessment and Management Documentation for Limited English Speaking Patients in a Community Hospital.

Dear Ms. Dekker:

On behalf of the Southwest Washington Medical Center (SWMC) IRB on October 2, 2006, 4 completed an expedited review the new study application titled: A Pilot Study Describing Lahor Palu Assessment and Management Documentation for Limited English Speaking Patients in a Community Hospital

Literature suggests possible differences in labor pain management based on culture or socioeconomic status, but no study has evaluated inconsistency in labor pain assessment and management based on Finglish language proficiency. Andersen's Utilization Model is the theoretical fiamework for this non-experimental descriptive study of labor pain assessment and management of limited English proficient patients. The pilot study will include data collection that will be gathered by retrospective chart review of 100 low-risk vaginal deliveries at SWMC during scheeted months in 2006. Results of statistical analysis will describe current practice and other evidence for focus areas of future research that may result in improvements in meeting patient needs for pain management during labor.

The requirement to obtain informed consent and HIPAA authorization has been waived or its elements have been altered in accordance with 45CFR46.E16(d)(1-4) and 45CFR164.512(i)(1)(i) This memo confirms:

- That the research accolves no more than minimal risk to the subjects;
- That the waiver will not adversely affect the rights and welfare of the subjects;
- That the research could not practicably be conducted without the warver;
- That the research could not practicably be conducted without access to and use of the PHE
- That the use or disclosure of the PHI involves no more than minimal risk to the privacy of the subjects as a result of:
 - An adequate plan to protect the PHI from improper use and disclosure;

- An adequate plan to destroy any identifiers contained in the PHI at the earliest opportunity consistent with the research;
- 5 Adequate written assurances that the PHI will not be reused or re-disclosed to any other person or entity, except as required by law, for authorized oversight of the research study, or for other research for which the use or disclosure of PHI would be permitted; and
- Whenever appropriate, the subjects will be provided with additional pertinent information after participation.

This wayver of consent and authorization applies only to the PHI for which use or access has been requested and described in the attached request for waiver.

Accounting for disclosures is not needed because the information disclosed outside of SW MC will be de-identified and will no longer be PEIJ

Copies of the signed/approved New Study Application Form and the Use and Disclosure of Protected Health Information (PHI) for Research Request for Waiver of Alteration of Consent and HIPAA Anthorization are enclosed for your files.

This letter is to advise you that on behalf of the SWMC Institutional Review Board. Fair granting you expedited approval for a period of one year (10/02/06 to 10/01/07).

The SWMC IRB is covered under Human Subjects Assurance number FWA00002222

The IRB will be advised of this expedited review and approval at the November 15, 2006 meeting.

Please be advised that you should inform the SWMC Institutional Review Board of any changes in your protocol, if any problems emerge, or if serious or unexpected adverse patient experiences have been observed. Please note that IRB approval is granted for one year: however, the subjects' progress and your needs as principal investigator will continue to be re-evaluated on an as needed busis.

If I can be of any further assistance, please do not hesitate to contact me.

Sincerely,

1. 1. A.M. .

Cornelia Faylor, M.D. Chair SWMC Institutional Review Board

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