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REM Initiative to Develop Educational Strategies for Inductions of Labor

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Walden University
2018

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MS, Walden University, 2011

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Project Submitted in Partial Fulfillment

Of the Requirements for the Degree of

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Abstract

Inductions of labor that occur prior to 39 weeks' gestation can pose increased risks for the mother-baby dyad. In the target setting, there is a gap in knowledge among the pregnant women about options for delivery, hospital policies and procedures, and what to expect in the labor and delivery experience. Because of this gap in knowledge, the pregnant patient is unable to make informed decisions regarding her needs, expectations, and care. This lack of knowledge has resulted in a 40-50% rate of inductions of labor at the target site, which is well above the 2014 national average of 25%. In response to this gap, an evidence-based initiative was developed that focused on appropriate use of inductions of labor to increase safety and quality of care of the pregnant patient in a suburban women's hospital located in southeastern Georgia. The design used for this project was the development of an evidence-based, theory-supported educational initiative that underwent a formative and summative evaluation by a 10 member, interdisciplinary expert panel. Watson's theory of human caring provided the theoretical basis for the educational program. The interdisciplinary expert panel found that the initiative was educationally sound. The materials were found suitable for the intended audience and easy to understand. It is projected that the initiative will not only benefit the pregnant woman but will also increase the interaction, collaboration, and respect of members of the healthcare team. Implications for positive social change include the development of an educational program that will result in patients being more informed and becoming active participants in their care which will result in better outcomes for the mother and baby dyad.

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Dedication

This paper is dedicated to my parents, Rodger and Marilyn Jones. At times, you cannot see where the sacrifices made in your youth will lead. As the light at the end of the tunnel gets brighter, I now know that because of what you both have done for me, all of this is possible. From a mischievous little girl growing up to a young, educated woman on the cusp of completing doctoral studies, you have helped shape who I have become. Thank you for always supporting my dreams, even when you may have had ones of your own. I hope that my achievements have and will continue to make you proud. I can never thank you enough for your love, guidance, and support. I thank God for you both and I am eternally grateful to have you both as parents. The very best is yet to come!

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Section 1: Nature of the Proposal

Introduction

The Association of Women's Health, Obstetric, and Neonatal Nurses (AWHONN, 2014) issued the following statement:

> Women can make fully informed decisions about induction and augmentation of labor only when they understand the medical indications for induction or augmentation; potential harms or benefits associated with the pharmacologic and/or mechanical methods used to induce or augment labor; alternatives to induction or augmentation; and the benefits of waiting for and permitting labor to progress spontaneously. (p. 678)

Education is essential for women to make reasonable choices concerning their care and knowing all possible outcomes her choice could lead to. Caregivers should take special care in providing education to their pregnant patients. Education of women that present for care in a 40-bed women's hospital in Savannah, Georgia, is lacking. There is an identified need for educating and preparing pregnant women for elective inductions of labor. Elective inductions of labor have increased tremendously in the years prior to this paper (World Health Organization [WHO], 2011). There are many reasons that are offered for this growing trend, but the obstetrician's schedule and maternal logistics factors have been named most frequently (WHO, 2011). Inductions of labor prior to 39 weeks can lead to many problems, namely a decrease in perinatal care quality (WHO, 2011). Elective inductions are becoming more common so education and support for the pregnant mother should increase to ensure full understanding and best choices.

When an induction of labor is being planned, the use of an education criterion can ensure patient safety and quality of care. Development of an evidence-based, theory supported education module on induction of labor can be a helpful tool in preparing pregnant women for the birth of their babies.

Problem Statement

In 2015, it was reported that 40- 50% of deliveries in the target hospital were elective inductions of labor (St. Joseph's/Candler Health System, 2015). This was well above the national average in 2012 of 23.3% (Osterman, M.H.S, & Martin, 2014). Many of the women that present for inductions of labor do not know why they are being induced. They are unfamiliar with the induction process or policies and procedures the hospital. Many women presenting for labor and delivery feel as if they are unprepared as it concerns the care that they will receive (Moore, Low, Titler, Dalton, & Sampselle, 2014). In the women's hospital in a large urban center in Georgia, the development of an effective form of education on inductions of labor could be beneficial. Education can begin in the second trimester and carry on through the duration of the pregnancy. Proper education of the pregnant woman can also be significant for the field of nursing because nurses can be the catalysts that can spur this educational movement and lead to pregnant women being positively involved in the care that they receive.

Purpose Statement and Project Objectives

Elective inductions of labor can lead to risk or consequence for the mother and newborn (Tillett, 2007). With the target site experiencing a nearly 50% induction of labor rate, there was an identified need to educate providers and patients so that informed

decisions can be made. Therefore, the identified purpose for this scholarly project was the development of a quality improvement initiative based on evidence and supported by theory which would result in an appropriate educational process for the intended audience in the target hospital

Purpose Statement

There was an identified problem in the target hospital of lack of education concerning inductions of labor and issues that was linked to safe, effective care. Proper preparation of pregnant women, with the increase of patient knowledge of the processes, can empower women to make educated choices concerning her care (ICEA, 2002). The purpose of this Doctor of Nursing Practice (DNP) project was to use an evidence synthesis process that would support the development of evidence-based, theory-supported educational modules and timelines for offering the modules. Development of an effective educational program would encourage safe, quality care of the mother-baby dyad. The goal of developing this intervention was to translate the literature and find a solution to this pertinent problem. As part of the project, an expert panel was incorporated and a formative and summative review of the materials, processes, and guidelines was developed.

Project Objectives

The developed project was intended to provide an educational program for pregnant women, beginning in their second trimester. The three objectives follow:

- To increase the knowledge of pregnant women regarding appropriate use and timing of inductions of labor.

- To increase knowledge of pregnant women by developing an education and interaction program between the pregnant mother and caregivers and to inform all of hospital policies and procedures.
- To increase the knowledge of pregnant women regarding the risks and benefits of inductions of labor.

With the exploration of the project's purpose and objectives, the direction of the project can be made clear. The need for the program was identified and the benefits of the program are listed. Development of this program opened the lines of discussion for future implementation and evaluation of the program.

Significance of the Project

The development of a program to educate the pregnant woman is important to safe, quality care. It is essential to develop a project that will hold significance in the care of the mother-baby dyad. The overall theme of the development of this project was to provide a substantive plan for the care of the intended patient population. The goal of this program is to reduce the potentially detrimental outcomes of unwarranted inductions of labor. These outcomes include distress to the neonate, blood transfusions, postpartum hemorrhage, longer hospital stays and higher costs, and the possibility of a caesarean section (c-section) (WHO, 2011).

Caregivers should implement evidence-based, yet feasible, methods to ensure those mothers and their babies are given the best possible chance at the safest labor and delivery possible. Nurses and the full healthcare team must lead the initiative and lobby for safe, quality care (Durham, Veltman, Davis, Ferguson, Hacker, Hooker, …Van Hout,

2008). There are many forces that influence the end result of a pregnant mother's delivery (Tillett, 2007). Nurses must be advocates for the patients in order to open the lines of communication and empower mothers to make the best possible decision for themselves (Moore et al., 2014). Development and use of the suggested educational program can ensure that a pregnant mother is making a fully informed decision about personal care.

There is a need to avoid the unnecessary risks associated with inductions of labor that are not medically indicated or occur at less than 39 weeks' gestation (Tillett, 2007). Tillett (2007) offers that caregivers should try to educate in order to avoid inductions of labor. Because the target hospital reports such a higher number of inductions of labor than the national average, solutions for this problem should be offered and explored. The significance of the program is clear and the benefits of developing a program to address the problem have been identified.

Project Question

The project questions were as follows: Will evidence support the development of a program that provides education of pregnant women in a suburban women's hospital in Savannah Georgia (the reduce, educate motivate [REM] initiative) in order to reduce the number of nonmedical inductions of labor and inductions of labor that occur at less than 39 weeks' gestation? Additionally, will the formative and summative evaluation of the developed educational materials reflect a product that is useful to the intended audience?

Reduction of Gaps

Physician leadership is a major driver in reducing the gaps in project understanding and success (Doyle, Kenny, von Gruenigan, Butz, & Burkett, 2012). It is important that when beginning a project, physicians are kept abreast of the changes and requirements. Nurses must also feel empowered to do what is right and what is ethical for patients. Being one of the primary patient caregivers, nurses are tasked to be the gatekeepers for safe, quality care (Ruhl & Cockey, 2014). Nurses must feel empowered to make decisions for the care of patients without fear of retribution (Ruhl & Cockey, 2014). Physicians and nurses are two of the major stakeholders in this project. Effective communication, education, and empowerment are needed to reduce the gap between the system status and safe quality care of this patient population. The third stakeholder, pregnant mothers, should be considered to help guide their personal care, receive education, and take part in collaboration.

Through the development of the REM initiative, focus on education, empowerment, and standardization in practice was addressed. This evidence-based program initiative will begin to change the way care is performed in the areas of need.

Implications for Social Change

It is essential for the pregnant mother, caregivers, and clinicians to become better educated on the latest and best standards of care. Nurses must also become better advocates for their patients through education of childbirth options and the benefits and risks of health decisions. Davis-Cockey (2014) asserted the best way to exact practice change is through exposure to the problem. Groups, such as the Association of Women's

Health, Obstetric, and Neonatal Nurses(AWHONN) (AWHONN, 2014), The March of Dimes (Ruhl & Cockey, 2014), and the American College of Obstetricians and Gynecologists (ACOG) (ACOG, 2013) have shed light on the issue of elective induction of labor and the issues that can arise from the procedure. These organizations inform of practice problems and best practices to correct them. Social awareness is the first step to change (Davis-Cockey, 2014). Through awareness, discussions can start to happen on the subject and solutions can begin to be created. The REM initiative is a quality improvement initiative to a documented issue in healthcare.

Elective inductions of labor are also an issue that must be addressed on local, state, and national levels. Pregnant mothers, nurses, and other caregivers must work together to change the way care is given. Informing lawmakers and regulatory agencies of the issues and risks surrounding early, elective inductions of labor is the best way to make a change (Davis-Cockey, 2014). Laws and practice guidelines can be created to address and alleviate the problems associated with this healthcare issue. Through the development of an educational program, social implications can be addressed. Patients will be more educated and, in turn, be better partners in their care. Caregivers will be able to positively impact their patient population through education and advocating safe care.

Assumptions

There are many assumptions that are associated with the development of this educational program that addresses inductions of labor (the REM initiative).

- Nurses will be advocates for the mother-baby dyad.

- Mothers will forego their comfort and desires to make the decisions best for their babies.
- Doctors will follow the correct and ethical procedures to provide the best care for their patients.

These assumptions must be evaluated and reevaluated throughout the development and implementation of the educational module.

Limitations

There are limitations of the implementation process that cannot be discounted. Change is difficult, so there will be limitations that must be addressed.

- The willingness of the pregnant mother to attend and participate in educational modules.
- The mother's desire to carry the pregnancy greater than 39 weeks.

There must be respectful, professional communication between the pregnant patient and caregivers at all times. Most importantly, there must be support from doctors to back the program and ensure their patients are informed of this valuable resource. Also, the desires of the pregnant mother must be taken into account. Through the development and subsequent implementation of the REM initiative, education can lead to better interaction, communication, and decisions. Although planning this developmental proposal at this time only includes development of a feasible project, including physician and administrative representation on the development team will increase the support necessary to ensure success of the proposed program.

Summary

There are many uncertainties during pregnancy, labor, and delivery. It is normal for a mother to feel overwhelmed and in need of direction (Moore et al., 2014). Educated with the latest in evidence-based practice, members of the health care team should be present and prepared to help mothers overcome these feelings. It is essential for a working relationship between the physicians and the nurses. A mutual respect will undoubtedly ease the transition into change (Doyle et al., 2012).

Vaginal deliveries are less costly and safer for the mother-baby dyad (Kaufman, Bailit, & Grobman, 2002). Whenever possible, a vaginal delivery should be the goal (Amis, 2014). Patience and care must be given to the pregnant women for her to understand this delicate process. Vaginal deliveries aid in the bonding process because there is little time that the mother and baby are separated (Doyle et al., 2012).

Education can greatly influence how the pregnant woman considers inductions of labor that occur at less than 39 weeks' gestation and without any medical indication (Doyle et al., 2012). Proper education of the pregnant woman can greatly influence the choices that she makes for the mother and her unborn child (Moore et al., 2014).

In this first section of the DNP project, a practice issue was identified. A need for increased education prompted a need for a change in practice. Through the development of the REM initiative, the project's purpose and objectives can be met. The introduction and overview of the DNP project is explained through this section.

Section 2: Background and Context

Introduction

The practice problem that will be addressed locally is the number of elective inductions that take place at less than 39 weeks' gestation and without medical indication. Education must be provided to the patient to ensure unwarranted elective inductions of labor do not occur. By reviewing the practices in place as they relate to elective inductions of labor, caregivers can determine if they are doing best practice and what information should be passed to the pregnant patient to ensure the health and wellness of the mother-baby dyad. Concepts, models, and theories will be explored to determine the relevance to nursing practice. Local background and context will allow us to know the importance and need of the project on the local level. Lastly, the role as a DNP student, as it relates to the problem, project, and potential outcomes will be explored.

Concepts, Models, and Theories

At the very core of this DNP project, there is a foundation of education, partnership, and respect. Within the carrying out of the project, it is essential to build upon a relationship that could last for years to come. The pregnant woman wants an educated provider who is knowledgeable of the care for the well-being of mother and baby and has their best interests in mind (Moore et al., 2014). The pregnant woman should also be properly educated to enable the ability to make informed decisions concerning personal care. Positive interaction, education, and caring are the basis for this DNP project.

Watson's Theory of Human Caring

Watson's (1989) theory of human caring has a foundation in the nursing profession, although it has roots in psychology and education. Arslan-Ãzkan and Okumu (2012) explained that Watson's theory can easily be applied in any area of nursing for educational and practice purposes. The theorist emphasized a transcendence of the medical and nursing professions to focus on the needs and desires of the patient (Arslan-Ãzkan & Okumu, 2012). Within this theory, the desire to educate is a symbol of caring (Arslan-Ãzkan & Okumu, 2012). Zaccagnini and White (2011) explained that the theory of human caring is based on the caring, supporting relationship that a patient and nurse share. This is especially important when explaining options to a pregnant mother. Patients and caregivers can connect with each other through caring opportunities, such as a pregnancy. Watson believed that nurses should help the patients develop by guiding them through problem solving and teaching moments (Zaccagnini & White, 2011).

Gestalt Theories

McEwen and Wills (2011) explained that people learn through motivation. Pregnant women need to know the benefits and risks of inductions of labor to motivate them to make sound decisions regarding their care. A person's way of thinking can influence their actions (McEwen & Wills, 2011). It is important for a learner to receive information and for that information to be the motivation to change the learner's way of thinking and discover the personal benefits of applying the information to areas of their lives (McEwen & Wills, 2011). The learner, in this case the pregnant woman, should be involved in the learning process in order for them to take ownership of the information

and apply it to their lives. The patient should always be considered when concerning her care. The patient is able to voice her needs, wants, and desires. The caregiver can use this information to tailor the care the patient needs to best suit her. Becoming educated can be the match that sparks the patient's desire to make better health decisions.

In the literature review, a need for an intervention was identified and the development of an effective DNP project can begin. Specific literature describing a need for education will be explained. General literature with an explanation of the induction of labor procedure and risks associated will also be explained.

Specific Literature

The literature that was used in the following literature review was accessed through the Walden library. The databases that were accessed were CINAHL Plus with Full Text, MEDLINE with Full Text, ProQuest Health and Allied Health Source. Adequate specific and general literature for the practice problem and possible solutions for the practice problem was provided in these databases. The search was limited to the last 10 years in order to obtain the most recent practice methods. The key search terms follow: *inductions of labor, scheduling, safety of inductions of labor, C-sections, inductions of labor, Primigravida, inductions of labor,* and *Scheduling, inductions of labor AND standardized methods*. Through the use of the many different databases coupled with the broad use of search terms, the search would to be comprehensive and exhaustive.

Education

Education is essential to the success of any program or project. Nursing involvement can positively impact the outcome of this DNP project. Some hospitals incorporate a nurse to provide education and guidance to the pregnant patient (ACOG, 2008). The issue of elective inductions of labor can be addressed through the use of an obstetric clinical nurse coordinator (OCNC). Ybarra (2015) stated an OCNC replaces a traditional scheduler and makes care comprehensive by working closely with the pregnant women during their last trimester. During this time, education and support are provided to the caregiver, as well as the patient (Ybarra, 2015). The person operating in the position of the OCNC is able to close the gaps concerning adherence to hospital guidelines on admissions, c-sections, and other scheduled procedures (Ybarra, 2015).

Along the same lines as an OCNC, Tillett (2007) introduced the perinatal nurse providing education and being proactive for the needs of the pregnant mother. Elective inductions are not the safest mode of childbirth and the outcomes can be detrimental for the mother-baby dyad (Tillett, 2007). Perinatal nurses can counsel mothers to give them all the necessary facts concerning options for labor and delivery, and can also participate in policymaking in order to make positive changes an everyday reality. Tillett also discussed an "end point" with inductions (p. 2). This end point comes about when an induction is not successful and the patient is given the option to go home as opposed to having a c-section (Tillett, 2007). The perinatal nurse would discuss this option with the pregnant mother who would then make the decision with the doctor.

It was documented in the literature that education is needed for pregnant mothers (Moore et al., 2014). Pregnant women need education in order to make the best possible decisions concerning their care. There are many ways to provide education, but the nurse is essential as a vehicle for knowledge diffusion (Doyle et al., 2012).

General Literature

Natural Birth

Amis (2014) asserted that labor should begin naturally on its own. This statement is based on the fact that hormones will naturally be released in the mother's body when it is ready for labor (Amis, 2014). By heeding to this method, Amis (2014) reported a decrease in primary c-section rates. Amis (2014) voiced a need to better educate mothers on the changes that are occurring in their bodies. Many times, misinformation is the reason mothers opt for inductions of labor, leaving them vulnerable to c-sections (Amis, 2014). Amis (2014) asserted that the Joint Commission advised against preterm deliveries without a medically indicated reason and many hospitals have banned all elective births before 39 weeks' gestation. Through knowing the risks associated with early inductions of labor, changes have been made to avoid the risks. With proper education and exploration of the practice problem, change takes place through hospital policies and regulations.

Elective Induction of Labor

The ACOG (2013), discussed in an informative article, the impact of restricting elective inductions of labor. The authors of the article reported new research to suggest that restricting elective inductions of labor reduced the number of c-sections (ACOG,

2013). The new policy that was initiated allowed elective inductions only for patients who were at least 39 weeks' gestation, had a previous vaginal delivery, and a favorable cervix (ACOG, 2013). The authors of the article reported a reduction in the amount of babies admitted in the neonatal intensive care unit and a reduction in the c-section delivery rate (ACOG, 2013).

The AWHONN (2014) offered a position statement on elective inductions of labor and augmentation of labor. The position statement outlined the benefits of spontaneous labor. The article also listed health and economic effects of inductions of labor and augmentation of labor (AWHONN, 2014). Increased education and informed decision making when concerning the health and wellness of the pregnant women is essential (AWHONN, 2014). The AWHONN (2014) position is that inductions of labor should be reserved for patients with medical indications for the benefit of the mother and baby.

In another article, focus shifted to the perinatal nurse as a source of a wealth of information. Tillett (2007) stated that the perinatal nurse is instrumental in the education of peers, colleagues, patients, and policymakers. If women were properly educated on the risks and benefits of an induction of labor, they would opt for a spontaneous labor (Tillett, 2007). Tillett listed the risks of an elective induction of labor: shoulder dystocia, c-sections, and amniotic fluid embolisms. Lastly, Tillett (2007) offered a discussion of an "end point" of a discharge for inductions if they are not progressing (p. 2). This means if an induction of labor is not successful by an ascertained time, it would be stopped and the patient would be sent home until another time.

Kaufman, Bailit, and Grobman (2002) analyzed the economic and health consequences of an elective induction of labor. They used a decision-tree model with a Markov analysis as a study design (Kaufman et al., 2002). In the study, it was noted that inductions of labor are never cost saving, but they were less expensive when performed in later gestational ages (Kaufman et al., 2002). Another conclusion of the study was that elective inductions of labor resulted in large numbers of costly c-section (Kaufman et al., 2002). The authors of the article aimed to explain that c-sections were more expensive than a vaginal delivery. Moreover, waiting until later gestations in pregnancy for inductions of labor were usually more successful and beneficial, from an economic and health standpoint.

A retrospective descriptive correlational study design was used to assess the likelihood of c-sections in women who opted for an induction of labor (Wilson, 2007). The author of this study looked at age, gestation, socioeconomic status, and ethnicity to determine risk (Wilson, 2007). Wilson (2007) concluded that elective inductions of the primipara increased the risk of a c-section. Wilson (2007) stated that elective inductions of labor should be used with caution in the primipara. The information in this article provided background information that was important for determining risk factors for c-sections. Elective inductions were implicated in the increase of the probability of a c-section. Primiparas were a subject contained in the article, although pregnant women of different parities were discussed.

Within the general literature reviewed, there were common themes. There was a deep-seated belief that labor will begin on its own, if given a chance (Amis, 2014).

Another theme was that c-sections should be a last resort. They are costly, both financially and physically (Wilson, 2007). Inductions of labor should not occur in any woman less than 39 weeks' gestation (Doyle et al., 2012) (Durham et al., 2008). Lastly, health care providers must educate and advocate for their patients to provide the best information to lead to the best possible care that can be given (Tillett, 2007). The authors of the articles explored in the general literature offered a glimpse into elective inductions, c-sections, and vaginal deliveries. Best practices were offered and education as a necessity for the pregnant woman was outlined in the literature review.

Local Background and Context

Locally, pregnant women are given education via worksheets and short question and answer sessions with their provider. During the course of a busy life, these handouts are lost, as is the opportunity for learning valuable information. Many of the women that arrive for labor and delivery are disappointed to know that their plans for a vaginal delivery may be changed if complications arise. They are horrified to know that a c-section is a real option when being induced. Elective inductions of labor bring on the risk of failed inductions and subsequent c-sections (Doyle et al., 2012). Pregnant women seeking care in clinics and private obstetric care offices face the choice of possible inductions of labor. During pregnancy, women may be vulnerable and in need education, support, and guidance (Moore et al., 2014). The overall mission is to encourage a full-term delivery (Davis-Cockey, 2014). A natural, full-term delivery will be safest for mother and baby (AWHONN, 2014). If this option is not available, then any elective induction should be held until that mother is 39 weeks' gestation (Durham et al, 2008).

ACOG and AWHONN Goals

On a national scope, The ACOG (2013) and the Association of Women's Health, AWHONN (2014) agree that elective inductions of labor should not occur at less than 39 weeks' gestation.

The ACOG, a national agency with local ties for the purposes of quality care and patient safety, arrived at the conclusion that elective inductions of labor increases the numbers of c-sections (ACOG, 2013). A policy passed by the ACOG in 2013 stated that restricting inductions of labor to women who are at least 39 weeks' gestation reduced the number of c-sections. The ACOG is addressing the presented practice problem in its entirety with this policy (ACOG, 2013). The issue to be addressed is making the words on paper come alive through practice and the increase of patient care and safety.

AWHONN (2014) offered a position statement regarding inductions of labor without medical indication. This national agency listed the benefits of a natural labor. AWHONN (2014) supports the limiting of inductions of labor that occur at less than 39 weeks' gestation and that are not medically indicated. Education is also listed as a necessity for comprehensive, quality care of the pregnant patient (AWHONN, 2014). Nurses are also charged with advocating and providing needed information to the pregnant woman (AWHONN, 2014). AWHONN addresses the need to limit inductions of labor, offers benefits for spontaneous labor, and supports best practice educating the pregnant woman. The agency also lists health and economic effects, as they relate to inductions of labor (AWHONN, 2014).

Definition of Terms

The terms listed in this section will aid in the reading and understanding of this project proposal. The definition of the terms will provide a foundation for the enrichment of the reader.

Dyad. *Dyad* is a term that refers to a group of two (i.e., mother and baby; *Merriam-Webster's Collegiate Dictionary*, 2005a).

Elective induction of labor. *Elective induction of labor* is a term referring to the induction of labor when there is no clear medical benefit to mother or child for delivery at that point in time compared with continuation of pregnancy (ACOG, 2008).

Full term. *Full term* is a term that refers to pregnancies between 39 weeks and 40 plus 6 days' gestation (Wilson, 2007).

Induction of labor. *Induction of labor* refers to the use of pharmacologic and mechanical methods to initiate uterine contractions before spontaneous labor occurs in order to affect vaginal birth (AWHONN, 2014).

Primigravida. *Primigravida* is a term referring to a woman pregnant for the first time (*Merriam-Webster's Collegiate Dictionary*, 2005b).

These definitions of terms will guide the reader through the reading of this proposal. The intent of the author is to illuminate any areas of confusion when reading this proposal.

Role of DNP Student

As a DNP student, the primary responsibilities are to form, lead, and guide the interprofessional team of experts. In order to develop and evaluate materials and

processes that will positively impact pregnant women, the DNP student must select individuals that can positively impact the project. The DNP student will select a group of 10 experts in their area of practice. These individuals will be carefully selected, being outstanding professionals the DNP student has encountered during a nursing career. The DNP student will then invite them to formatively and summatively evaluate the materials that have been designed to provide education. Because these individuals have reputations for the encouragement of education and the passion for the patients in their care, the DNP student does not harbor any biases. Upon receipt of their input, the DNP student will make any necessary adjustments. Lastly, as the DNP student, it will be the students' responsibility to present the edited materials and processes to the organizational leaders and encourage them to integrate this new, dynamic educational program into their plans of care.

Summary

The gaps in practice have been identified and explored. There should be a bridge between the gaps in practice and the solutions for the gaps. It is essential to gather as much evidence as possible to determine the best way to handle the problems. Through the identification of the practice problem and the background information surrounding the problem, the research can help to design a plan of action to address the practice problem and offer answers to the questions that are asked.

There is a need for education of the pregnant women regarding inductions of labor. The literature has made this fact clear. The road to development of the best possible way to address these practice problems has been paved. Through identification,

review and synthesis, the REM initiative can begin to take form.

Section 3: Methodology

Introduction

Elective inductions of labor that occur at less than 39 weeks' gestation can prove to be problematic to the mother-baby dyad (Doyle, Kenny, von Gruenigen, Butz, & Burkett, 2012). Education is essential for the pregnant mother to be an active participant in personal care (ICEA, 2002). Support and respect were needed components to provide safe, quality care to the pregnant woman. Watson's (1989) theory of human caring clearly outlined the importance of the relationship between a patient and their provider in order to bring mutual satisfaction to the exchange (Zaccagnini & White, 2011). Exploration of Gestalt theories encouraged us to educate in order to provide motivation for patients to make changes and learn (McEwen & Wills, 2011).

During this section, the practice-focused questions are restated and elaborated upon. The sources of evidence are identified and expounded upon. The sources of evidence helped determine the proper way to address the previously stated practice questions. A thorough analysis and synthesis of the evidence is completed and explained. There is also a proposed project design. Lastly, a summary connects the elements of Section 3 together in a lucid, understandable fashion.

Practice-Focused Questions

Locally, there was a gap in knowledge concerning the process of induction of labor and hospital regulations. Pregnant women needed clear, concise, perpetual education in order to fully understand the induction of labor and the choices that they have concerning it (Moore et al., 2014). The pregnant women may have had questions

concerning the medications used, length of process, dietary restrictions, and alternatives to inductions of labor (Moore et al., 2014). Through the education provided through the REM initiative, pregnant women could be more empowered to make choices concerning their care. Through the collecting, analyzing, and presentation of the evidence that was gained to address the local problem, workable, achievable solutions and how the solutions impacted the questions and gaps in practice were discovered and utilized.

Project Design

The REM initiative was a series of evidence-based, theory supported education modules. It consisted of *doses* (modules of materials to be learned). The objective of the REM initiative was to increase the safety and quality of care of the pregnant mother-baby dyad by increasing the amount of education given to a pregnant mother regarding the elective inductions of labor. The REM initiative had an aim to positively impact the outcomes of women by increasing their knowledge of the labor, delivery, and induction of labor. Caregivers should endeavor to reduce the number of elective induction of labor (AWHONN, 2014). Caregivers and other staff must educate the pregnant woman on the childbirth options. Lastly, nurses and other staff must motivate. Motivation was essential for physicians who would come aboard with the idea of not scheduling pregnant women for inductions of labor (Doyle, Kenny, von Gruenigen, Butz, & Burkett, 2012). Caregivers must also motivate the pregnant woman to make the best decisions regarding her personal health and the health of her baby (Tillett, 2014). Through the REM initiative, there will be a change in the culture of the care of patients from within the hospital, when implemented.

The REM initiative is an educational and interventional program that focuses on the pregnant mother. Education will be provided to the patient during pregnancy, when the program is implemented in the target hospital. Information, such as childbirth options, full-term delivery pros and cons, hospital guidelines, medications, and inductions of labor was included in the teaching. The teaching of the information contained in the REM initiative will be taught starting the second trimester of pregnancy. As planned, the pregnant woman will get five to six doses of teaching through the pregnancy. In the first visit of the second trimester, the pregnant woman will complete a pretest to determine personal knowledge of inductions of labor and hospital policies. During this meeting, the woman will receive the educational materials to read through. The next doses of teaching can occur during office visits, when the pregnant patient can ask questions and dialogue can be established for teaching purposes. The final dose of teaching could occur during a scheduled prenatal class, preferably at the hospital. The educational information will be reviewed, questions asked and answered, and the final posttest will be administered at this time. The interdisciplinary expert panel collaborated to determine the content of the doses, timing, of doses, and where the teaching would take place.

Method

Protection of Human Subjects

As required by the Walden University Institutional Review Board, protection of human subjects was a necessity (Zaccagnini & White, 2011). Participants' identities were kept confidential and their participation was voluntary. All participants were contacted via e-mail. Consent was obtained from the Institutional Review Board at

Walden University prior to any contact with participants. Participants were informed that they may withdraw their participation at any time during the project. The participants were also informed of the IRB approval number for the study; 11-16-17-0281110. Compensation for participation in the project included a certificate for their time, consideration, and participation in the project.

Population and Sampling

Interdisciplinary Review Team

When considering the assessment of the educational products of the REM initiative, it was essential to formulate the most effective mix of professionals to properly evaluate the information doses (introduced in section four). The educational materials were evaluated using the analysis, design, develop, implement, evaluation (ADDIE) model. The interdisciplinary evaluation team consisted of clinical and administrative staff with years of experience dealing with pregnant women and their families. The interdisciplinary team included the following: one obstetrician-gynecologist with over 30 years' experience in the field, four labor and delivery registered nurses (RNs) with over 32 combined years of experience, two special care nursery nurses, one nurse midwife with DNP credentialing, one medical assistant with experience working in obstetrician-gynecologist field offices, and one nurse administrator with an extensive history in postpartum nursing. These professionals were contacted via e-mail and solicited for their participation. Upon agreeing to participate, the educational materials were provided. Instructions for the ADDIE model, as well as the ADDIE model were provided. The team then had 10 days to evaluate the materials and provide feedback.

Instrument

ADDIE Model

The need for education of the pregnant woman concerning a safe, healthy, labor, and delivery process was the identified problem that this DNP project addressed. An expert panel collaborated to formatively and summatively evaluate educational materials designed for the pregnant woman. The ADDIE model (see Appendix B) was used to evaluate the educational fortitude of the materials. The ADDIE tool was an instructional systems design model that was used by a person or persons developing instructional or training materials (Culetta, 2013). After a thorough analysis of the literature surrounding the identified problem and knowledge gap, educational plan and materials were designed and changes developed that addressed the knowledge gap. The implementation and evaluation steps of the ADDIE model were not used for this project. This DNP project contained the development of an educational initiative to be evaluated by the selected expert panel.

Data Collection

A PowerPoint presentation was created based on the information contained in the project outline plan (see Appendix A). An invitational email (see Appendix D) was sent by email to intended members of the interdisciplinary expert panel. The selected members of the interdisciplinary expert panel were e-mailed the educational materials and an ADDIE model (see Appendix B). The members returned their ADDIE model, along with any further suggestions. The ADDIE model had no distinguishing information to maintain confidentiality. The received data was assessed after the 10-day

review period. The revised information and a second ADDIE model were sent out to all members of the expert panel with a 3-day review for consensus.

Data Analysis and Synthesis

Data analysis for this project included scoring from the ADDIE model (see Appendix B) and the likert-style exit survey (see Appendix E). Using data analysis, it was determined that the information contained in the educational portion of the project was effective. The understanding of the material in the educational portion of the project by the pregnant woman was determined by the expert panel as a result of data analysis. The information gathered during the data analysis helped to determine any changes that needed to be made, confirming the project was suitable to be implemented with pregnant women. The interdisciplinary expert panels were charged with the formative and summative evaluation of the educational materials. Through the use of data analysis, the REM Initiative's goals, concepts, and objectives were validated.

The analysis of the sources of evidence came from a need that was identified and an institution to address the need. There was a need to have increased safety and quality concerning elective inductions of labor. The literature was analyzed to determine the best way to address this issue. In this project, ways to improve the safety and quality care of patients were identified and several professional important themes were brought to light.

The teaching of the information begins in the second trimester of a woman's pregnancy. The teaching continues in "doses" throughout the pregnancy. Information pertaining to the REM Initiative was provided in a PowerPoint presentation and in a handout.

Project Evaluation Plan

Using the ADDIE model and any feedback that the interdisciplinary review team provided, an evaluation of the project's objectives, goals, and purposes was completed. The success of this project was evaluated in a twofold manner. The first part of the evaluation was to apply any changes that were recommended by the review team. The second part was when the feedback that was obtained was unanimously agreed upon by the interdisciplinary expert review team. Future implementation of this program will take place in a 40-bed women's hospital in Savannah, Georgia, as well as a women's care clinic in Georgia. Members of the education department and staff in the areas of implementation will be responsible for guiding the progress of the project. An implementation team would be ideal for beginning and guiding the project. The results of the project can be announced in staff meetings, the hospital's intranet, and the birthing center's news list-serve. Dissemination of the results can include assessment of objectives, goals, opportunities for improvement, and further participation.

Summary

It was apparent that there must be ample education before considering an elective induction of labor. This will ensure care of the mother-baby dyad safe and productive. Fundamentally, it was stated that it should be a goal to deliver at full-term (AWHONN, 2014). A pregnancy that goes to at least 39 weeks' gestation is considered full-term. The risks associated with labor inductions include uterine rupture, c-sections, fetal death, and infection of the mother or baby (ACOG, 2013). These risks are amplified if a cervix is not ripe (softened or ready) prior to induction. Safety and quality of care must be at the

forefront of the care that is provided for patients. A collaborative, educational effort amongst physicians, nurses, management, and pregnant mothers is needed to increase safety and quality of care. Initial communication, education, and encouragement can provide better outcomes for the mother-baby dyad.

With the development of the REM initiative, the issue of elective inductions of labor without medical indication and proper education can be addressed. This quality improvement project can positively impact pregnant women and their caregivers. A plan for development was laid out with the option for implementation and evaluation to be performed by any intended organization at any time. The first organization that can benefit from the REM initiative is the women's hospital where the DNP student is employed. This hospital has over 100 monthly deliveries and employs a staff mix of doctors, nurses, and ancillary staff. There was a need for change in this facility and management often supports areas of educational need, increased patient involvement, and positive change in practice. The REM initiative can truly benefit this area and positively impact practice in use. Through the use of scholarly evidence, the REM initiative can be used to create a strong foundation for education and care of the pregnant mother and those involved in her care.

Through the development of the REM Initiative, better patient care will be achieved. Analysis work with the experts who reviewed and evaluated the process ensured that the program was educationally sound. The educational materials, based from reputable entities in health care, provided the necessary information needed for mothers to be educated and make better decisions concerning their care. The REM

initiative can act as a catalyst in changing the way care is delivered and redefining the roles that patients play in their care.

Section 4: Findings and Recommendations

Introduction

The aim of the REM initiative was to introduce evidence-based education to pregnant women and their families. It is important for the pregnant woman to be aware of the pros and cons of induction of labor and hospital policies and procedures (Moore et al., 2014). The use of the information within the REM initiative can guide the pregnant woman's decisions on how to better manage her care. Use of the REM initiative in the target hospital can greatly increase the level of knowledge that a pregnant woman has regarding her labor options and hospital policies and procedures. The objective of this DNP project was to create effective education materials through summative and formative evaluation by an interdisciplinary expert panel and literature review. The expert panel ascertained that the REM initiative, after coordination and modification of the information contained, was scholarly, sound, and helpful to the intended audience. Review of literature proved that providing information is the best way to make a change (Davis-Cockey, 2014). With hope, after implementation of the REM initiative, pregnant women will be more educated to become active participants in their care. The process of induction of labor, childbirth options, and hospital policies and procedures will be outlined to the pregnant women. Further evaluation of the REM Initiative can be achieved when the scholarly product is introduced and implemented in the target hospital.

Findings and Implications

Inductions of labor can have many associated risks for a mother and her unborn child (Kaufman, Bailit, & Grobman, 2002; Tillett, 2007). Education is essential for this population to aid in decision making regarding care. Tillett (2007) explained that pregnant women are seldom educated on their options for and the risks of inductions of labor. The REM initiative contains valuable information for the pregnant woman and her family. Through the analysis of the project by the interdisciplinary expert panel, an effective, scholarly project has been developed.

Full participation in the summative and formative evaluation of the REM Initiative by the expert panel was achieved. After two rounds of evaluation using the ADDIE tool, 100% satisfaction from the participants was achieved. Twenty percent of the expert panel believed that the use of a pain scale should be included in the education materials. Ten percent of the expert panel suggested that a definition of *full-term* be added to the education. Lastly, 40% of the expert panel agreed that the education materials should presented in closer intervals, with less time in between intervals. Synthesis of the suggestions obtained by the panel was agreed upon and a satisfactory scholarly product was produced. The results of the likert-style exit survey showed that the panel had confidence in the product that had been developed and that it would be helpful and understandable to pregnant women. The nurses in the expert panel were very vocal about the education provided to their patients. This was in agreement with Doyle et al. (2012) who stated that nurses have a great opportunity to influence patient care through education, advocating, and leadership.

Implications for Practice

A patient-centered approach is essential when providing education in the labor and delivery setting (Moore et al., 2014). Patients believe that their caregivers give them accurate information (Moore et al., 2014). Patients trust those who they hire for their care. Education for the pregnant woman should be scholarly, provide full disclosure, and be easy to understand and apply to their care (ICEA, 2002). Physicians, hospital management, nurses, and other ancillary staff must work together to make sure education is consistent, helpful, and addresses pertinent issues surrounding labor and delivery. Through the implementation of the REM Initiative, knowledge deficits can be alleviated and patients will be able to become more active participants in their care. There will also be a change in the culture of practice of any institution that chooses to utilize the REM initiative. This change will reflect a promotion of interdisciplinary teamwork to address the needs of the pregnant patient.

Research

Wilson (2007) explained that with labor inductions on a steady rise, caution should be offered to include its' pros and cons. It is known that patient must be informed in order to have effective decision making (Moore et al, 2014). Education for these patients must include a multifaceted approach. Receiving the information in different ways (audio, visual) is also helpful for learning (Bradshaw & Lowenstein, 2011). Moore et al. (2014) offer that patients trust their caregivers to provide safe, competent care. Using an interdisciplinary expert panel to assess the REM Initiative revealed several implications:

- There was a need for the education contained in the REM Initiative.
- Education should begin in the second trimester.
- The mix of the interdisciplinary expert panel ensured all aspects of the education were addressed.
- Teamwork, respect, and morale were all increased through the collaboration of the interdisciplinary team.
- There may be a need to adjust the information to cater to populations of each hospital or clinic that utilizes the REM Initiative.

Social Change

Social change can be created through the REM Initiative in several ways. The use of the interdisciplinary expert team encourages collaboration and breeds an atmosphere of professional respect. Each member of the team is valued for their contributions and add greater dimension to the project. Use of the REM Initiative will transform a pregnant woman who is unsure of her choices into an informed individual, able to contribute to the throughput of her care. The REM initiative contributes to social change by renewing the mindset that only a physician can educate a patient. Every member of the healthcare team can play their part through the REM Initiative by working together to help pregnant women achieve effective care and positive birth outcomes.

Program Strengths, Recommendations, and Limitations

Program Strengths

This evidence-based, scholarly-reviewed program is educationally sound. A major strength of the program is that it utilizes the expertise of an interdisciplinary expert

team for assessment. This offers a multi-dimensional approach to patient education that is both holistic and inclusive. Another strength of the program is that information is given on paper and verbally discussed. The multiple ways that the audience receives the information makes it more effective. The information contained in the REM Initiative is made to be easy to learn and retain. Tillett (2007) suggests that pregnant women are influenced by their trusted caregivers. Through the REM Initiative, caregivers can offer needed information and guidance to the pregnant woman.

Program Limitations

The following program limitations must be addressed prior to implementing the REM Initiative. The first limitation is that the REM Initiative has never been implemented. Its true effectiveness can be fully assessed when it is used on the target audience. Another limitation to the program is that all correspondence was done by email. A higher amount of collaboration could be achieved if the interdisciplinary expert team met in person. Lastly, the program a possible limitation to the program could be a lack of participation by hospital staff. An incentive of some kind could be effective in encouraging participation.

Recommendations

Through the use of the interdisciplinary expert team, several recommendations were expressed. These recommendations were added to the final scholarly product, but it is beneficial to reiterate them. These recommendations contributed to the overall strength of the final product. The identified recommendations were:

- Addition of a standardized pain scale for use in the education

- A definition of "full-term" based on ACOG or AWHONN standards.
- Explanation of a c-section as a possible end-result of an induction of labor.
- Use of an interdisciplinary expert team to initiate and guide the project upon implementation.

The REM Initiative yielded several important products that added to its educational validity. In the appendices, the documents used by the interdisciplinary expert panel and the DNP student can be visualized. Appendix A is the REM Initiative Project Outline Plan. This document explained the "doses" of education and the timeframes each dose should take. Appendix B is the ADDIE Evaluation worksheet. This worksheet was used by the interdisciplinary expert panel to formatively evaluate the REM initiative materials. Appendix C is the written permission to use the ADDIE evaluation tool. Appendix D is the invitational email that was sent to each member of the interdisciplinary expert panel. Appendix E is the exit survey used by the expert panel to summatively evaluate the REM initiative materials. Appendix F is the recommended pain scale used in the REM Initiative. Lastly, Appendix G is the finalized version of the REM Initiative educational product.

Implementation and evaluation of the REM Initiative in facilities can be achieved with a project initiation team. The major aspects that the team must keep in mind are the identified needs of their population and use of an interdisciplinary collaboration team. Upon implementation of the REM Initiative in the identified hospital and beyond, it will be important to cater to the needs of the demographic in that particular area. It may be important to place emphasis in some areas of information over others. Overall, it will be

important for the implementing facility to be supportive of the changes that the REM Initiative can offer. As highlighted by Durham et al. (2008), change in practice is difficult, but providers and nurses must use teamwork to bridge the gaps in knowledge and influence positive patient outcomes.

Section 5: Dissemination Plan

Introduction

Although the ultimate goal for this DNP product is for the information to be disseminated worldwide through publication, the first step to realizing this goal is to possibly implement in a target hospital. Because social media has such as vast platform, I would start by posting my DNP project on nursing help sites located on Facebook and Instagram. Through these social media sites and groups, the information can possibly be seen by thousands of healthcare professionals. I would also like to offer my DNP project for the review of agencies; such as AWHONN, ACOG, and the WHO. Through these national agencies, the information contained in the REM Initiative could be tested and appraised for further efficacy. With much dedication, the REM Initiative could become a standard of practice shared by these prestigious agencies. It is a personal dream of mine to have this DNP project featured in a project-related journal, such as *Maternal Child Nursing, Journal of Perinatal Education,* or *Journal of Obstetric, Gynecologic, & Neonatal Nursing*. Through these publications, my DNP product can be disseminated to the broader nursing profession. It will also have the opportunity to have further scholarly review and additional implementation and evaluation opportunities.

I think that I would want to turn this project into a poster presentation for professional development. Zaccagnini and White (2011) suggested the DNP project should reflect the area of practice or interest of the DNP student. I am sure this information will be helpful in my current area of practice, but a poster presentation will be more appealing and less time consuming on the part of the audience. The knowledge

that can be gained through the use of this project is endless. Not only will the project educate pregnant women, it will also positively impact the professional relationships of members of the healthcare team. I feel that it can be a help for all who read it and can be a catalyst for change in other hospitals or in legislation.

Analysis of Self

Scholar

Finishing this DNP project has truly been a labor of love. I have pushed myself to limits that I did not know were possible. I have enjoyed the challenge, but I can only wish that I had a better sense of organization with this paper. I realize that this paper has been an integral part of my DNP journey, so I am grateful for the opportunity and challenge. As a scholar, I feel that I have truly grown. I am exploring more freely now and I feel that I am a resource at my job and in my practicum experience. I am more willing to explore other options, as opposed to being close-minded. I am committed to being a life-long learner and being a change agent in any setting that I chose.

Practitioner

As a practitioner, I feel that only time will tell how far my knowledge and skills will take me. I am learning that I need to stay abreast of current issues in health care. Patients want to be sure that their practitioner is one of the most educated in their field and that is what I plan to be. As a DNP, I must be at the forefront and most knowledgeable in my practice (Zaccagnini & White, 2011). My DNP project dealt with an issue that is prevalent in my practice. I am now better equipped to harvest what I have

learned into competent, effective practice. I am growing as an effective practitioner and I feel that greater learning and understanding is to come.

Project Developer

As a project developer, I have much more to learn. Although my skills as a scholar are honed, I have to further build time management and research skills. I feel that I will be better in a group or on a tight schedule. These things will keep me focused and on track. With the knowledge that I have acquired, I believe that I will be a more competent project developer. The support of leadership is essential to change (Durham et al., 2008). As a DNP, I will not only be able to offer knowledge and perspective, but also be a champion for nurses and a voice for the profession.

Summary

The need for education in the pregnant woman is a necessity. Information about her pregnancy, birth options, and hospital policies and procedures will aid in her understanding. An informed individual is better equipped to make solid choices about the care she wants to receive (McEwen & Willis, 2011). Because of the trust that a pregnant woman has for her caregivers, the education should start there. McEwen and Wills (2011) outlined Watson's (1989) theory of human caring. Through this theoretical framework, it is understood that transpersonal care is a special bond shared with patient and practitioner that breeds trust, respect, and endless possibilities (McEwen & Willis, 2011). This is the essence of the REM Initiative. Reducing the number of uneducated, elective inductions of labor, educating the pregnant woman, and motivating the pregnant

woman take an active role in her care and for the healthcare team to work together for the best, safest outcomes for this population.

The interdisciplinary expert review team was essential to this DNP project. Their experience, education levels, and dedication to this project made it a true success. The team and I were all able to successfully come together with a common goal of educating pregnant women. Future implementation and evaluation will hopefully uncover a successful program that is easy to initiate and maintain. Through the REM Initiative, lives will be changed, pregnant women will make more educated decisions regarding their health, and interdisciplinary comradery will soar. The REM Initiative will undoubtedly prove helpful in changing the culture of patient care and professional relationships and development.

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Appendix A: The REM Initiative- Project Outline Plan

"Dose One" Title: A Healthy Delivery

Planned Dose Topic: Delivering your baby

Length of Dose: 30 minutes

Dose Timing: Weeks 20-22 gestation

Dose Description: In this first "dose", different modes of delivery will be discussed. The pros and cons of vaginal deliveries and C-seasons will be outlined. The definition of "full-term" will be stated, as well as its implications.

"Dose Two" Title: Will I have pain?

Planned Dose Topic: Medications used in labor and delivery

Length of Dose: 30 minutes- 1 hour

Dose Timing: Weeks 26-28 gestation

Dose Description: In this "dose", the different medications used in labor and delivery will be discussed. Medications for pain relief, sedation, cervical softening and dilation will be discussed at length. A pain scale will also be highlighted in this section.

"Dose Three" Title: Alternatives in labor and delivery

Planned Dose Topic: Induction of labor

Length of Dose: 30 minutes- 1 hour

Dose Timing: Weeks 32-34 gestation

Dose Description: Induction of labor will be discussed during this "dose". Reiterating the medications in dose two, the process of induction of labor will be explained. Pros and cons of induction of labor will be discussed. Reasons for inductions of labor will be listed and described.

"Dose Four" Title: When do we eat?

Planned Dose Topic: Dietary restrictions in labor and delivery

Length of Dose: 15-30 minutes

Dose Timing: Week 35 gestation

Dose Description: In this "dose", dietary restrictions will be discussed. Food choices that are acceptable during labor, post-vaginal and post-caesarean deliveries will be outlined. During this lesson, different dietary options, such as clear liquids and regular diet will be discussed with examples.

"Dose Five" Title: Rules of the house

Planned Dose Topic: Hospital regulations

Length of Dose: 30 minutes

Dose Timing: Weeks 36-38 gestation

Dose Description: In this "dose", hospital policies and procedures will be discussed. Visitation, smoking policy, infant security, and length of stay will be discussed.

"Dose Six" Title: Your labor and delivery

Planned Dose Topic: Ensuring understanding, verifying knowledge

Length of Dose: 30 minutes

Dose Timing: Weeks 38-40 gestation

Dose Description: In this final "dose", all previously discussed doses will be reviewed. If an induction is chosen and/or warranted, this would be the time when informed consent could be obtained. The patient will have an opportunity to ask any questions that she may have.

Appendix B: The ADDIE REM Initiative Evaluation Worksheet

1. Is a gap in knowledge clearly stated?
    - Yes
    - No

   Comments:

2. Are the objectives of the educational materials clearly stated?
    - Yes
    - No

   Comments:

3. Is the intended audience clearly stated?
    - Yes
    - No

   Comments:

4. Can the material be understood by the intended audience?
    - Yes
    - No

   Comments:

5. Is formal education needed to understand the educational materials?
    - Yes
    - No

   Comments:

6. Can the delivery of the educational materials be achieved in the stated amount of time?
    - Yes
    - No

   Comments:

7. Are the goals of the educational materials clearly stated?
    - Yes
    - No

   Comments:
8. Is the mode of delivery of educational materials appropriate for target audience and location?
    - Yes
    - No

   Comments:

9. Does the information contained in the educational material reflect current, best practices?
    - Yes
    - No

   Comments:

10. Are the methods used to evaluate understanding of educational materials appropriate?
    - Yes
    - No

   Comments:

11. Are the educational materials suitable for the learner's cultural background?
    - Yes
    - No

   Comments:

   Adapted from: "Creating a Training Program Using the ADDIE Model".

Appendix C: Permission for Use of ADDIE Review Tool

Dear Chandra,

Absolutely. Please feel free to use the ADDIE worksheet and adapt it for your project. Please reference the original with URL in your references, so that others may find it and use it, too.

I wish you all the best with your doctoral degree and your developmental project. I would be interested to hear how it goes!

Kind regards,

Anne

Anne Rudnicki, Ed.D.
Senior Medical Educator
Assistant Professor of Pediatrics
Office of Educational Development
University of Texas Medical Branch

Appendix D: Invitational Email

Invitational Email

August 29, 2017

Dear Potential Team Member:

This is an email to invite you to take part in a doctoral study for a student matriculating at Walden University. Chandra Jones, RN, is completing a Doctorate of Nursing Practice project entitled, "REM Initiative: Developing Educational Strategies for Inductions of Labor". An expert review panel is needed to summatively and formatively assess educational materials. Because of your knowledge of pregnant women, inductions of labor, and hospital policies and procedures, Chandra Jones feels that you will be an excellent addition to the team. You can agree to participate in this study by returning the attached consent form with the response of "I CONSENT".

Approximately 3 days after this invitation, the materials needed for this project will be sent to you. Unless you decline participation by not returning the attached consent form, the email used to send this invitation and consent form will be used to send the project materials. You will have seven (7) days to review, complete, and return the materials. Further instructions will follow. All activities related to participation in this project will take approximately 2 hours of your time.

If you have any questions, please do not hesitate to contact Chandra Jones, RN.

Thanking you in advance for your participation

Chandra E Jones, RN

Walden DNP Student

Appendix E: Project Exit Survey

REM Initiative
Exit Survey
To be administered after reviewing REM Initiative materials

Answer the following questions using the scale of 1-5:

1= "not at all"
2= "somewhat no"
3= "neither yes nor no"
4="somewhat yes"
5="yes, definitely"

1. I feel that the audience will know more about the process of an induction of labor after taking part in the *REM Initiative*.

   1 2 3 4 5
2. I feel that the audience could make more informed decisions about their care after taking part in the *REM Initiative*.

   1 2 3 4 5
3. I believe that the audience will have more knowledge about the medications used for inductions of labor after taking part in the *REM Initiative*.

   1 2 3 4 5
4. I am confident the audience will be more informed of their pain relief options during an induction of labor after taking part in the *REM Initiative*.

   1 2 3 4 5
5. I believe the audience will understand the policies and procedures of their chosen hospital after taking part in the *REM Initiative*.

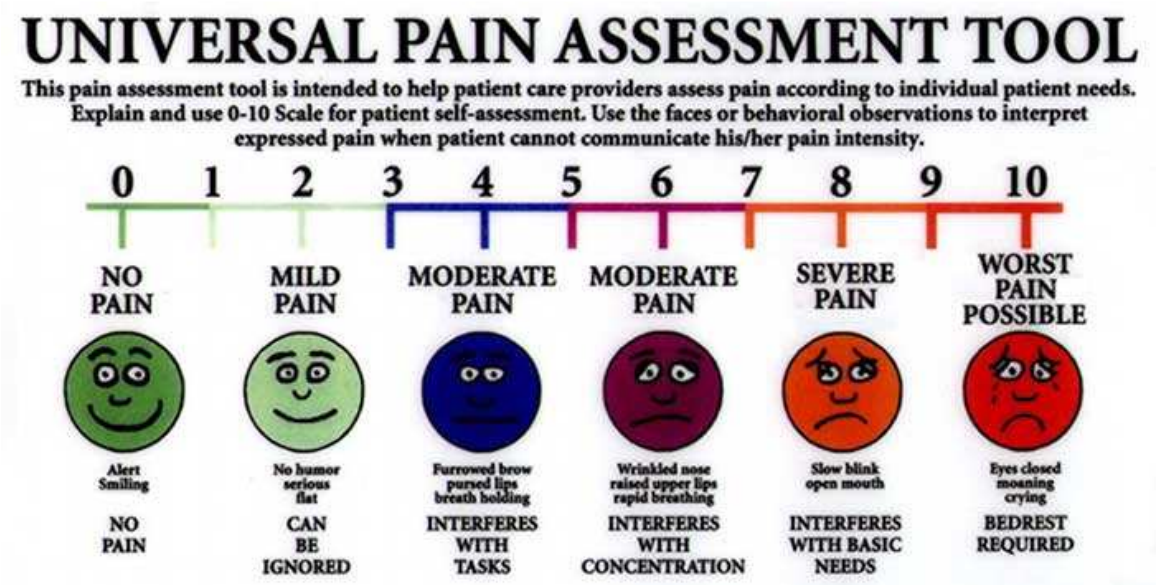
   1 2 3 4 5

Appendix F: Pain Assessment Tool

Universal Pain Assessment Tool

BY DRTZCHEN · MAY 4, 2013

Universal Pain Assessment Tool



Use this Universal Pain Assessment Tool to help you assess your pain level and healthcare needs. Use the numerical, facial, or activity tolerance scales to aid in your self-assessment.

Appendix G: REM Initiative Educational Product

R.E.M Initiative

(Reduce, Educate, Motivate)

Developing Educational Strategies for Inductions of Labor

Congratulations!!!

Your pregnancy is almost over!! You are getting close to meeting your little one. You may have many questions concerning the labor and delivery process. This education manual will help explain it all and make your choices easier. Feel free to ask questions!!

Let's Get Started!!

Objectives

Upon completion of these educational modules ("Doses"), the learner will be able to:

- Understand the appropriate use of inductions of labor
- Know the pros and cons of the process of induction of labor
- Be aware of the hospital's policies and procedures
- Make informed choices concerning childbirth options

Dose One: A Healthy Delivery

Delivering Your Baby

Delivering Your Baby

- There are 2 Modes For Delivering Your Baby
  - Vaginal delivery
  - Caesarean "C-Section" Section
- Which Option is Best for YOU??

The Vaginal Delivery

Pros	Cons
A quicker recovery	Possible vaginal tearing or need for episiotomy (cut)
Shorter hospital stay	Possible trauma to the baby
Faster, more effective breastfeeding	Higher rates of urinary incontinence
A sense of empowerment and accomplishment	Possible tailbone injury (to mother)
Decreased risks for blood clots and heavy bleeding (hemorrhage)	

The C-Section

Pros

- Convenience
- Reduced risk of postpartum hemorrhage
- Lower risk of birth trauma to baby
- Less stress and anxiety for mother
- Decreased risk of passing infections to baby (STDs or GBS- group beta strep

Cons

- Anesthesia side effects: headache, nausea, vomiting
- Longer hospital stays
- Longer recovery periods
- Increased blood loss
- Increased risk for respiratory problems for baby

Keep In Mind....

- When is my baby considered "Full-Term"?

- A "Full-Term" Pregnancy, as defined by the American College of Obstetricians and Gynecologists (ACOG), is a pregnancy that lasts between 39 weeks and 0 days and 40 weeks and 6 days.

Let's Review

True/False: The hospital stay is longer with a vaginal delivery?

- TRUE
- FALSE
- **Answer: FALSE. Your hospital stay is typically shorter with a vaginal delivery.**

Which is considered "Full-Term"?

- 37 weeks
- 36 weeks and 5 days
- 39 weeks and 0 days
- 20 weeks
- **Answer: 39 weeks and 0 days is considered full-term.**

Dose Two: Will I Have Pain??

Medications Used In Labor and Delivery

The medications you receive in labor and delivery can be given by mouth, through your IV, or vaginally. You may receive medications for the following reasons:

- Pain relief
- Sedation (sleep or relaxation)
- Cervical softening/dilation

Medications

For Pain Relief

- Morphine- IV
- Nubain/Stadol- IV
- Tylenol- By mouth
- Demerol- IV
- Fentanyl-Epidural/Spinal

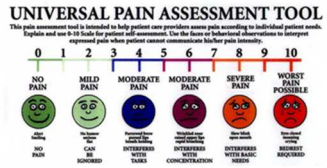
- You may choose not to use any medications for pain relief.

Side Effects

- Sleepiness
- Dizziness
- Nausea
- Vomiting
- Jitteriness or irritability

- These medications are given PRN, or an "as needed" basis.

Pain Scale



Medications

For Cervical Softening and Induction

- Misoprostol- Vaginally or orally (by mouth)
- Oxytocin- IV
- Cervidil- Vaginally

- These medications can be used alone or together
- These medications may cause uterine contractions, leading to pain or discomfort

Medications

For Sedation

- Ambien (Sleep)- By mouth
- Versed- IV

Side-Effects

- Calming feeling
- Sleep
- May experience confusion or forgetfulness

Let's Review

Nubain, a pain relief medication, is given PRN. How often is PRN?

A. Every 2 Hours
B. As Needed
C. Everyday

Answer: B. As needed. Remember, it is your choice whether or not to have pain medications.

Each of the following are ways you can get medications in L & D EXCEPT:

A. Oral (by mouth)
B. IV
C. Vaginally
D. Nasally (through the nose)

Answer: D. You will not receive any medications in L & D nasally.

The Induction of Labor

- Induction of labor can occur several different ways:
  - Membrane Stripping
  - Cervical Ripening
  - Chemical Induction
- The induction of labor is an OPTIONAL procedure that is used to progress the start of labor.

Induction of Labor

Membrane Stripping

The manual separating of your cervix from the tissues surrounding your baby's head.

- Easy and non-invasive
- Can be done in your doctor's office

Cervical Ripening

The use of oral or vaginal medications to soften your cervix in preparation for labor.

- *Done in the hospital*
- *Done prior to the use of chemical induction.*

Induction of Labor

Chemical Induction

The use of Oxytocin (Pitocin) through an IV placed in your arm or hand to cause labor to begin.

- Normally works well
- Contractions will normally begin within 30 minutes after the start of the medication
- Requires monitoring of both mother and baby
- This is the most common type of induction of labor.

Induction of Labor

PROS

- The ability to control when baby is born
- Less stress waiting for labor
- Prevention of prolonged pregnancies

CONS

- May end with a C-Section
- Possibility for prematurity (if last menstrual period unknown of early ultrasound not done)
- Uterine hyper-stimulation (can be adjusted)
- Placental abruption (Medical Emergency!!)

Let's Review

Which is a reason for an induction of labor?

A. "I have gone past my due date."
B. "I am tired of being pregnant!"
C. "This baby is ready to come out!"
D. "I was induced with my last pregnancy."

Answer: A- Although the other options are valid thoughts and feelings, they are not medical reasons for induction of labor.

Which medication is NOT used for inductions of labor?

A. Pitocin
B. Dulcolax
C. Cervidil
D. None of the above

Answer: B: Dulcolax is a laxative. Pitocin and cervidil are common medications used for inductions of labor.

Dose Four: When Do We Eat?

Dietary Restrictions in Labor and Delivery

Types of Diets

Regular Diet

- Fast-foods
- Meats
- Fruits
- Vegetables
- Starches (breads, rolls, etc.)

Clear Liquid Diet

- Water or ice chips
- Coca Cola
- Apple juice
- Broth
- Popsicles

Types of Diets

Soft Diet

- All items considered clear liquid AND
- Mashed potatoes
- Baked chicken
- Sandwiches
- Eggs
- Grits

NPO

- NOTHING BY MOUTH

Types of Diets

Regular Diet

You may indulge in a regular diet:

- During induction of labor, prior to start of pitocin
- After a vaginal delivery
- After tolerating a clear liquid and soft diet after a c-section

Types of Diets

Soft Diet

You may indulge in a soft diet:

- After tolerating a clear liquid diet after a c-section

Types of Diets

NPO

You must be NPO, or nothing by mouth:

- Prior to a c-section
- Whenever experiencing nausea and/or vomitting

Let's Review

Ice Chips are an example of :

A. NPO
B. Clear Liquid Diet
C. Regular Diet
D. Soft Diet

Answer: B: Ice Chips are an example of a clear liquid diet. Please use ice chips for comfort during the "pushing" phase as well.

True/False: If you are hungry, you can eat a burger while in labor.

A. True
B. False

Answer: False: While in labor, you must only consume clear liquids. You can also use mints or hard candy for comfort during the labor phase.

Dose Five: Rules of the House

Hospital Regulations

Hospital Policies

While in the hospital, it is important that you know:

- NO SMOKING!! There are designated areas outside the hospital for smoking
- There are 3 visitors allowed in the labor and delivery room at a time. Any other visitors must switch amongst others.
- There is only one support person allowed in the operating room (c-section)
- NO CHILDREN are to be left alone with a patient at any time.

Hospital Policies

- Patients that have a vaginal delivery typically stay in the hospital 2 days.
- Patients that have a c-section delivery typically stay in the hospital 3 days.
- Newborn infants are only to be transported in the supplied bassinettes
- Newborn infants are not to be carried in the halls. Only nurses or designated staff are to transport infants outside the patient rooms.
- Please consult with your hospital caregivers if any questions arise concerning hospital policies and procedures.

Let's Review

True/False: It is okay for you to walk down the hall with my baby.

A. True
B. False

Answer: False: NEVER walk outside your room with your baby unless accompanied by hospital staff.

For a vaginal delivery, typical length of stay is:

A. 1 week
B. As long as possible
C. 2 days
D. 3 days

Answer: C: Although every delivery is different, a patient who has a vaginal delivery typically stays in the hospital for 2 days.

Dose Six: Your Labor and Delivery

Ensuring Understanding

Ensuring Understanding

LABOR AND DELIVERY

How long will labor and delivery take?

A. 2 days
B. 1 day
C. 1 week
D. There is no set time

Answer: D

PAIN

True/False: I must have pain medications during labor.

A. True
B. False

Answer: B

Ensuring Understanding

INDUCTION OF LABOR

I can choose to have an induction of labor:

A. At 35 weeks
B. At 41 weeks
C. At 39 weeks

Answer: C

DIETS

After a c-section, I must eat:

A. Regular Diet
B. NPO
C. Clear Liquid Diet

Answer: C

Ensuring Understanding

HOSPITAL RULES

Which is NOT true concerning hospital rules and regulations?

A. They are in place for safety of patients and their families
B. May not be violated at ANY time
C. Can be negotiated

Answer: B

UNDERSTANDING

Do you feel that you can make informed decisions regarding your labor and delivery options?

YES
NO

Any Questions???

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