

DEVELOPMENT OF PRENATAL EDUCATIONAL LIBRARY IN THE SOMALI
LANGUAGE FOR FAMILY HEALTHCARE

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ABSTRACT

The purpose of the project was to develop a library of culturally sensitive, and language specific prenatal educational materials for Somali women at Family HealthCare (FHC). The educational materials were provided in both written and DVD form. The assumption being that culturally sensitive, prenatal education is necessary to promote knowledge and understanding in patients and increase engagement of healthcare providers.

Prior to language specific resources, Somali women typically refused written informational resources. Somali women when offered culturally sensitive education materials readily accepted the information. The resources used were acquired from various governments and non-profit organization websites. In the course of the project, a library was developed which included educational materials from various government websites, non-profit organizations, Mayo Clinic and the MedlinePlus website. The beginnings of a prenatal education library at FHC was established by access to and selection of appropriate resources from MedlinePlus. The Cass County Public Health nurse will maintain and store the educational resources.

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I would like to express my deepest gratitude and appreciation to my committee chair, Tina Lundeen. Without her encouragement, support, and hours of editing, this project would not have reached a conclusion. She is an exemplary educator and I am privileged to know her.

DEDICATION

To

My husband: Durward

My children: Erin, Daniel, Andrew, Katherine and Michael

My grandchildren: Alex, Jonah, Adelyn, Dane, Eleanor, Jude and Lila

You are my reason for living

TABLE OF CONTENTS

ABSTRACT	iii
ACKNOWLEDGMENTS	iv
DEDICATION	v
CHAPTER 1. INTRODUCTION AND PROBLEM STATEMENT	1
Problem Statement	2
Purpose of Project	3
CHAPTER 2. LITERATURE REVIEW	4
Influence of Literacy on Communication	4
Influence of Culture on Communication.....	6
Somali Women and Pregnancy	6
Somali Perception of Caesarean Birth.....	6
Healthcare Providers Perceptions of Somali and Caesarean Birth.....	8
Female Genital Cutting (FGC).....	9
Somali Women and FGC.....	10
Healthcare Providers and FGC	11
CHAPTER 3. ORGANIZATION AND PLAN	13
Project Objective.....	13
Project Team	13
Framework	13
Identification of Need.....	15
Source Identification and Resource Selection.....	15
Permissions for Use.....	18

Institutional Review Board.....	18
CHAPTER 4. PROJECT PLAN, IMPLEMENTATION, AND RESULTS	19
PDSA Cycle: Plan	19
DVD Based Education.....	19
Written Educational Material	21
PDSA Cycle: Do	22
DVD Based Education.....	22
Written Educational Material	23
PDSA Cycle: Study.....	24
DVD Based Education.....	24
Team response	24
Somali response	24
Written Educational Material	25
Team response	25
Somali response	27
PDSA Cycle: Act	28
CHAPTER 5. DISCUSSION AND CONCLUSION	29
Project Purpose and Benefits.....	29
Assumptions	30
Limitations	31
Recommendations	32
Dissemination of Findings	32
Implications for Practice	33

Conclusion.....	33
REFERENCES	35
APPENDIX A. PERMISSION FOR USE.....	42
APPENDIX B. MEDLINE PLUS RESOURCES	43
APPENDIX C. IRB APPROVAL	47

CHAPTER 1. INTRODUCTION AND PROBLEM STATEMENT

According to the Family HealthCare's (FHC) website, the facility is a "primary care clinic that provides excellent medical and dental care to anyone and everyone who needs it, regardless of age, nationality, or ability to pay" (FHC, n.d.). Living up to their mission, FHC provides healthcare to much of the refugee and immigrant population in Fargo-Moorhead. Formal prenatal education by a registered nurse, employed by Cass County Public Health (CCPHN) is a standard of care for all pregnant women and this specialized attention reduces anxiety, increases preparedness for delivery, and improves pregnancy outcomes.

As important as qualified personnel are, when providing prenatal education to Somali women additional factors must be considered. Beyond language, cultural norms such as personal space and religious beliefs about childbearing must be taken into account. Health education must provide culturally specific educational materials, patient-centered communication, and interactions that demonstrate that the patient is valued as a person (Wilson, 2012).

Prenatal education typically includes verbal and written educational material. During the initial prenatal visit, the healthcare provider identifies knowledge gaps in the areas of diet, exercise, work schedule, and sleeping habits. The information is then tailored to emphasize the value of maintaining a healthy lifestyle during pregnancy. Prenatal education includes expected changes in the woman's body during pregnancy, prenatal laboratory, and ultrasound testing, schedule of recommended prenatal visits, and prenatal classes offered. A follow-up prenatal visit is scheduled at the conclusion of the initial visit. At subsequent prenatal visits, the initial prenatal education is reinforced as needed and other topics are individualized to the woman and stage of pregnancy.

In order to accomplish prenatal education, FHC utilizes language specific interpreters accessed through the AT&T language line or locally available interpreters to assist in the delivery of prenatal education to pregnant women and their support persons. Somali women, as with all women, need to have prenatal education information in a language that they can understand. However, FHC currently did not have Somali language specific educational material available.

According to Brar et al. (2009), Somali women prefer to have a female interpreter and healthcare provider. Additionally, pregnancy and delivery is very personal and Somali women are unlikely to discuss personal topics with a male who is not a member of their family (Brar et al. 2009). In order to maximize education and care, a female should provide interpretive services; unfortunately, the available Somali interpreter at FHC is a male. To provide culturally sensitive, gender concordant healthcare, FHC employs two female certified nurse midwives (CNM).

Problem Statement

Prenatal education promotes positive pregnancy outcomes (Tayebi, Zahrani, & Mohammadpour, 2013). Maximization of prenatal education for Somali women would promote healthy outcomes and improve patient satisfaction during their prenatal period. FHC lacks written material in the Somali language and lacks a female interpreter to assist the providers in prenatal education. If no female interpreter is available, another form of delivering prenatal education is necessary, such as video education. DeStephano, Flynn, and Brost (2010) found that education offered in a video format was acceptable to Somali women. Language specific, culturally sensitive, written educational material and video-based education would be a valuable source of prenatal education.

Purpose of Project

The purpose of the project was to acquire a library of culturally sensitive, language specific prenatal written and video-based education for Somali women at FHC. The assumptions are:

1. Given that FHC provides healthcare to refugee and immigrant population in Fargo-Moorhead, culturally sensitive, language specific prenatal education is necessary.
2. Culturally sensitive, language specific prenatal education will improve knowledge and understanding.
3. Questions stimulated from viewing educational DVD will improve patient/provider interaction, promotes a healthy patient/provider relationship, and expands patient/provider understanding.

The clinical question is will there be an improvement in prenatal education and patient satisfaction if Somali women are offered culturally sensitive, language specific written and video-based prenatal education?

CHAPTER 2. LITERATURE REVIEW

The fall of the Somali government in the early 1990s was the impetus for the increased number of Somali immigrants and refugees entering the United States. Approximately 1.5 million Somali now live in the United States (Office of the United Nations High Commissioner for Refugees, 2010b).

Living in refugee camps, cultural and religious differences gave rise to unique educational needs for Somali women. Somali women who have relocated to the United States, whether as a refugee or immigrant, often experience health disparity and barriers to obtaining healthcare (Hill, Hunt, & Hyrkäs, 2012). The American healthcare system is complex and difficult to navigate. For refugees and immigrants language and cultural barriers increase this challenge.

Influence of Literacy on Communication

Providing prenatal education is important to all women regardless of language barriers, but language barriers are not the only concern. According to Hammond (2014), large-scale displacement of Somali people has occurred for up to three generations. In fact, the displacement of Somali people has been the longest lasting of any population in the Horn of Africa. “Since at least the 1970s, Somalis have been displaced at varying scales in response to different dynamics involving conflict, natural disaster, and economic hardship” (p. 2). This history of large-scale displacement has led to one of the lowest literacy rates in the world. The current literacy rate in Somalia is 37.8% overall with male literacy listed as 49.7% and female literacy listed at 25.8%. Because of displacement and the lack of access to regular education, literacy is lower for immigrant and refugee women (Central Intelligence Agency, 2014). Although literacy rates are low, the Somali culture is rich in oral traditions such as storytelling,

poetry, and song. Because of this long oral tradition, Somali prefer answering questions orally rather than in writing (Drake & Mutua-Kombo, 2009).

Culturally sensitive, language specific prenatal education is a necessary component of providing quality prenatal care. Degni, Suominen, Essén, El Ansari, and Vehvilainen-Julkunen (2012) found that good communication is essential for providing quality healthcare to immigrant women and that the style of healthcare provider's communication is equally important. Providers must understand the culture of the Somali woman and realize that negative preconceptions can interfere with delivery and quality of care. To promote optimal communication Straus, McEwen, and Hussein (2009) recommend:

- Use of a trained interpreter
- Explanation of proposed interventions
- Acknowledgement of the importance of community and family in decision-making
- Provision of continuity of care
- Awareness of the accumulated pressures immigrant women face
- Gender concordance when important to the patient
- Respecting modesty of the patient

Lazar, Johnson-Agbakwu, Davis, and Shipp (2013) identified communication and the need for interpreters as a primary barrier to providing prenatal care to Somali women. The Somali language is structurally different from English, which makes the language difficult to “pick up.” Providers are heavily dependent on interpreters to promote communication. Effective prenatal education relies on correctly interpreted information and understandable communication.

Influence of Culture on Communication

According to Lazar et al. (2013), within the Somali culture, the male is the head of the household and makes the decisions, including decisions about healthcare. The family decision-making structure is difficult for healthcare providers in the United States to understand and can have a negative impact on communication. Healthcare providers often see the male dominated decision-making structure as depriving the woman of her autonomy. A physician with many years experience expressed his lack of understanding with the decision making structure in this way,

"It's a culture that, to this day, I don't really understand; the role of the woman, the role of the pregnancy, the male domination...even for people who have been in America for a while, they still follow that, and how the male really dictates exactly what happens to the woman. We have interpreters come and they'll even tell us that if we want to get a point across, we have to explain it to the husband first so that the wife will say ok and I don't understand why it's that way" (Lazar et al., 2013, p. 4).

Somali Women and Pregnancy

Narruhn (2008) indicates that Somali women marry early, usually in their teens, and begin childbearing soon after marriage. Somali consider pregnancy and resulting children as gifts from Allah making the concept of family planning and birth control of little cultural relevance. Somali consider seven or eight children as the ideal number for a Somali family and a woman's social status is dependent upon the number of her children.

Somali Perception of Caesarean Birth

The cultural norm for a Somali woman is to have as many children as she can. Caesarean birth limits the number of children a woman is able to have in the future and for this reason, there is resistance to the procedure (Narruhn, 2008). Among Somali, there is concern that caesarean birth reduces fertility and the concern is not unfounded. Several studies have demonstrated that

there is empirical evidence of reduced fertility following cesarean birth (Esséén, Binder, & Johnsdotter, 2011; Salem, Flynn, Weaver, & Brost, 2011). However, limiting the number of children a woman is able to have and reducing fertility is not the only reason Somali women tend to resist caesarean birth.

Somali view childbirth as a natural process that does not need surgical intervention (Hill et al., 2011). A Somali woman who has had a previous vaginal delivery is especially resistant to a caesarean birth. Somali women feel that caesarean birth happens because labor is rushed, the labor is not allowed to proceed naturally, and the physicians decide too quickly that a caesarean birth is needed (Amereskere et al. 2011). Worse still, by consenting to a caesarean birth, Somali women feel that they are not waiting on God for help with the delivery (Brown, Carroll, Fogarty, & Holt, 2010).

Fear may be another reason that Somali women resist caesarean birth. Caesarean birth is a surgical procedure that can be frightening. Somali women may fear anesthesia and believe that undergoing surgery can cause death or permanent disability. The word “surgery” itself causes fear of caesarean birth. Deyo (2012) discovered during interviews within the Somali community that in the Somali language, “surgery” literally translates to mean “slaughter.” The resulting fear and anxiety is not surprising, given this context. Deep seated fears can cause Somali women to delay seeking prenatal care of any sort and resistance to caesarean birth can cause conflict with care providers as well as increase the risk for tragic maternal and fetal outcomes (Boerleider, Wieggers, Mannien, Francke, & Deville, 2013; Brown et al., 2010). Somali women often believed that caesarean birth is encouraged because healthcare providers are not familiar with Female Genital Cutting (FGC-see following discussion) and research confirms that there is a

correlation between women who have undergone FGC with a higher incidence of emergency caesarean birth (Wuest et al., 2009).

Somali women may also resist caesarean birth because of the longer recovery period following the birth. The surgical restrictions can keep a woman from fulfilling childcare responsibilities and limit her ability to care for the home. Understanding these fears and concerns is important when providing prenatal education and demonstrates the importance of culturally sensitive and language specific education (Murray, Windsor, & Parker, 2010).

Healthcare Providers Perceptions of Somali and Caesarean Birth

Healthcare providers who have worked with Somali women for any length of time are very much aware of the resistance to caesarean birth (Brown et al., 2010). Healthcare providers typically attribute the Somali woman's resistance to caesarean birth to fear about the effect on subsequent births. While valid, this concern confuses providers who have difficulty understanding why a woman would sacrifice one child to preserve the possibility of having more children in the future (Lazar et al., 2013).

Many healthcare providers have personal experience with fetal and/or maternal death due to refusal of caesarean birth (Small et al., 2008). Healthcare providers are trained to preserve and protect the life of the mother and the baby. This apparent disregard for the life of the baby goes against the training and ethics of healthcare providers. The frustration healthcare providers feel can sometimes promote disrespect of the patient's cultural values. A better understanding of the resistance to caesarean birth may help healthcare providers accept and respect the choices made by Somali women and their families (Lazar et al., 2013).

Female Genital Cutting (FGC)

Female genital cutting is also known as female genital mutilation or female circumcision. Of the three terms, female genital cutting is the more acceptable because the term has less negative connotations (Norman, Hemmings, Hussein, & Otoo-Oyortey, 2009). The origin of FGC is uncertain but is thought to have existed in ancient Egypt, Ethiopia, and Greece (ACOG, 2008). FGC is a deeply rooted cultural practice and is a rite of passage for Somali girls. The procedure is performed anytime from birth to pre-adolescence (age 10-12 years). Parents who have the procedure performed on their daughters believe they are protecting their daughters from harm and acting in their best interest. According to Nour (2008), other reasons for FGC are “preserving chastity, ensuring marriageability, improving fertility, religious requirement, hygiene, and enhancing sexual pleasure for men” (p. 137). The World Health Organization (WHO) (2014) indicates that Somali culture considers the procedure necessary to make a girl beautiful, clean, and to prepare her for adulthood and marriage. WHO describes FGC as all procedures that involve partial or total removal of the external female genitalia, or other injury to the female genital organs for non-medical reasons. There are four types:

- Type I is the excision of the clitoral prepuce. This may or may not include excision of part of or the entire clitoris.
- Type II is partial or total removal of the clitoris, labia minora, and possibly excision of the labia majora.
- Type III, referred to as infibulation is a procedure in which the vaginal opening is narrowed by cutting and repositioning the labial folds. Only a small opening remains for the passage of urine and menstrual blood. With this procedure, the clitoris may or

may not be removed. The purpose of infibulation is to narrow or tighten the vagina introitus.

- Type IV is any procedure not previously described that harms or alters the female genitalia for non-medical purposes. This can include pricking, piercing, incising, scraping, and cauterizing of the genital area.

Somali Women and FGC

The experiences of Somali women with western healthcare providers who are unfamiliar with FGC are varied. Some Somali women report a positive experience with western healthcare providers who are knowledgeable about FGC. Other women have had such difficult experiences that they would not return to western healthcare providers for future care (Oguntoye, Otoo-Oyortey, Hemmings, & Hussein, 2009). Somali women report feeling embarrassment and/or shame when faced with the negative reactions and ignorance of healthcare providers about FGC. Healthcare provider's negative attitude and lack of knowledge can cause the Somali woman to lose confidence in healthcare providers, which results in reduced quality of care (Terry & Harris, 2013).

The World Health Organization (2014) views FGC as a violation of women and children's rights. FGC is illegal in most western countries including the United States. The United States made FGC illegal in 1996. The legal status of FGC in the United States may cause Somali women to be ashamed and, because of the shame, they will not volunteer the fact that they have had the procedure (Wuest et al. 2009). FGC is a very sensitive topic that needs to be addressed with tact and compassion. Because of United States law, Somali girls are transported back to Somalia to have the FGC procedure performed. The procedure is often without the girl's knowledge or consent (Turkewitz, 2014).

Healthcare Providers and FGC

Most healthcare providers in the United States are unfamiliar with FGC, although this is changing. The American Congress of Obstetricians and Gynecologists (ACOG) have developed a position paper on FGC entitled *Female Genital Cutting: Clinical Management of Circumcised Women*. ACOG also has educational training modules available for healthcare providers to improve knowledge and cultural awareness of FGC. Nevertheless, many healthcare providers express frustration with a lack of guidelines and consensus on clinical management of women who have had FGC (Widmark, Leval, Tishelman, & Ahlberg, 2010). Hess, Weinland, and Saalinger (2010) report that healthcare providers misunderstand the legal implications of caring for women with FGC.

Healthcare providers are reluctant to talk about FGC with their patients, perhaps because they are trying to balance “ignorance or respect for different cultures, with personal feelings such as anger and powerlessness preventing the delivery of effective care” (Terry & Harris, 2013, p. 45). Women who have undergone the procedure have a higher risk of problems such as dysmenorrhea, dyspareunia, recurrent urinary tract, and vaginal tract infections. Furthermore, FGC may lead to infertility, sexual dysfunction, difficult labor, and delivery complications. Healthcare providers must become confident and competent in treating Somali women who have had FGC, since an estimated 98% of Somali women have had some form of FGC (Nour, 2008).

FGC is troubling for healthcare providers because the procedure violates the basic human right to physical integrity. Healthcare providers have the moral commitment to work to eliminate practices that “imply a discriminatory, violent, degrading, and painful treatment towards women” (Kaplan-Marcus et al., 2010, p. 917) while maintaining respect for the Somali culture and people. Healthcare providers must seek to educate themselves about the cultural and

religious meaning of FGC, and the implications for childbirth. Sensitivity, respect, knowledge, and technical training will improve the quality of care for Somali women (Straus, McEwen, & Hussein, 2009).

CHAPTER 3. ORGANIZATION AND PLAN

Project Objective

The project objective was to develop a multi-media prenatal reference library for FHC providers and staff to use in the education and care of pregnant Somali patients at FHC.

Project Team

A project team was assembled to plan, build, and implement a Somali specific multi-media library of prenatal education references. The project team was made up of two Certified Nurse Midwives (CNM), the Cass County Public Health Nurse (CCPHN), and the author. The CNMs were the only midwives at FHC and seasoned professionals. The CCPHN was a registered nurse with a bachelor's degree; she had eleven years experience providing prenatal education to clients at FHC. The author's experience has encompassed over thirty years in nursing. Roles included nurse educator and lactation consultant for the last five years. The author's role was to find evidence based, language specific, culturally sensitive, multi-media prenatal educational materials in the Somali language. The CCPHN had the responsibility of delivering appropriate prenatal education to each patient. Expectations of the CCPHN and CNMs were review of the located educational material to confirm accuracy, and fit for FHC. The development and successful implementation of the project required the input and cooperation of all team members.

Framework

According to the Deming Institute (2014), the PDSA Cycle is a systematic series of four steps for gaining valuable learning and knowledge. The information is gathered and used for the continual improvement of a product or process. According to the American Society for Quality (ASQ, n.d.), PDSA can be used as a model for continuous improvement, when starting an

improvement project, or when implementing any change. The PDSA model has been used effectively in multiple healthcare settings to facilitate process improvement (Varkey et al., 2009).

PDSA is a proven model of process improvement and provides organizations with a guide to plan an action, study the proposed action and to act on the information acquired. According to Tews, Heany, Jones, VanDerMoere, and Madamala (2012), PDSA asks three key questions:

1. What are we trying to accomplish?
2. How will we know that a change is an improvement?
3. What changes can we make that will result in improvement?

Tews et al. (2012) indicate there are four stages to the PDSA Cycle:

Stage 1 - Plan: The first stage is the time to identify the opportunity for improvement and plan for how that improvement will occur. During the plan stage, the target population is identified, needs are identified and goals are set. During the plan step an action plan is developed. The plan determines what needs to be done, who is responsible for its completion and when the plan will be evaluated.

Stage 2- Do: During the second stage, the plan is tested for effectiveness, problems are documented, and observations and unintended side effects are noted. Observations and unintended side effects will aid in the learning process.

Stage 3 - Study: Collected data is studied and change is analyzed. This is the stage when success of the plan is determined. If the results are satisfactory, the cycle moves on to the next stage.

Stage 4 - Act: Stage 4 is the action step in which the information learned in the third stage is incorporated as the new process or if the change is not considered successful, the PDSA cycle is repeated. The PDSA is represented as a circle to emphasize that there is no end. PDSA

is a repeating cycle designed to improve the action with each cycle. PDSA cycle can be repeated as many times as necessary. The goal is to learn and improve with each cycle (Tews et al., 2012).

Identification of Need

My original project was to develop an educational DVD of breastfeeding information for Somali women, however after an interview with CNMs at FHC, the project changed. During the interview, the CNMs indicated that they had no written prenatal educational material for Somali women. The CNMs felt the topic of breastfeeding was important, but other topics such as prenatal care and expectations of labor and delivery were a higher priority. The CCPHN had a folder of prenatal materials in English that she wanted translated from English into Somali. She approached the male Somali interpreter used in prenatal teaching sessions about translating the material but he declined. He told the CCPHN that he was immersed in several projects currently too busy to do the project.

The task of translating prenatal educational materials would have been monumental and the interpreter might not have had the skills necessary to do the job. In order to be a good translator, an individual must have both the ability to write well and express the intended tone and meaning of the material from source to target language. Additionally a translator must have the ability to understand the source language and the culture of the country where the text originated (Gile, 2009).

Source Identification and Resource Selection

An internet search for Somali specific educational information was undertaken using a variety of search engines. The search for written health information regarding pregnancy,

delivery, post-partum, and newborn care produced a variety of Somali language specific resources. The following sites were identified as potential sources of written material:

1. Minnesota Department of Health (n.d.)
2. WellShare International (2012)
3. Healthy Roads Media (2012)
4. Health Information Translations (2014)
5. MedlinePlus (2014)

MedlinePlus is a curated online information service produced by the U.S. National Library of Medicine and National Institutes of Health (MedlinePlus, 2014). MedlinePlus included links to Health Information Translations, Healthy Roads Media, Centers for Disease Control, and Ethnomed (web resource containing information about cultural beliefs, medical issues and other issues pertinent to the health of immigrants). Having all the information compiled in one location, alphabetically arranged by topic and/or health condition, made MedlinePlus an excellent source of education materials. After careful review, the websites of WellShare International and Minnesota Department of Health reflected limited Somali specific written educational resources. The initial search findings were shared with the CNMs and CCPHN. After reviewing MedlinePlus and the other websites, the team decided that the most appropriate source for written educational material was MedlinePlus.

With the directive to obtain information on topics relevant to prenatal care, labor, delivery, and newborn care, a list of Somali resources was identified for later use (Appendix B). A copy of these resources was provided to the CNMs and the CCPHN to review. After reviewing the topics, the team was satisfied that selected educational materials met the identified need for Somali prenatal educational material.

During the search for written Somali prenatal educational material, several video-based resources were identified. Since Somali written literacy levels are one of the lowest in the world (Central Intelligence Agency, 2014) the team felt that video-based education would be a good option for delivering prenatal education. The author viewed on-line video resources related to pregnancy, postpartum care, and infant care. Healthy Roads Media (HRM) had a very basic video on pregnancy and reproduction; however, there were no videos on postpartum or newborn care. HRM had a very basic video about infancy and a short video on car seat safety. The author and the CCPHN viewed the three videos, and based on the scarcity of information the videos contained, that they would not meet FHC needs. WellShare International and the Minnesota Department of Health had Somali videos available but not on the topics needed. During the search for written educational material, a DVD developed by the Mayo Clinic Office of Women's Health and Rochester Somali Community Resettlement Services was discovered. A copy of the DVD was obtained viewed by the team. The team decided that the quality of information, Somali specific language, and English subtitles made the DVD, *A Somali Pregnancy in America*, a good fit for the clinic's needs. The content in the DVD was divided into six chapters with information that was applicable to each trimester of pregnancy. Each chapter was five to six minutes in length, and easy for the viewer to move from chapter to chapter within the DVD. The six chapters are:

1. Prenatal Care: Prevention and Preparation
2. Balancing Nutrition and Exercise During Pregnancy
3. A Father's Changing Role. Poem: "In My Arms...Reflections of a Somali Father"
4. Pregnancy Myths and Facts
5. Episiotomy: Understanding Individual Differences and Practices

6. Understanding Caesarean Birth

Based on the content and ease of use, the project team chose to include the DVD in the project. Once the team made the decision to utilize the DVD, four copies were requested from Mayo Clinic Office of Women's Health.

Permissions for Use

The copyright status of the materials had to be determined prior to the use of the identified resources. There was no restriction for use of material from MedlinePlus; all materials could be downloaded and copied. Health Information Translations educational resources were also not copyrighted and were available for healthcare professionals, individuals, or community groups to use. Material from Healthy Roads Media could also be printed or downloaded for personal, non-commercial use. Since FHC did not plan to charge for prenatal education material, the use in education would be considered non-commercial. Permission was obtained from Mayo Clinic Office of Women's Health to use the DVD as a component of the project (Appendix B).

Institutional Review Board

FHC does not have an IRB review board and approval for the project came verbally from the clinic director Dr. Espejo during the first week of March 2014. Certification of exempt human subject's research was received from the NDSU Institutional Review Board (Appendix C).

CHAPTER 4. PROJECT PLAN, IMPLEMENTATION, AND RESULTS

The Plan Do Study Act Cycle is a systematic series of four stages that are useful for guiding process improvement project. The Plan stage is the time to establish objectives and processes. The Do stage is the time of implementation and collection of data. Study stage is just what it says, study the results, and then, Act. The Act step can be either implementation of the change, or the process begins again. PDSA is a model that works well when developing a new improvement project (ASQ, n.d.).

PDSA Cycle: Plan

DVD Based Education

The team decided that “*A Somali Pregnancy in America*” would be a good addition to the prenatal education of Somali women. DeStephano et al. (2010) had previously explored the acceptability of the DVD by Somali women in a clinical setting in Minnesota. Based on their evaluation, DeStephano et al. (2010) recommended that the chapters most relevant to first and second trimester were

- Prenatal Care: Prevention and Preparation;
- Balancing Nutrition and Exercise During Pregnancy.

Pregnancy Myths and Facts was relevant to any trimester of pregnancy and the chapters most appropriate for the third trimester were

- Episiotomy: Understanding Individual Differences and Practices;
- Understanding Caesarean Birth.

A Father’s Changing Role was appropriate when the woman’s male partner accompanied her. Team members agreed with the recommendations of DeStephano (2010) after their own evaluation of the DVD’s content.

Before initiating the DVD education, the Cass County Public Health Nurse (CCPHN) verified that each of the exam rooms at FHC had a computer that was capable of playing a DVD. However, the computers had no speakers. To solve this problem, the CCPHN requested and received three sets of portable speakers from the Information and Technology department of FHC. The CCPHN believed, based on prior experience, that we would not have more than three Somali patients needing DVD education at the same time. The available exam room space was more than sufficient to accommodate DVD viewing by at least three persons and their support person(s). If the need arose, more than one patient and support person could view the DVD together in one room. The method of viewing the DVD was in place and ready to show to Somali women. With three rooms available, we did not expect to have any space or patient flow conflicts. The team discussed the current workflow and established the following process for viewing the DVD:

1. Three rooms were designated with a bright orange magnet on the doorframe. Each room had a set of speakers and a copy of the DVD that remained in the room.
2. At the start of the day, the CCPHN identified Somali patients who needed prenatal education. On the paper schedule, the patient's name was highlighted with an orange marker. A highlighted copy was provided for each of the nurses working with the CNMs.
3. Each morning the CCPHN readied the rooms for use.
4. The CCPHN selected the chapter of the DVD for each patient based on gestational age.
5. Somali women were roomed by nurse. The nurse notified the CCPHN of patient readiness. If the CCPHN was not available, the nurse could start the DVD.

6. The CCHPN asked each Somali woman if she would watch the DVD.
7. If the selected chapter(s) were not completed when the CNM got to the room, the CNM would stop the DVD and give her the option of finishing after being examined.
8. The CNM would resume the DVD if the patient desired. The CNM reminded the patient that on completion of the DVD the CCHPN would visit with her.
9. The CCHPN was available for questions after viewing was completed.
10. The CCHPN documented in the electronic health record the chapter (s) viewed.
11. If additional prenatal educational needs were identified, and not covered by the educational DVD, the specific handout on the topic was retrieved by the CCHPN. The CCHPN retrieved the information and gave it to the Somali woman.
12. The Somali woman was directed to the reception desk to schedule a return visit.

Written Educational Material

The prenatal education folder the CCHPN had for patient education was only in English. The nurse midwives had experienced a large volume of Somali primagravidas in the previous three-month period and wanted to have prenatal education information in the Somali language. Prenatal education information for Somali women comparable to the information contained in the English language prenatal folder was requested. Available material from MedlinePlus was evaluated for accuracy of information and clarity of instructions. Three handouts in Somali were selected:

1. *A Healthy Pregnancy*, which included the following information:
 - Make and keep regular appointments for prenatal care, even when feeling well
 - The importance of taking a daily prenatal vitamin, a healthy diet, and expected weight gains

- Guidelines for physical activity and sleep
 - Recommendations to quit smoking and avoid second hand smoke
 - Avoiding alcohol
 - No medications unless approved by healthcare provider
 - Avoiding x-ray, paint, pesticides and chemicals
 - Don't clean cat litter box
 - Wash hands after handling raw meat
 - Wear seatbelt low over the hips
2. *Changes to Your Baby and Your Body during Pregnancy* described bodily changes in pregnancy and the development of the unborn baby during each trimester.
 3. *Concerns and Discomforts of Pregnancy* covered the common complaints of pregnancy for example nausea, changes in bowel habits, back pain, leg cramps and many more.

All three handouts stressed the importance of talking to healthcare provider about questions and concerns of pregnancy. The CCPHN read and approved the handouts for the prenatal folder. If an education need arose that was not covered by the prenatal education folder, the team decided the CCPHN would retrieve the necessary handout from MedlinePlus.

PDSA Cycle: Do

DVD Based Education

The logistics of available rooms and obtaining speakers had been dealt with and the next step was to incorporate the DVD into prenatal education of Somali women. An exemption was received from the Institutional Review Board of NDSU (Appendix C) on May 30, 2014. The next week the team initiated showing the educational DVD. Each Somali woman who came for

a prenatal appointment watched at least one chapter of the DVD based on her gestational age. If there was time or interest, she was free to watch additional chapters

After each Somali woman viewed the DVD education she was asked, “What did you learn that was new to you?” followed by “Do you have any questions?” The method of open-ended questions was chosen because individual literacy levels had not been tested. Open ended questions was a better way of assessing understanding (Singleton & Krause, 2009) and Somali prefer oral communication (Drake & Mutua-Kombo, 2009).

Written Educational Material

The CCPHN was looking forward to using the prenatal education folder. The prenatal education folder was intended for Somali women with first time pregnancies but we soon realized that the folder could have a wider use. The first Somali woman we saw was twelve weeks pregnant and she had not received any educational material at prior appointments. The CCHPN thought the prenatal education folder would be a good review for her. The CCPHN and the author discussed the value of the information contained in the prenatal education folder for women in early pregnancy and decided to use the folder with any woman thirty weeks gestation or less. From then on, we used the prenatal education folder for women of thirty weeks gestation or less. The CCPHN verbally reviewed all three handouts in the prenatal education folder with each Somali patient and answered any questions.

The CNMs needed four educational handouts for specific patient problems that were not included in the basic prenatal education folder. They were *High Blood Pressure in Pregnancy*, *Diabetes and Pregnancy*, *Male Circumcision*, and *Signs of Labor*. Once the CNM identified an educational need, she asked the CCPHN to retrieve the appropriate handout from MedlinePlus. The CCPHN retrieved the handout and sent that information to the printer at the nurse’s station.

The CCPHN gave the handout to the Somali woman and kept copies of each handout as part of an education file.

PDSA Cycle: Study

DVD Based Education

Team response

After the first week of using the DVD, the team evaluated the patient flow. The team did not observe prolonged appointment times or disruption in clinic workflow. The team worked together well. Review of the first week highlighted a concern of the clinic nurses. The nurses were unsure of what chapters (s) to have the Somali women view if the CCPHN was unavailable to make the selection. To correct this oversight a label was placed on each DVD to indicate the recommended chapters for each gestational age.

Review at the end of the first week also showed fewer Somali women had viewed the DVD than expected. The concern was that some Somali women were missed. However, investigation showed that all Somali women who kept their appointment viewed the DVD and that approximately 40% of Somali women did not keep their scheduled appointment. The CNMs confirmed the percentage was typical of the Somali patients that they see. The team decided the process worked well, needed no other changes,

Somali response

At the end of the first week, the team evaluated the Somali women's response to the educational DVD. As previously mentioned, there were no first time pregnancies in the first week. The DVD provoked positive comments such as "good" and "I liked it." One Somali woman recognized an individual on the DVD from the greater Somali community in Minnesota. Recognizing a fellow Somali made the DVD more meaningful for her. She stated, "I know her,"

she smiled and patted her chest and said, “We are Somali!” Another Somali woman said, “First I did not watch, then it was Somali and I was happy!” On occasion, one or the other CNM was behind in seeing patients. During those times, viewing the DVD made waiting easier as one woman stated, “I wait and I wait, but I watch movie. Good!” Over all comments about the DVD were positive however, Somali women who had previous pregnancies felt the DVD did not present new information. A Somali woman who had had multiple pregnancies indicated the DVD information was not something she needed by saying, “I know this. Movie better for new mother.”

Over the month, twenty-two Somali viewed the educational DVD. The gestational age of the Somali women ranged from ten weeks to forty plus weeks. Four were primagravidas, and the number of previous pregnancies for multigravidas ranged from three to seven. The Somali women, with previous pregnancies, thought they did not learn anything new from the educational DVD nor did they have any questions for the CCPHN. The Somali women with first time pregnancies had questions, but the CCPHN did not feel there were more questions than usual. The CNMs reported slightly different results. They confirmed that Somali women who had previous pregnancies did not have a noticeable increase in questions; however, both CNMs felt that Somali women with their first pregnancies had more questions than they usually did after viewing the DVD.

Written Educational Material

Team response

The CCPHN reported to the team that she was satisfied with the prenatal education folder. Although unable to use the prenatal education folder with a primigravida during the first week of implementation, she knew the folder would fill the educational need. She told the team

about her rationale for using the prenatal education folder with Somali women thirty weeks gestation or less indicating that the information was still relevant to this stage of gestation. The information dealt with the discomforts of pregnancy, changes in the woman's body, development of the baby, and important safety concerns throughout the pregnancy. The team reviewed the prenatal education folder and agreed with the CCPHN's recommendation for expanded use.

Eventually we were able to use the prenatal education folder for four primigravida women. The CCPHN commented that she was surprised at the willingness and openness of the Somali women to discuss the information the prenatal education folder covered. She noticed a distinct increase in questions and a positive response from the Somali women, "Usually there aren't that many questions, even when the interpreter is here. I can hardly believe it! I have never had Somali women talk so much. The folder is great!" The team determined that the prenatal education folder was complete, concise, language specific, culturally sensitive, and no changes or additions were necessary.

The CCPHN reported that she quickly located and retrieved educational material from MedlinePlus. A CNM was concerned about a Somali woman at a postpartum visit and requested the resource *Postpartum Depression*. A second resource was needed for a woman who was forty-one weeks gestation and the CNM wanted her to have some information about the non-stress test used to evaluate the baby's health, and the handout *Non-stress Test in Pregnancy* was retrieved. Occasionally the CNMs retrieved the educational material themselves rather than ask the CCPHN. They both agreed MedlinePlus was very easy to use and they were amazed at the variety of resources available.

Evaluation of the retrieval process identified the lack of printers in exam rooms as a barrier. By printing handouts at the nurse's station, the team was able to get printed material to

Somali women. However this extra step, could potentially increase patient wait time if we were very busy and increase the risk of not getting the information to the patient.

Availability of the written prenatal educational handouts addressed an issue that had troubled one of the CNMs. She stated, “It’s great to have this information! I always felt like the people who speak English get the best education, the ones from Nepal get the second best, and everybody else is just lost!”

Somali response

Prior to having language specific resources, the CCPHN had few Somali women accept prenatal education material in English. During the first week, three prenatal education folders were used. The response to the prenatal education folder was positive. The first Somali woman took the prenatal education folder, carefully removed each of the three handouts, and then read them through. She was conversant in English and said “Thank you. I am happy to have this.” She said that she was much more comfortable reading Somali than struggling with English. The second Somali woman accepted the prenatal folder with many thanks also. She took the folder and carefully placed it in her bag and said, “My husband will read, we read together.” Like the first two, the third Somali women readily accepted the prenatal educational folder with appreciation. She had two preschool daughters with her and was so happy with the handouts that she took them out and showed her daughters saying,” This is our language, this is Somali!”

Over the course of the project, there were four Somali women with first time pregnancies. These women were particularly interested in the prenatal education folder and had many questions. *Changes to Your Baby and Your Body during Pregnancy* generated the most interest. The first primigravida was ten weeks pregnant and fascinated with the developmental stage of her baby saying,” My husband will want to know this. He is so proud!” One primipara

indicated that *Concerns and Discomforts of Pregnancy* was “very good for me.” She was troubled by nausea and the handout gave many useful suggestions to help combat the condition.

We used ten prenatal education folders over the course of the project. Not a single Somali woman declined the folder. Three of the ten Somali women read the educational material while in the clinic. The remaining seven women indicated that they would take the prenatal folder home to read, or that a family member would read it.

PDSA Cycle: Act

The anticipated questions stimulated by the educational DVD did not happen in the first week; however, the team decided to continue showing the DVD as they considered the information a worthwhile addition to prenatal education. The process was in place and showing the DVD to Somali women continued.

The prenatal education folders needed no change and we continued using the folder with women of thirty weeks gestation or less. The method of retrieving educational handouts from MedlinePlus was successful and satisfactory to both the CNMs and the CCPHN and continued as well.

Both the DVD and the written prenatal resources are still in use at FHC. The plan is for the CCPHN to assume the leadership of the project. Her responsibility includes retrieving educational handouts, maintaining in a file of the handouts utilized, and showing the DVD. The CCPHN will have pregnant Somali women view the DVD at their first visit and have them watch chapters through their prenatal care as appropriate.

CHAPTER 5. DISCUSSION AND CONCLUSION

Project Purpose and Benefits

A Doctor of Nursing Practice must recognize a need and develop a plan to meet the need. An interview with the Certified Nurse Midwives (CNM) at FHC, determined there was a need for culturally sensitive, language specific, Somali prenatal educational material. Somali women who cannot comprehend educational material presented to them derive little value from that material, making the need for these resources clear. The CNMs, Cass County Public Health Nurse (CCPHN), and the author formed a team, planned how to meet the need, instituted a process, and followed through to meet the identified need.

“Holders of practice doctorates are in the business of applying knowledge as they provide direct service to clients” (Zaccagnini & White, 2011, Introduction, xix). Through the project, evidence-based, Somali language specific, prenatal education material was located. Material was written and translated by experienced professionals who had the experience, ability, and cultural knowledge necessary to accomplish such a massive task. Providing language specific, culturally sensitive materials demonstrated an awareness of and sensitivity to educational needs, learning preferences, and culture of Somali women (Caine, Smith, Beasley, & Brown, 2012; Boerleider et al., 2013).

Investigations done through the project, revealed organizations that are working hard to provide culturally sensitive education materials. The resources are available in multiple languages and accessible by healthcare providers, nurse educators, nurses and others involved in patient care. The CNMs and CCPHN now know how to retrieve educational materials through MedlinePlus and use this knowledge to improve their service to clients. They can retrieve

information on many topics and in many languages and that will have a lasting and positive impact on their practice.

Assumptions

The assumptions of the project were that 1) FHC was in need of culturally sensitive, language specific prenatal education, 2) culturally sensitive, language specific prenatal education will improve knowledge and understanding and 3) viewing an educational DVD will stimulate questions. Healthcare providers strive to provide education to all their patients. Some of the challenges to effective health education include provider's time limitations and communication skills, patient knowledge gap, language barriers, and a patient's perceived relevance and readiness to learn. Many healthcare providers are not aware of the available educational resources available and struggle to provide patients with the necessary educational materials.

The assumption was that viewing an educational DVD would stimulate questions and would improve patient/provider relationships and expand understanding (DeStephano et al., 2010). The overwhelming response of Somali women who viewed the DVD was positive. The three primigravida women did ask follow-up questions after viewing the DVD because the information was new to them.

The multigravida women who viewed the DVD did not have follow up questions. Possible reasons could be, as one multigravida Somali woman indicated, the information was not new and more appropriate for a new mother. Though the information on the DVD was not new, the material would be valuable to multigravida Somali women as a review. Another possible reason for lack of follow-up questions could be the language barrier, which made asking questions difficult for the Somali woman. Additionally, the Somali women without the services of the interpreter may not have understood the questions asked of them. Of the twenty-two

Somali women who viewed the DVD, only three did so with the male interpreter present. Given cultural preferences, a male interpreter was not a good option for a Somali woman. Somali women prefer not to voice personal questions in the presence of an unrelated male (Brar, et al., 2009).

Limitations

A major limitation of this project is that initiation and evaluation was done over a one month period. Another limitation is the small and homogenous sample of twenty-two Somali women who viewed the educational DVD. The majority of the participants had experienced multiple pregnancies with only four primigravida women as participants. There were no formal interviews conducted with the participants, and no written questionnaires. They were queried verbally, after viewing the DVD and without consistent use of an interpreter or language line, there was no way to determine the level of understanding. Because of language and literacy barriers, no written questionnaires or surveys were given to patients. Such surveys would have dubious value. Finally, the absence of a pretest or control group limited the conclusions that could be drawn.

The project was geared toward provision of relevant patient educational materials, rather than the outcome of the education. If this project were continued it would be important to look at the outcomes of Somali women who had received prenatal education. For example, would there be fewer missed appointments? The project would be enhanced by assessing birth outcomes of the women who had prenatal education. Evaluation of prenatal outcomes is beyond the scope and organization of this project and is a weakness. However, each piece of educational material distributed emphasized the importance of regular visits with a healthcare provider during pregnancy.

Additionally it would be valuable to have a reevaluation meeting at least quarterly. The team should review the materials in use for evidence based content and accuracy. The team could evaluate the need for additional educational topics. Each quarter the team could search out new video resources and assess delivery of the educational materials currently in use.

Recommendations

Because of information learned in the project, a recommendation would be that FHC consider investing in printers for each exam room. Having a printer in each exam room allows healthcare providers to deliver educational information, discharge summaries, and other resources directly to patients. Immediate provision of such material reduces risk of missing valuable information. A second recommendation is that FHC ensure healthcare providers, educators, nurses, and other staff have internet access to MedlinePlus so they can retrieve health education resources as necessary. Finally, this project is recommended as a model to be used for implementation of additional language specific education interventions.

Dissemination of Findings

The goal of dissemination is to increase the reach of evidence, increase the motivation to use and apply evidence, and increase the ability of practitioners to use and apply evidence (Agency for Healthcare Research and Quality, 2012). With these goals in mind, the findings of the project were shared with the OB/GYN core team members at FHC. Prior to completion of the project, a poster entitled “Development of Prenatal Education Library in the Somali Language for Family HealthCare” was presented at NDSU. The question and answer time during the evening was an excellent opportunity to inform healthcare practitioners from the community and students of the valuable resources available for people whose first language is not English. An article highlighting the importance of, and ability to acquire, culturally

sensitive, language specific health teaching resources will be submitted to an on-line journal for publication. All healthcare practitioners need to know where to find language appropriate resources for educational purposes and knowing where to find these resources is a positive outcome of my project.

Implications for Practice

The Doctor of Nursing Practice (DNP) must have the knowledge and ability to develop and evaluate delivery of care that improves the health of populations. The DNP degree focus is excellence in clinical practice and the utilization and translation of research into evidence based clinical practice (Chism, 2013). The identification of credible sources of language specific educational materials is a valuable contribution to the delivery of patient focused care with implications for all healthcare providers endeavoring to deliver quality education and care.

The DNP has the responsibility to reduce the negative impacts of language and cultural barriers on patient care. This can be done by being culturally aware, staying current and knowledgeable about resources that are available, and implementing the use of culturally sensitive, language specific resources.

Conclusion

FHC and other facilities that provide healthcare to patients must have a method to deliver health education in a manner that the patient can understand. Having language specific educational material is one way to foster understanding. Prenatal education is especially important because the health of two individuals is involved, the mother and the baby. The project goal was accomplished. A library was developed of prenatal educational resources that are culturally sensitive and language specific for Somali women at FHC. The FHC provides services to a variety of cultures and non-English speaking patients. The process of development

of a Somali specific library can serve as a model for locating, reviewing, and utilizing educational materials for patients of many cultures and languages.

At the conclusion of the project at FHC three assumptions seem to be supported, including:

1. There is importance and value for language specific resources for both the patient and the healthcare provider.
2. The project established the beginnings of an educational library that FHC can build upon, refine, and improve over time.
3. Three, the project provides a procedural roadmap for FHC to compile culturally sensitive educational materials for other refugee and immigrant communities.

Healthcare providers have an obligation to provide culturally sensitive, up to date, evidence based care. By utilizing available online resources, such as MedlinePlus, they can gain access to culturally sensitive resources. The PDSA cycle offers a framework for implementing quality improvements within the healthcare environment. Providers must address the challenge of integrating culture, language, and health education into daily practice. By addressing those issues healthcare providers can substantially decrease healthcare disparity and access to healthcare for persons of different cultures. To paraphrase a provider at FHC, those who can speak English get the highest quality care, and those who cannot speak English get less than they deserve.

REFERENCES

- Amereskere, M., Borg, R., Frederick, J., Vragovic, D., Saia, K., & Raj, A. (2011). Somali immigrant women's perceptions of cesarean delivery and patient-provider communication surrounding female circumcision and childbirth in the USA. *International Journal of Gynecology and Obstetrics*, *115*(3), 227-230. doi:10.1016/j.ijgo.2011.07.019
- American Society for Quality. (n.d.). *Plan-do-study-act cycle*. Retrieved from <http://rube.asq.org/edu/2010/11/basic-quality/pdsa-poster.pdf>
- Boerleider, A., Wiegers, T. A., Mannien, J., Francke, A. L., & Deville, W. (2013). Factors affecting the use of prenatal care by non-western women in industrialized western countries: systematic review. *BMC Pregnancy and Childbirth*, *13*(81). doi:10.1186/1471-2393-13-81. Retrieved from <http://www.biomedcentral.com/1471-2393/13/81>
- Brar, S., Tang, S., Drummond, N., Palacios-Derflinger, L., Clark, V., John, M., & Ross, S. (2009). Perinatal care for south Asian immigrant women and women born in Canada: Telephone survey of users. *Journal of Obstetrics and Gynaecology Canada*, *31*(8), 708-716.
- Brown, E., Carroll, J., Fogarty, C., & Holt, C. (2010). "They get a c-section...they gonna die": Somali women's fears of obstetrical interventions in the United States. *Journal of Transcultural Nursing*, *21*(3), 220-227. doi:10.1177/104365960935878
- Caine, V. A., Smith, M., Beasley, Y., & Brown, H. L. (2012). The impact of prenatal education on behavioral changes toward breastfeeding and smoking cessation in a healthy start population. *Journal of the National Medical Association*, *104*(506), 258-264.

Centers for Disease Control and Prevention. (2008). Promoting Cultural Sensitivity: A Practical Guide for Tuberculosis Programs That Provide Services to Persons from Somalia.

Atlanta, GA: U.S. Department of Health and Human Services.

Central Intelligence Agency. (2014). Somalia. *The World Factbook*. Retrieved from

<https://www.cia.gov/library/publications/the-world-factbook/geos/so.html>

Chism, L. A. (2013). *The doctor of nursing practice: A guidebook for role development and professional issues (2nd ed)*. Burlington, MA: Jones and Bartlett.

Degni, F., Suominen, S., Essén, B., El Ansari, W., Vehvilainen-Julkunen, K. (2012).

Communication and cultural issues in providing reproductive health care to immigrant women: Health care providers' experiences in meeting Somali women living in Finland.

Journal of Immigrant and Minority Health, 14, 330-343.

doi:10.1007/s10903-011-9465-6

DeStephano, C., Flynn, P., & Brost, B. (2010). Somali prenatal education video use in a United

States obstetric clinic: A formative evaluation of acceptability. *Patient Education &*

Counseling, 81(1), 137-141. doi:10.1016/j.pec.2009.12.003

Deyo, N. S. (2012). Cultural traditions and the reproductive health of Somali refugees and

immigrants (Master theses). Retrieved from [http://repository.usfca.edu/cgi/](http://repository.usfca.edu/cgi/viewcontent.cgi?article=1034&context=thes)

[viewcontent.cgi?article=1034&context=thes](http://repository.usfca.edu/cgi/viewcontent.cgi?article=1034&context=thes)

Drake, D., & Mutua-Kombo, E. (2009). Somali language and oral tradition in post-conflict life in

the US: What does the future hold? *Africa Media Review, 17*(1), 109-122.

- Essén, B., Binder, P., & Johnsdotter, S. (2011). An anthropological analysis of the perspectives of Somali women in the West and their obstetric care providers on caesarean birth. *Journal of Psychosomatic Obstetrics & Gynecology*, 32(1), 10-18.
doi:10.3109/0167482X.2010.547966
- Family HealthCare. (n.d.). Affordable, quality healthcare for all. Retrieved from <http://famhealthcarefargo.org/>
- Female genital cutting: Clinical management of circumcised women* (2nd ed.) (2008). Washington, DC: The American College of Obstetricians and Gynecologists.
- Gile, D. (2009). *Basic concepts and models for interpreter and translator training*. Philadelphia, PA: John Benjamins Press.
- Hammond, L. (2014). New issues in refugee research. Research paper no. 268: History, overview, trends and issues in major Somali refugee displacements in the near region. Retrieved from <http://www.unhcr.org/cgi-bin/texis/vtx/home/opedocPDFViewer.html?docid=5310b0159&query=Somali%20and%20refugee%20camp>
- Health Information Translation. (2014). Retrieved from <https://www.healthinfotranslations.org/>
- Healthy Roads Media. (2012). Retrieved from <http://www.healthyroadsmedia.org/>
- Hess, R. F., Weinland, J., & Saalinger, N. M. (2010). Knowledge of female genital cutting and experience with women who are circumcised: A survey of nurse-midwives in the United States. *American College of Nurse-Midwives*, 55(1), 46-54.
- Hill, N., Hunt, E., & Hyrkäs, K. (2012). Somali immigrant women's health care experiences and beliefs regarding pregnancy and birth in the United States. *Journal of Transcultural Nursing*, 23(1), 72-81. doi:10.1177/1043659611423828

- Kaplan-Marcus, A., Fernandez del Rio, N., Moreno-Navarro, J., Castany-Fabregas, M. J., Nogueras, M. R., Muñoz-Ortiz, L., Mongui-Avila, E., & Torán-Monserrat, P. (2010). Female genital mutilation: Perceptions of healthcare professionals and the perspective of the migrant families. *BMC Health Services Research*, 911-918. doi:10.1186/1471-2458-10-193
- Lazar, J. N., Johnson-Agbakwu, C. E., Davis, O. I., & Shipp, M. P. (2013). Providers' perceptions of challenges in obstetrical care for Somali women. *Obstetrics and Gynecology International*, 2013, 1-12. doi:10.1155/2013/149640. Retrieved from <http://www.hindawi.com/journals/ogi/2013/149640/cta/>
- Mayo Clinic Office of Women's Health & Rochester Somali Community Resettlement Services, Inc. (2008). *A Somali pregnancy in America: A six part series* [DVD]. United States. Mayo Foundation for Medical Education and Research.
- MedlinePlus. (2014). Health Information in Somali (af Soomaali). Retrieved from <http://www.nlm.nih.gov/medlineplus/languages/somali.html>
- Minnesota Department of Health. (n.d.). Somali translated materials. Retrieved from <http://www.health.state.mn.us/divs/translation/somali.html>
- Murray, L., Windsor, C., & Parker, E. (2010). The experiences of African women giving birth in Brisbane, Australia. *Health Care for Women International*, 31, 458-472. doi:10.1080/07399330903548928
- Narruhn, R. A. (2008). Perinatal profile for patients from Somalia. Retrieved from <http://ethnomed.org/culture/somali/somali-cultural-profile#section-5>

- Norman, K., Hemmings, J., Hussein, El, Otoo-Oyortey, N. (2009). *FGM is always with us: Experiences, perceptions and beliefs of women affected by female genital mutilation in London. Results from a PEER study*. London, UK: Options Consultancy Services and Foundation for Women's Health, Research and Development.
- Nour, N. W. (2008). Female genital cutting: A persisting practice. *Reviews in Obstetrics & Gynecology*, 1(3), 135-139.
- Office of the United Nations Higher Commissioner for Refugees. (2010b). *Global trends 2009: Refugees, asylum-seekers, return-ees, internally displaced and stateless persons*. Retrieved from <http://www.unhcr.org/4c11f0be9.html>
- Oguntoye, S., Otoo-Oyortey, N., Hemmings, J., Norman, K., Hussein, E. (2009). FGM is with us every day: Women and girls speak out about female genital mutilation in the UK. *World Academy of Science, Engineering and Technology*, 30, 1015-1020.
- Salem, W., Flynn, P., Weaver, A., & Brost, B. (2011). Fertility after cesarean delivery among Somali-born women resident in the USA. *Journal of Immigrant And Minority Health / Center for Minority Public Health*, 13(3), 494-499. doi:10.1007/s10903-010-9362-4
- Singleton, K., & Krause, E. S. (2009). Understanding cultural and linguistic barriers to health literacy. *Online Journal of Issues in Nursing*, 14(3), 2-12.
- Small, R., Gagnon, A., Gissler, M., Zeitlin, J., Bennis, M., Glazier, R. H., Haelterman, E., Martens, G., McDermott, S., Urquia, M., & Vangen, S. (2008). Somali women and their pregnancy outcomes postmigration: Data from six receiving countries. *BJOG; An International Journal of Obstetrics & Gynaecology*, 115(13), 1630-1640. doi:10.1111/j.1471-0528.2008.01942.x

- Straus, L., McEwen, A., & Hussein, F. (2009). Somali women's experience of childbirth in the UK: Perspectives from Somali health workers. *Midwifery*, 25(2), 181-186.
- Tayebi, T., Zahrani, S. T., & Mohammadpour, R. (2013). Relationship between adequacy of prenatal care utilization index and pregnancy outcomes. *Iranian Journal of Nursing and Midwifery Research*, 18(5), 360-366.
- Terry, L., & Harris, K. (2013). Female genital mutilation: A literature review. *Nursing Standard*, 28(1), 41-47.
- Tews, D. S., Heany, J., Jones, J., VanDerMoere, R., Madamala, K. (2012). *Embracing quality in public health: A practitioner's quality improvement guidebook (2nd ed)*. Retrieved from https://www.mphiaccredandqi.org/wp-content/uploads/2013/12/2012_02_28_Guidebook_web_v2.pdf
- The W. Edwards Deming Institute. (2014) Theories & Teachings. Retrieved from <https://deming.org/theman/theories/pdsacycle>
- Turkewitz, J. (June 10, 2014). A fight as U.S. girls face genital cutting abroad. *The New York Times*. Retrieved from http://www.nytimes.com/2014/06/11/us/a-fight-as-us-girls-face-genital-cutting-abroad.html?_r=0
- Varkey, P., Sathanathan, A., Scheifer, A., Bhagra, S., Fujiyoshi, A., Tom, A., & Murad, M. (2009). Using quality-improvement techniques to enhance patient education and counseling of diagnosis and management. *Quality In Primary Care*, 17(3), 205-213.
- WellShare International. (2012). Retrieved from <http://www.wellshareinternational.org/media-center/videos>

- Widmark, C., Leval, A., Tishelman, C., & Ahlberg, B. M. (2010). Obstetric care at the intersection of science and culture: Swedish doctors' perspectives on obstetric care of women who have undergone female genital cutting. *Journal of Obstetrics and Gynaecology*, 30(6), 553-558.
- Wilson, L. (2012). Cultural competence: Implications for childbearing practices. *International Journal of Childbirth Education*, 27(1), 10-17.
- World Health Organization. (2014). *Female genital mutilation*: Fact sheet N 241. Retrieved from <http://www.who.int/mediacentre/factsheets/fs241/en/>
- Wuest, S. S., Raio, L. L., Wyssmueller, D. D., Mueller, M. D., Stadlmayr, W. W., Surbek, D. V., & Kuhn, A. A. (2009). Effects of female genital mutilation on birth outcomes in Switzerland. *BJOG: An International Journal Of Obstetrics & Gynaecology*, 116(9), 1204-1209. doi:10.1111/j.1471-0528.2009.02215.x
- Zaccagnini, M. E., & White, K. W. (2011). *The doctor of nursing practice essentials: A new model for advanced practice nursing*. Sudbury, MA: Jones and Bartlett.

APPENDIX A. PERMISSION FOR USE

To: womenshealth@mayo.edu

I would like to use the DVD *A Somali Pregnancy in America* in a community clinic with our Somali women. Do I need to have permission to use this DVD? The DVD will be shown during prenatal visits and it will not be duplicated, distributed, or excerpted.

If I need to obtain permission, whom do I contact for this?

Karon Garrett, RN, DNP-Student

North Dakota State University

Karon~

Our office produced the DVD and we can give you permission to use it. Would you like any extra copies? If so, I can mail you some. I will just need your mailing address.

Thanks,

[Jillian Himli](#) | Administrative Assistant to: Dr. Rebecca Bahn, Jessica Schmitt, Dr. Lynne Shuster
| 507-255-7102 | Fax: 507-538-8378 | himli.jillian@mayo.edu | [Mayo Clinic](#) | 200 First Street
SW | Rochester, MN 55905 | www.mayoclinic.org

APPENDIX B. MEDLINE PLUS RESOURCES

Pregnancy

- A Healthy Pregnancy
Xaamilo caafimaad qabta - af Soomaali (Somali) Bilingual PDF
Health Information Translations
- Changes to Your Baby and Your Body during Pregnancy
Isbeddelka ku dhaca ilmahaaga iyo jidhkaaga intaad uurka leedahay - af Soomaali (Somali) Bilingual PDF
Health Information Translations
- Concerns and Discomforts of Pregnancy
Dhibta iyo Raaxo-darada Uurka - af Soomaali (Somali) Bilingual PDF
Health Information Translations
- Exercising during Pregnancy
Jimicsiga Xilliga Uurka - af Soomaali (Somali) Bilingual PDF
Health Information Translations
- Nausea and Vomiting during Pregnancy
Lallabada iyo Matagga Inta Uurku Jiro - af Soomaali (Somali) Bilingual PDF
Health Information Translations

HIV/AIDS and Pregnancy

- Pregnancy and HIV
Uurka iyo HIVga - af Soomaali (Somali) Bilingual PDF
Health Information Translations

High Blood Pressure in Pregnancy

- High Blood Pressure in Pregnancy
Cadaadis Dhiig oo Sarreeya waqtiga Uurka - af Soomaali (Somali) Bilingual PDF
Health Information Translations

Diabetes and Pregnancy

- Diabetes during Pregnancy
Kaadi sonkorowga Waqtiga Uurka - af Soomaali (Somali) Bilingual PDF
Health Information Translations

Prenatal Care

- Fetal Movement Count
Tirada Dhaq-dhaqaaqa Uur ku Jirta - af Soomaali (Somali) Bilingual PDF
Health Information Translations

- Prenatal Care
Daryeelka Dhalmada ka Hor - af Soomaali (Somali) Bilingual PDF
Health Information Translations
- Prenatal Care - English
Xannaanada Hooyada - af Soomaali (Somali) Multimedia
Healthy Roads Media

Prenatal Testing

- AFP (Alpha-Fetoprotein) Test
Baaritaanka AFP (Alpha-Fetoprotein) - af Soomaali (Somali) Bilingual PDF
Health Information Translations
- Amniocentesis
Baaritaanka Dheecaanka Uur-jiifka ku Hareereysan - af Soomaali (Somali) Bilingual PDF
Health Information Translations
- Non-Stress Test in Pregnancy
Baarid Uur oon Cadaadis Lahayn - af Soomaali (Somali) Bilingual PDF
Health Information Translations

Childbirth

- Epidural Pain Relief for Labor and Delivery
Xanuun ilowsiiska Epidural ee foosha iyo dhalmada - af Soomaali (Somali) Bilingual PDF
Health Information Translations
- Signs of Labor
Calaamadaha Foosha - af Soomaali (Somali) Bilingual PDF
Health Information Translations
- Stages of Labor
Heerarka Foosha - af Soomaali (Somali) Bilingual PDF
Health Information Translations
- Your Recovery After Vaginal Birth
Bogsashadaada Ka Dib Umushaada Dabiiciga ah - af Soomaali (Somali) Bilingual PDF
Health Information Translations
- Your Recovery After Cesarean Birth
Kasoo doogista ilme-lagugu soo qalay - af Soomaali (Somali) Bilingual PDF
Health Information Translations

Postpartum Depression

- Emotional Changes After Giving Birth
Isbeddellada Dareen ahaaneed Dhalidda ka Dib - af Soomaali (Somali) Bilingual PDF
Health Information Translations
- Postpartum Depression - English
Niyad-jabka Dhalmada Kaddib - af Soomaali (Somali) Multimedia
Healthy Roads Media

Infant and Newborn Care

- Hearing Test for Your Baby
Baaritaanka Maqalka ee Ilmahaaga loogu talaggalay - af Soomaali (Somali) Bilingual PDF
Health Information Translations
- Male Circumcision
Gudniinka Wiilasha - af Soomaali (Somali) Bilingual PDF
Health Information Translations
- Car Seat Safety - English
Ammaanka Kursiga Baabuurka - af Soomaali (Somali) Multimedia
Healthy Roads Media
- Caring for Your Baby
Dhaqaalaynta Ilmahaaga - af Soomaali (Somali) Bilingual PDF
Health Information Translations
- Caring for Your New Baby - English
Daryeelka Ilmahaaga Hadda Ama Dhawaan Dhashay - af Soomaali (Somali) Multimedia
Health Information Translations
- Coping with Your Baby's Crying
La Qabsiga Cunug Ooyaya - af Soomaali (Somali) Bilingual PDF
Health Information Translations
- How to Bathe Your Newborn Baby
Sidee loo nadiifiyaa ilmahaaga dhashay iminka - af Soomaali (Somali) Bilingual PDF
Health Information Translations
- Planning Ahead for the Birth of Your Baby
Qorshaha Isu-diyarinta Dhalashada Ilmahaaga - af Soomaali (Somali) Bilingual PDF
Health Information Translations
- Teething
Ilko-baxa - af Soomaali (Somali) Bilingual PDF
Health Information Translations

- When Should I Call My Baby's Doctor?
Goorma Ayay Tahay Inaan Waco Dhakhtarka Ilmahayga? - af Soomaali (Somali)
Bilingual PDF
Health Information Translations
- Your New Baby
Ilmahaaga Cusub - af Soomaali (Somali) Bilingual PDF
Health Information Translations

Infant and Newborn Development

- Infancy - English
Ilmaha yar - af Soomaali (Somali) Multimedia
Healthy Roads Media

Retrieved from www.nlm.nih.gov/medlineplus/languages/somali.html

APPENDIX C. IRB APPROVAL



May 30, 2014

FederalWide Assurance FWA00002439

Tina Lundeen
Department of Nursing
Sudro Hall 222E

Re: IRB Certification of Exempt Human Subjects Research:
Protocol #PH14286, "Development of Prenatal Educational Library in the Somali Language for Family HealthCare"

Co-investigator(s) and research team: **Karon Garrett**

Certification Date: 5/30/14 Expiration Date: 5/29/17
Study site(s): **Family HealthCare Center**
Funding: **n/a**

The above referenced human subjects research project has been certified as exempt (category # 1,2) in accordance with federal regulations (Code of Federal Regulations, Title 45, Part 46, *Protection of Human Subjects*). This determination is based on protocol materials (received 5/29/14).

Please also note the following:

- If you wish to continue the research after the expiration, submit a request for recertification several weeks prior to the expiration.
- Conduct the study as described in the approved protocol. If you wish to make changes, obtain approval from the IRB prior to initiating, unless the changes are necessary to eliminate an immediate hazard to subjects.
- Notify the IRB promptly of any adverse events, complaints, or unanticipated problems involving risks to subjects or others related to this project.
- Report any significant new findings that may affect the risks and benefits to the participants and the IRB.
- Research records may be subject to a random or directed audit at any time to verify compliance with IRB standard operating procedures.

Thank you for your cooperation with NDSU IRB procedures. Best wishes for a successful study.
Sincerely,

Kristy Shirley, CIP, Research Compliance Administrator

INSTITUTIONAL REVIEW BOARD
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