Encouraging the Health of Mothers, Infants, and Our Budget Through the Promotion of Midwifery and Home Birth: Information Makes a Difference

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Encouraging the Health of

Mothers, Infants, and Our Budget

Through the

Promotion of Midwifery and Home Birth:

Information Makes a Difference

by

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Abstract

This study evaluated university students' perception of their likeliness to choose home birth and midwifery care. Only 77% of participants recalled having ever heard the term "midwife" and of those reporting to know the term, several supplied incorrect definitions. The participants' responses were evaluated in regard to prior knowledge of the term midwife and likeliness to choose a midwife and/or home birth. Significant findings include a greater likeliness to consider a home birth when participants report prior knowledge of the term midwife. One hundred eighteen of the participants read the pamphlet "The Rights of Childbearing Women" (Childbirth Connection, 2010) and 113 did not. Impact of the pamphlet was examined to see how easily demand could be affected through a generic educational tool. Participants who read the pamphlet scored no higher than participants who did not read the pamphlet on likeliness to consider a home-birth setting for the birth of their children, consideration of a home-birth in specific scenarios, use of a midwife, as well as a sub-scale measuring likeliness to use a non-hospital setting. However, between-group differences were observed, with pamphlet readers expressing greater agreement with the following statements: (1). Where a woman chooses to birth is up to her, (2). A woman should birth where she feels most safe, be it home or hospital, and (3). Insurance should cover home births. The reverse relationship was found on the comment "a woman should obey all instructions given by her doctor."

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Chapter I: Introduction

Numerous studies on home birth provide evidence supporting the overall safety of home births using a certified professional midwife (CPM) with the back-up of a modern hospital (Olsen, 1997; Johnson and Daviss, 2005; de Jonge, van der Goes, Ravelli, Amelink-Verburg, Mol, Nijhuis, Gravenhorst, and Buitendijk, 2009). There is also evidence that home births with CPMs lead to increased maternal satisfaction (Villar, Carroli, Khan-Neelofur, Piaggio, and Gulmezoglu, 2008), increased breastfeeding rates (Zanardo, Svegliado, Cavallin, Giustardi, Cosmic, Litta, and Trevisanuto, 2010) and decreased use of dangerous interventions (i.e. forceps, vacuum, and cesarean delivery) (Durand, 1992; Chamberlain, Wraight, and Crowley, 1997). Additionally, in the text *A Chochrane Pocketbook: Pregnancy and Childbirth* (2008) by Hofmeyr, Neilson, Alfirevic, Crowther, Duley, Gulmezoglu, Gyte, & Hodnett, it is estimated that "for a woman and baby with no complications, the risk of an unexpected adverse event during a home birth may be smaller than risks specific to hospitalization, such as hospital acquired infections" (as cited by Wikipedia, 2011). However, many people are unfamiliar with the Midwifery Model of Care and are not aware that a home birth attended by a CPM is a safe and valid option.

Support from insurance companies, legislators, and the medical field will be necessary in order for all American women to truly experience what is considered by many respected organizations to be the basic rights of child bearing women, to choose where she gives birth and to have a professional attendant present. The following entities have explicitly expressed that "women desire and should be legally protected to birth their children in out-of- hospital settings": the American Public Health Association

(APHA), the Midwives Alliance of North America (MANA), the North American Registry of Midwives (NARM), the National Perinatal Association (NPA), the American College of Nurse Midwives (ACNM), and the World Health Organization(WHO) - the international authority on health care (Hill, 2011; Goodman, 2011; Wikipedia, 2010). A great number of nations, including the Netherlands and Great Britain (Wikipedia, 2011) actively support home birth, providing the appropriate resources to make it a valid option for mothers. Within the United States, all 50 states license Certified Nurse Midwives(CNMs), but only 24 states regulate certified professional midwives(CPMs) - the only midwives required to have out-of-hospital experience (MANA, 2011).

It seems that special interests and political dynamics are making efforts to find a trained professional to attend a home birth, a very difficult situation for many mothers, in the United States. In 2008, the American Medical Association (AMA) declared that hospital births are the safest option for all mothers (ama-assn.org) and the American College of Obstetricians and Gynecologists (ACOG) affirmed its agreement with the claim in 2009 (MacDorman and Menacker, 2010), effectively condemning homebirths. Without the support of the AMA or ACOG, hospitals and their doctors are hesitant to collaborate with home birth care providers. In many states (Alabama, Georgia, Hawaii, Illinois, Indiana, Iowa, Kentucky, Maryland, North Carolina, and South Dakota) it is, in fact, illegal for CPMs to attend a birth, as a care provider, (MANA, 2011) because they do not hold nursing degrees. These states refuse to license the nationally-certified apprentice-trained midwives often charging these practitioners with a felony crime for practicing medicine without a license (Dowdy, 2006; Potts, 2011). As a result, families

and society as a whole get the impression that home birthing is unsafe and illegal. This environment leads to home birth supporters becoming disenfranchised.

Statement of the Problem

In 2006, Wisconsin took action to legally protect the profession of home birth midwifery by licensing CPMs (Citizens for Midwifery, 2011 & Wisconsin State Legislature, 2006). Shortly thereafter, Southwest Technical College, in Fennimore, Wisconsin, began a program to educate and train direct-entry midwives (Southwest Tech.,2011). However, the State of Wisconsin, through BadgerCare Plus, still does not reimburse for the services of those midwives which it licenses (ForwardHealth Policies Department, 2011).

Medicaid programs cover the healthcare costs of uninsured expecting mothers and their infants. This cost is a significant portion of state and federal budgets. In 2006, 42% of all maternal childbirth-related hospital stays in the United States were billed to Medicaid, with charges billed for mother's pregnancy and delivery and newborn infants totaling $39 billion (Russo & Steiner, 2009). In 2005, it was estimated that nearly half of Wisconsin's births were funded by Medicaid. These births, paid for by the general public in order to give safe care to low income mothers and infants, cost the state $179.9 million dollars in that one year alone. The average Wisconsin hospital birth that year cost $5,791 (Forster, 2007).

In consideration of the ever growing cost of health care, many are contemplating the concepts of home health care and the age old profession of midwifery. In a study conducted in 1999, it was found that the average in-home birth cost 68% less than hospital births (Anderson and Anderson, 1999) and anecdotal evidence supports that figure now in 2011. Additionally, based on 2007 data, another study found uncomplicated vaginal births occurring in birth centers cost 78% less than those comparable births occurring in hospitals (Transforming Maternity Care,

2011). Indirect cost savings, such as those benefits of reduced recovery time, fewer infections, and the long term savings occurring from greater mental health and breastfeeding rates could also profoundly affect our economy. Serious consideration should be given to this safe way of reducing health care costs, which effectively maintains rates of infant and maternal health as well as increases overall satisfaction.

Despite the data referred to previously on the safety of home births with a trained provider and the back-up of a modern hospital, it appears that the American public is largely skeptical of the practice and the profession of midwifery. It appears that parents and future parents are unaware of home birth as a valid option, having little to no understanding of the profession of midwifery or the varying types of midwives. Seemingly, they are not aware of the extensive educational process involving a preceptor and portfolio, the books studied and workshops attended, or the national exam process that direct entry midwives complete.

Post-secondary students are our likely future policy makers and the soon-to-be parents of America's next generation. They are a likely population for inspiring cultural change, specifically a paradigm shift in the American birth scene, encouraging the health of mothers, infants, and our budget through the promotion of midwifery and homebirth. Many young Americans seemingly give little consideration to the birth of their future children; it is a topic to consider when the time comes. By this point it is often too late, with only a short amount of time to research options as they become apparent. While many students may consider the concept of parenthood to be far in the future, it is for the average American likely to happen by age 25 (BabyCenter, 2011).

Purpose of the Study

This study was designed to assess college students' attitudes about options available to families giving birth. Of particular interest was information regarding students' knowledge of and attitudes toward midwifery and home births. Specifically, what are students' opinions about a woman's right to choose the location and care provider for her child's birth and what do students think about society's responsibility to fulfill those rights (i.e. insurance coverage for all options)? This study also assessed an educational tool's effect on consumer attitudes regarding home birth and midwifery care.

The information acquired from this study may be used as verification of consumer demand. This can then be offered to legislators, insurance providers, and doctors, encouraging them to confidently support the field of midwifery and a mother's choice to birth at home. The literature review presented in this paper could also be used to inform these parties of the safety of homebirth and the advantages of midwifery care. With this information, several things could happen. Legislators could remove detrimental laws and put in place laws protecting women's rights. Insurance companies could include coverage for home birth and CPMs. Hospitals could encourage collaboration of doctors with local home birth attendants by stream-lining the referral process and welcoming midwives to continue to accompany the mother after admission to the hospital. Creating system wide support would greatly increase public confidence in the option to birth at home with the help of a midwife.

Assumptions of the Study

This study assumes students will accurately report their reactions to the subject matter. The survey includes concepts common in our society, but that may not be known by some students. It is a working assumption of the researcher that students would most likely choose the concepts which are familiar to them on this survey as well as when faced with them later in life.

Definitions of Terms

While the profession of midwifery is contentious here in the United States, midwives are recognized professionals throughout the world. To get a general description for some of the terms used in this study, Wikipedia (2010) was consulted as it explains the concepts in general terms as they apply throughout the world. According to Wikipedia:

Midwifery is a health care profession in which providers offer care to childbearing women during pregnancy, labor and birth, and during the postpartum period. They also care for the newborn and assist the mother with breastfeeding. In addition to providing care to women during pregnancy and birth, many midwives also provide primary care to women, well-woman care related to reproductive health, annual gynecological exams, family planning, and menopausal care.

Midwives are autonomous practitioners who are specialists in low-risk pregnancy, childbirth, and postpartum. They generally strive to help women have a healthy pregnancy and natural birth experience.

Midwives are trained to recognize, and deal with, deviations from the normal. Obstetricians, in contrast, are specialists in illness related to childbearing and surgery. Midwives refer women to general practitioners or obstetricians when a pregnant woman requires care beyond the midwives' area of expertise. In many jurisdictions, these professions work together to provide care to childbearing women. In others, only the midwife is available to provide care. A midwife may practice in any setting including in the home, the community, hospitals, clinics or health units.

In the United States there are several titles used for varying types of midwives. The Midwives Alliance of North America (MANA) defines each of the terms on their website. Their definitions of the terms are as follows:

Certified Midwife (CM) - an individual educated in the discipline of midwifery, who possesses evidence of certification according to the requirements of the American College of Nurse-Midwives. Certified Midwives do not hold a nursing degree. Some states use the CM title to designate those midwives certified by the state.

Certified Nurse Midwife (CNM) – an individual educated in two disciplines, nursing and midwifery. Likely she/he has completed a bachelor's degree and training as an RN and continued his/her education to earn a Master of Science in Nursing, specializing in childbirth. Certified Nurse Midwives can administer medications and currently practice under the supervision of a Medical Doctor in most states.

Direct-Entry Midwife (DEM) - refers to any person attending a birth as a midwife without a nursing degree. Most commonly this person has completed an apprenticeship and is educated in the discipline of midwifery through self-study, apprenticeship, a midwifery school, or a college- or university-based program distinct from the discipline of nursing. Many direct-entry midwives go on to obtain certification.

Certified Professional Midwife (CPM) - is a midwife who has passed a national accreditation exam and has completed a portfolio under the training of a preceptor. It is the only certification process that specializes in out-of-hospital settings.

Licensed Professional Midwife (LPM) - is a professional midwife licensed by one's state. Most states that license non-nurse midwives use the North American Registry of Midwives (NARM) certification as criteria for a license.

Lay Midwife - The term "Lay Midwife" has been used to designate an uncertified or unlicensed midwife who was educated through informal routes such as self-study or apprenticeship rather than through a formal program. This term does not necessarily mean a low level of education, just that the midwife either chose not to become certified or licensed, or that there was no certification available given his/her type of education (as was the fact before the Certified Professional Midwife credential was available). Other similar terms to describe uncertified or unlicensed midwives are traditional midwife, traditional birth attendant, granny midwife and independent midwife.

Starting in 1995, the Midwifery Task Force, consisting of representatives of the Midwives Alliance of North America (MANA), the North American Registry of Midwives (NARM), the Midwifery Education Accreditation Council (MEAC) and Citizens for Midwifery (CfM) worked together to write a "definition" of what is called the "Midwives Model of Care" (Citizens for Midwifery, 2011).

The **Midwives Model of Care** is based on the fact that pregnancy and birth are normal life processes.

The Midwives Model of Care includes:

- *Monitoring the physical, psychological, and social well-being of the mother throughout the childbearing cycle.*
- *Providing the mother with individualized education, counseling, and prenatal care, continuous hands-on assistance during labor and delivery, and postpartum support*
- *Minimizing technological interventions*
- *Identifying and referring women who require obstetrical attention*

The application of this woman-centered model of care has been shown to reduce the incidence of birth injury, trauma, and cesarean section.

Chapter II: Literature Review

A review of current literature on the subject of home birth attended by direct-entry midwives revealed data pertaining to safety outcomes and America's volatile political environment which surrounds the subject. The fact that less than 1% of births occur in a home setting in the United States (MacDorman et al, 2010) suggests that Americans may be struggling to identify confidence in themselves and/or the system in regards to home birthing. In creating this research design, the author desired to obtain a greater understanding of consumers' attitudes surrounding home birth and midwifery care as well as insight into the possibility of creating a greater consumer confidence in the matter. Neither studies on the subject of consumer attitudes toward home birth and midwifery, nor studies on the impact of educational tools on consumer demand of home birth were discovered during the process of review.

In 2001 the American Public Health Association (APHA) issued a policy statement entitled "Increasing Access to Out-Of-Hospital Maternity Care Services Through State-Regulated and Nationally-Certified Direct-Entry Midwives." The intention of this document was to reaffirm the organization's stance that maternity services can be provided in a variety of locations, by a variety of professionals. It specified that birth can occur safely in out-of-hospital settings. It also recognized that legally-regulated and nationally-certified direct-entry midwives can serve clients desiring safe, planned, out-of-hospital maternity services. This statement expresses APHA's support for an increase in home births through the recognition of all routes of education available for professional midwives. The APHA also urged public and private insurance plans to equitably reimburse for the services of direct entry midwives (DEMs).

One way to substantially validate the policy of insurance reimbursement for the services of all certified midwives (CMs) would be through federal or state legislation regarding Medicaid

policy. The APHA states that out-of-hospital settings have the potential for reducing the costs of maternity care and cites out-of-hospital care as a possible way to address limited access to quality maternity services in rural communities. Unfortunately, the federal Department of Health and Human Services Center for Medicare and Medicaid does not include CPMs as providers in Rural Health Clinics, nor does it reimburse for the costs incurred for a birth at a freestanding birth clinic or at home (U.S. Department of Health and Human Services Centers for Medicaid and Medicare Services (CMS), 2010). Current Medicaid policy limits the term midwife to include only certified nurse-midwives (CNMs) and does not cover the services of direct entry midwives, certified or not (CMS, 2011). There are ten states that currently reimburse for the services of a non-nurse midwife. The state of Wisconsin is not one of them (MANA, 2011).

The APHA notes that an epidemiological study of Certified Professional Midwives (CPMs) is currently underway in order to further substantiate practice outcomes, safety, client satisfaction, and practitioner competency. The APHA also advises that government monies be invested into such research. However, the same political environment that inhibits states, including Wisconsin, from reimbursing for services, may also be inhibiting research on home birth with direct-entry midwives. It has been noted that inadequate data on home births throughout the United States may be caused by variations in state laws regarding midwifery practices and home births (MacDorman, Mirian, Menacker, Fay, and Declercq, 2010). Births are most often reported through the process of applying for a birth certificate and/or social security number. Some families do not report births at all to the government because of immigration status or religious beliefs. In several states the number of births attended by direct-entry midwives goes unreported as a result of fear. Without consistent laws regarding birth-certificate application research will continue to be inhibited, making thorough comparison impossible.

Despite the challenges faced by researchers, some data has been collected in certain states. This research shows that planned home birth is as safe as hospital births in low risk mothers. One study made this conclusion after researchers examined the results of 5,418 planned home births in North America with CPMs (Johnson & Daviss, 2005). Another study involving 529,688 low-risk planned home births in Britain, concluded that a home birth does not increase the risks of perinatal mortality and severe perinatal morbidity among low risk women, provided the maternity care system facilitates this choice through the availability of well-trained midwives and through a good transportation and referral system (de Jonge, van der Goes, Ravelli, Amelink-Verburg, Mol, Nijhuis, Gravenhorst , Buitendijk, 2009). In 1992, Durand looked at home births on a commune in Tennessee called The Farm, which occurred between 1971 and 1989. This study found that after comparing the results of 1,707 home births attended by direct entry midwives to those of a comparable group of 14,033 physician attended hospital births, the home birth group shared similar safety outcomes to the hospital group, while experiencing fewer assisted deliveries (i.e. the use of forceps, vacuum, or cesarean surgery). The home birth population experienced assisted deliveries 2.11% of the time, while the hospital birth population experienced assisted deliveries 26.6% of the time. Mothers who birthed at The Farm experienced a cesarean section rate of 1.46% compared to the hospital rate of 26.6%. Simply put, when birthing in a hospital, infants were ten times more likely to be dangerously pulled from their mothers' bodies and mothers were twenty times as likely to experience major surgery.

One WHO report recently published (Gibbons, Belizan, Lauer, Betran, Merialdi, & Athabe, 2010) suggested that a healthy cesarean rate is less than 15%, with rates of morbidity and mortality in mothers and neonates increasing with the rate of cesarean after that point. A previous report was cited, which had been published in the Lancet in 1985 and entitled

Appropriate Technology in Birth. The report had stated that results >15% may result in more harm than good and declared, "There is no justification for any region to have a cesarean rate higher that 10-15%". Meanwhile, consistent with the hospital birth rates reported in Durand's (1992) aforementioned study of births, the United States currently reports 32.9% of infants are born surgically(Childbirth Connection, 2011). This suggests that the United States may be increasing its morbidity and mortality rates via the overuse of cesareans, as well as overburdening our economy with excessive medical costs. The WHO estimated that in 2008 the United States spent $687,167,996 on unnecessary cesarean surgeries (Gibbons et al, 2010). This figure is not calculated using home birth as a comparison. Notably the average uncomplicated vaginal birth costs 68% less in home than in a hospital (Anderson & Anderson, 1999).

The mental and physical health of our mothers and infants will most likely evidence the benefits of homebirth and midwifery care. Future research should focus on rates of postpartum depression and attachment disorders, incidence of mental and physical illnesses, and rates of breastfeeding which has great potential for reducing addictions, auto immune diseases,(Jackson and Nazar, 2006) and cancers (Wikipedia, 2011). As evidenced, hospital birthing mothers are more likely to experience a cesarean birth. Aside from the direct risks and cost of cesarean births, there are many indirect consequences, such the impact on successful breastfeeding rates (Zanardo et al, 2010). Zanardo et al's (2010) study examined the correlation between cesarean births and breastfeeding rates. This study found the prevalence of breastfeeding in the delivery room of vaginal and cesarean births to be 75% and 3.5% respectively. Vaginal delivery was also associated with higher rates of breastfeeding at discharge and at subsequent follow-up dates of 7 days, 3 months, and 6 months post-birth. It is estimated that the United States could save $13

billion dollars and prevent nearly 1,000 infant deaths per year if most American mothers would exclusively breastfeed for the first six months of their child's life (Falco, 2010).

The WHO reports published in 2010 shed a much needed light upon our childbirth practices. The title of the previously cited report concerning cesarean rates in the United States is quite telling considering our current health care crisis; "The Global Numbers and Costs of Additionally Needed and Unnecessary Cesarean Sections Performed per Year: Overuse as a Barrier to Universal Coverage." A companion report was titled, "Determinates of Cesarean Section Rates in Developed Countries: Supply, Demand and Opportunities for Control." This study concluded that demand from consumers, supply provided by doctors and health system policies all play a role in the rising cesarean rate. Perhaps more importantly, the study also found that health care system financing had the largest impact on aggregate levels of cesarean delivery (Lauer, Betran, Merialdi, and Wojdyla, 2010).

Another report published by the WHO was a comprehensive study on health system financing and included the WHO's recommendations to nations in order to bring about Universal Coverage. This concept is defined as all people having access to health services and not suffering financial hardship paying for them. The report suggests that as countries face increasing health care costs and struggle to continue to provide high levels of coverage, they must work toward greater efficiency. As no one desires compromised care, increased efficiency would extend coverage while maintaining or decreasing costs. The points presented within this paper address two of the WHO's ten leading sources of inefficiency: the inappropriate and ineffective use of medicines, specifically narcotics and antibiotics used in labor and during and after cesarean deliveries and the overuse and supply of health-care products and services, specifically cesarean surgeries. It is also discussed that one of the most costly insurance schemes

is common in American obstetrics. This scheme is a fee for service paid for by pooled funds of policy holders. The report goes on to say that "because the insurer is paying, neither the doctor nor the patient has an incentive to restrict costs and over-servicing is the inevitable result." Laurer et al were cited, as they showed a 29.8% decrease in Cesarean-section rates when health services were provided by government. As this health systems financing report outlines an agenda for action, it states under the heading "Use resources more efficiently and equitably",

> *Preventive and promotive interventions can be cost effective and reduce the need for subsequent treatment. Generally speaking, however, there is much greater pressure on politicians to ensure access to treatment, and many financing systems focus largely on paying for this rather than population based forms of prevention and promotion. In addition, left to their own devices, individuals will generally underinvest in prevention. This means it is sometimes necessary for governments to fund population-based prevention and promotion activities separately from the financing system for personal services linked largely to treatment and rehabilitation.* *(WHO, p.90)*

As pregnancy and child birth are normal biological processes, the model proposed in the previous paragraph would suggest that the American federal and state governments make greater strides toward the prevention of complications during pregnancy and child birth and the promotion of appropriate attendees for low risk women. This would include assuring availability of the needed obstetrician while reserving referrals to such specialists and cesarean deliveries for complicated/high-risk pregnancies. Denmark, Sweden, and Holland all have lower rates of infant mortality than the United States (CIA.gov, 2011). It has been noted that "midwives provide 'the first line' of care for normal pregnant women and are viewed as essential to the excellent perinatal outcomes these three countries enjoy" (McKay, 1993). Nearly 30% of babies born in the Netherlands are born at home (Hall, 2009). The University of Copenhagen found that

a lower frequency of lower Apgar scores and severe lacerations, as well as fewer medical interventions including augmentation, episiotomy, operative vaginal birth, and cesarean births occurred in the homebirth population (Olsen, 1997).

A segment from a British news article explains the home birth environment there. Akin to the WHO report, it refers to how a government reacts to demand in order to provide certain services, scrambling to find funds to pay for those services. Meanwhile, investment in promoting certain options would likely prove more cost-effective.

> *The decline in UK home births began after the Peel Report of 1970, which said every woman should have the right to give birth in a hospital. As Professor Steer says, "I'm old enough to remember the 60s, when women marched in the streets, demanding more places be made available for hospital births." But it took less than a generation for women to realise what they had lost: by 1992, a survey by the expert maternity committee found that 72% of women said they wanted an alternative to a hospital delivery. Of those, 44% were interested in home birth.*
>
> *The government, the Royal College of Obstetricians and Gynaecologists, and the Royal College of Midwives came out in support of greater choice for women, including access to home births. Britain's maternity services were duly transformed. The conundrum today is why, despite 50% of women regularly polling as being in support of the practice, the take-up is still so low.*
>
> *"You need three things in order for women to be free to choose home births," says Dr Leonie Penna, a consultant in foetal medicine and obstetrics at King's College hospital. "You need women who want a home birth, you need a supportive infrastructure and you need midwives who are happy to deliver it. Unfortunately, we obstetricians undermine the first two – and sometimes even all three. By our nature, we are very risk averse. Many of us blow out of proportion the risk inherent in home births, counselling women against it in a very paternalistic way. The fewer women chose it, the more the infrastructure is weakened. Then midwives begin to lose confidence, and suddenly the entire structure becomes shaky."* *-Amelia Hill. April 19, 2011*

Chapter III: Methodology

Hypotheses

The first hypothesis was that participants who had read the pamphlet would score higher on a measure of likeliness to consider a home-birth setting for the birth of their children (question 3) and would score higher on a measure of likeliness to consider a home-birth in specific scenarios (a scale score combining answers to questions 4(a) through 4(h)) than those students who had not read the pamphlet.

The second hypothesis was that participants who had read the pamphlet would score higher on a measure of likeliness to use a midwife for the birth of their children (a scale score combining answers to questions 17(a) and 17(b)) than those who had not read the pamphlet.

The third hypothesis was that participants who had read the pamphlet would score higher on a measure of likeliness to choose birth centers or in-home settings for the birth of their children (a scale score based on answers to questions 20(a) and 20(b)) than those who had not read the pamphlet.

Subject Selection and Description

Participants were undergraduate students of a small/rural Midwestern university. The researcher was invited to enter classes and asked students to participate. Most participants completed the survey during class time, while others came to the library outside of class to earn extra credit for psychology courses. With the exception of General Psychology students who received extra credit for participating, there was no compensation for participation. A wide variety of majors were observed as participants were students of courses in communications, biology, and psychology. A variety of majors was desired as the researcher believed there would

be varying degrees of familiarity and comfort with the subject across the population which would likely concentrate within varying fields of study.

Instrumentation

The "Attitudes Regarding Options Surrounding Childbirth" survey (Appendix A) was created by the researchers, Robin Cline and Dominic Barraclough. This survey contains yes/no, Likert scale, and short answer questions evaluating students' familiarity with and preferences toward specific birthing options, including a variety of practitioners and locations. Demographic information was also acquired.

Procedures

The researchers contacted various professors via email and through casual conversation and requested time in their class to survey students. After a brief explanation of the survey to various professors via email and personal contacts, the researcher was invited to enter the various undergraduate classes. Students were asked while in class to participate and offered the option to decline. After a brief introduction of the researcher's name and department affiliation, informed consent was presented to the students.

One hundred and twenty participants were asked to read a pamphlet before completing the survey. One hundred and thirteen participants were asked to complete the survey, and upon completion of the survey, they were given the pamphlet to read at will. The pamphlet is entitled "The Rights of Childbearing Women" and outlines basic maternity rights that Childbirth Connection has identified and promotes for all childbearing women in the United States.

Efforts to match the control group with those who received the pamphlet were made. Prior to surveying a class the researcher weighed factors such as major, year of education, gender, race, and possible previous exposure to the subject while at the university, keeping the

samples as balanced as possible. For example, the researcher was able on two occasions to survey sections of the same classes with the same professors; this occurred in the biology and communications classes. The remaining balance of students was acquired through psychology courses and the researcher continued to keep matched sampling in mind. As General Psychology meets general education requirements, a great deal of variance was observed within that population.

Chapter IV: Results

Demographics

A total of 231 participants completed surveys. The mean age of participants was 20.97 (sd = 4.74). Out of the 231 participants, 107 (46.7%) were female and 120 (52.4%) were male, two reported being transgender, and two others did not report. Sexual orientation information was asked, with 224 participants responding: 3 (1.3%) reported that they were gay, 2 (.9%) were lesbian, 6 (2.7%) were bisexual, 213 (95.1) were heterosexual. Of the 228 students who reported their year of education, 82 (36.0%) were freshman, 51 (22.4%) were sophomores, 33 (14.4%) were juniors, and 62 (27.2%) were seniors. Of the 228 participants who reported their racial identification, 3 (1.3%) were Asian, 4 (1.7%) were black, 2 (.9%) were Hispanic, 2 (.9%) were Pacific Islander, 215 (93.1%) were White, and 2 (.9%) were other. Of the 227 participants that reported regarding the size of their hometowns, 45 (19.5%) came from an urban area, 49 (21.2%) came from a suburban area, and 133 (57.6%) came from a rural area. Participants were also asked to report on their current healthcare situation, with 227 reporting; 153 (66.2%) did not feel that their healthcare was a financial burden, while 57 (24.7%) reported it was somewhat a burden and 17 (7.4%) reported it was a large burden.

Overall, 118 participants read the pamphlet and 113 did not. The mean age of participants who read the pamphlet was 20.77 years of age (sd = 2.91) and the mean age of those who did not read the pamphlet was 21.19 years of age (sd = 6.08). Sixty-four females read the pamphlet and 43 did not, 52 males read the pamphlet and 68 did not, and 2 transgender students did not read the pamphlet. Differences, in terms of reported gender between the two groups, appeared large, so a Chi-squared test was run and results were seen to be statistically significant ($X^2(2)=8.22$, $p<.02$). The ratio of women to men was greater in the group that read the

pamphlet. Additionally, of those reading the pamphlet 1 reported being gay, 2 lesbian, 2 bisexual and 107 heterosexual, while of those who did not read the pamphlet, 2 reported being gay, 0 lesbian, 4 bisexual, and 106 heterosexual. The two groups were not statistically different based on sexual orientation($X^2(4)=4.oo$, $p<.41$). Also, reading the pamphlet were 36 freshmen, while 46 freshmen did not, 23 sophomores read, while 28 did not, 16 juniors read, and 16 did not and lastly, 40 seniors read the pamphlet, while 21 did not. Significant differences between groups based on year of education were not found($X^2(5)=9.56$, $p<.09$). Within the group of those reading the pamphlet, 3 participants reported being Asian, 2 Black, 1 Hispanic, 0 Pacific Islander, 108 White, and 2 of other ethnicity. Within those who did not read the pamphlet; 0 participants identifying as Asian, 2 as Black, 1 Hispanic, 2 Pacific Islander, 107 White, and 0 of other ethnicity. Examination of group differences regarding ethnicity showed no statistical significance ($X^2(5)=6.94$, $p<.23$).

The two groups were statistically equivalent with the exception of the number of men and women: the group that read the pamphlet had significantly more women while the group which did not read it had significantly more men. An examination of the major survey items and sex was conducted, and found that men and women did not have dissimilar scores. Because of this, the difference between the treatment and control groups was decided to be inconsequential.

Hypotheses Results

The first hypothesis was that participants who had read the pamphlet would score higher on a measure of likeliness to consider a home-birth setting for the birth of their children (question 3) and would score higher on a measure of likeliness to consider a home-birth in specific scenarios (a scale score combining answers to questions 4(a) through 4(h)) than those students who had not read the pamphlet. Question number three read as follows: If you were

planning for the birth of your child, how likely would you be to consider a homebirth? Participants who read the pamphlet (n=118, mean score of 1.66 (sd=.98)) scored no higher than participants who did not read the pamphlet (n=112, mean score of 1.51 (sd=.83); F(1,228)=1.61, p<.21). The second measure of a participant's likeliness to consider homebirth, the subscale of questions asking about home birth in specific scenarios, showed that participants who read the pamphlet (n=118, mean score of 25.26 (sd= 7.44)) scored no higher than those students who did not read pamphlet (n=111, mean score of 25.45 (sd=6.98); F(1,227)=.039, p<.84).

The second hypothesis was that participants who had read the pamphlet would score higher on a measure of likeliness to use a midwife for the birth of their children (a scale score combining answers to questions 17(a) and 17(b)) than those who had not read the pamphlet. Results of the midwife use subscale showed that participants who read the pamphlet (n=118, mean score of 5.18 (sd=2.68)) scored no higher than participants who did not read the pamphlet (n=89, mean score 5.24 (sd=2.41); F(1,205)=.03, p<.87).

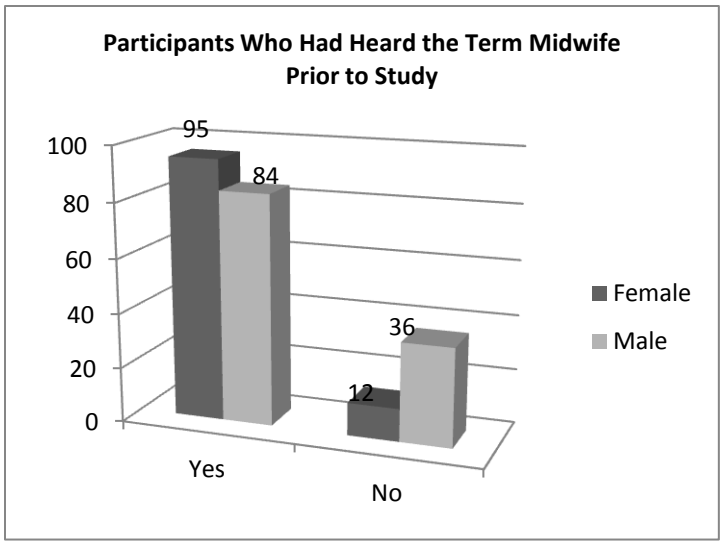
The third hypothesis was that participants who had read the pamphlet would score higher on a measure of likeliness to choose birth centers or in-home settings for the birth of their children (a scale score based on answers to questions 20(a) and 20(b)) than those who had not read the pamphlet. Results of the subscale non-hospital setting showed that participants who read the pamphlet (N=113, mean score 5.58 (sd=2.04)) scored no higher than those who did not read the pamphlet (n=109 mean score 5.73 (sd=2.09); F(1,220)=.33, p<.57).

Exploratory Results

When preparing for this study we wondered whether or not students ever think about the subject of childbirth. It was discovered that 59% of participants had in fact thought about the birth of their own child and 81% of them had watched a birth on television. Only 77% participants had ever heard of the term midwife and of those reporting to know the term, many supplied incorrect definitions.

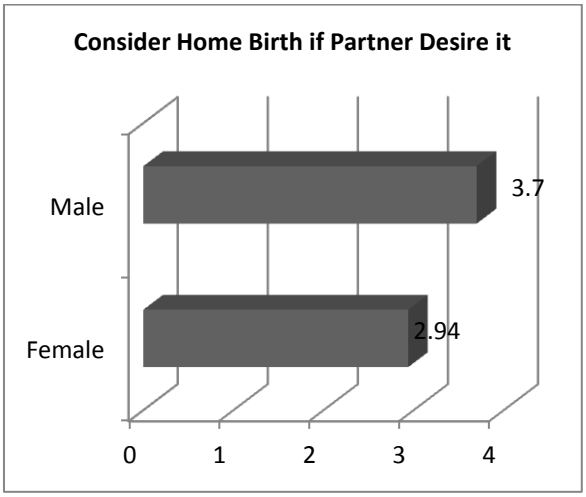
Additional statistics were run to examine unexpected differences between participant groups. Several individual survey items were found to have statistically significant between-group differences.

Figure 1: Prior Knowledge of the Term Midwife by Gender



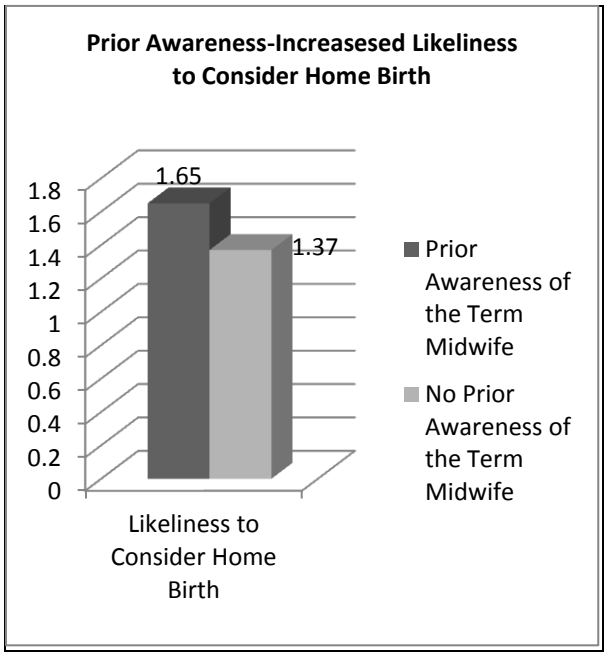
Participants were asked to answer yes or no (scored as 2 and 1 respectively) in response to the question, "Prior to participating in this study, had you ever heard the term midwife?" Ninety-five females replied yes and 12 replied no, while 84 males replied yes, and 36 males replied no. A significant gender difference was seen with females being the most likely to have heard the term midwife X^2 (2) = 18.92, p<.00.

Figure 2: Males More Likely to Consider a Home Birth if Their Partner Desired One



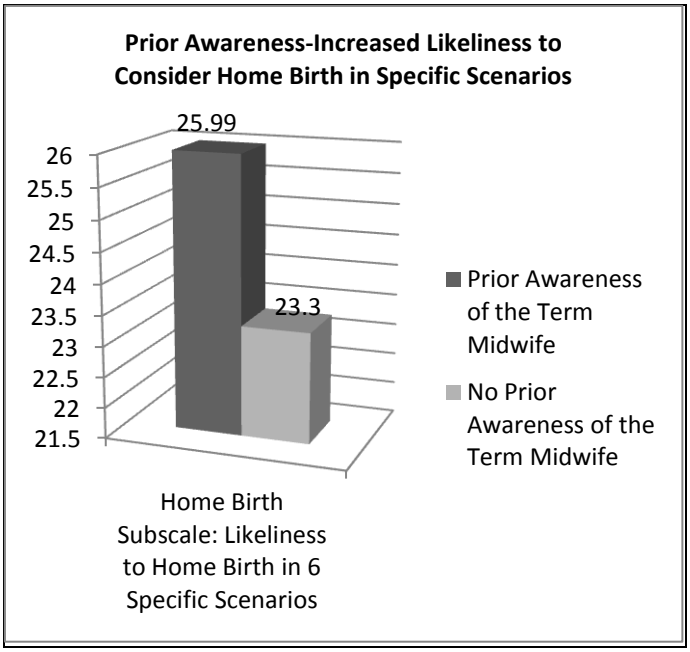
It was also observed that males were significantly more likely to claim they would consider a home birth if their partner wanted one. Using a Likert scale of 1-5, in response to the question, "…how likely would you be to consider a home birth if your partner wanted one," males (n=120 with a mean of 3.7 (sd=*1.07*)) scored significantly higher when compared to females (n=107, mean score of 2.94 (sd=*1.06);* F(2)=17.29, p<.00).

Figure 3: Prior Awareness of the Term Midwife and Consideration of a Home Birth



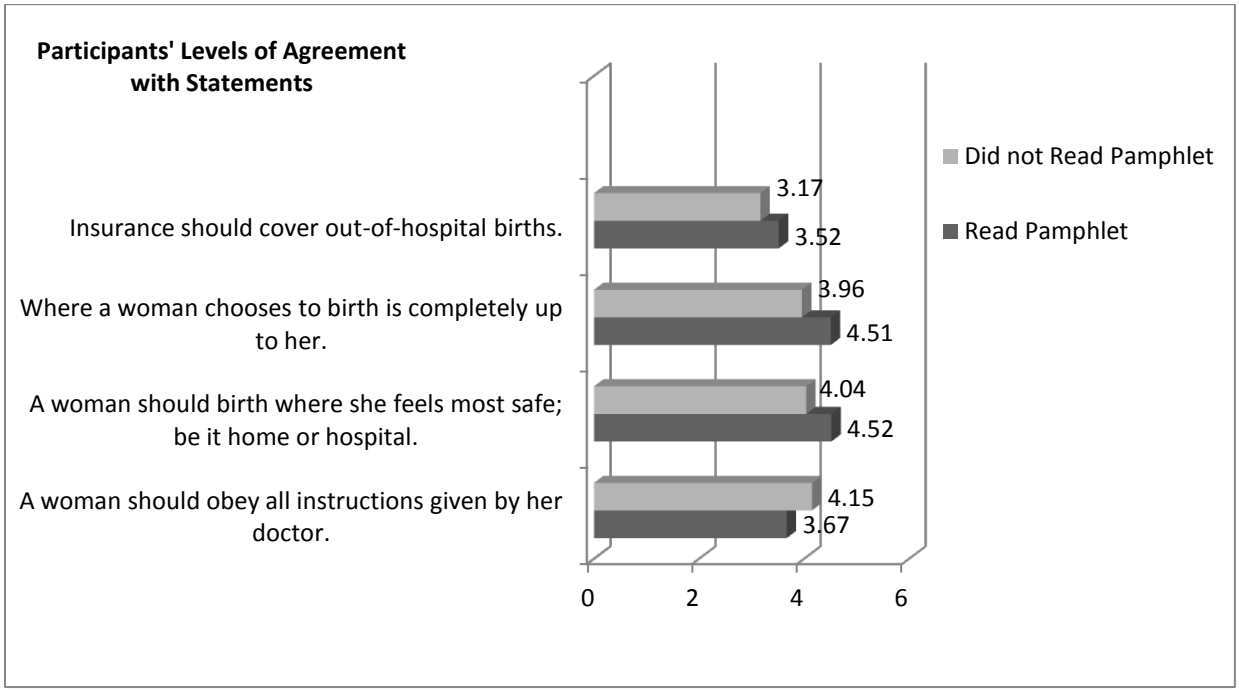
In order to measure if awareness of midwifery increased the likeliness to choose a home birth, an analysis was run comparing responses to the questions, "prior to participating in this study had you heard the term midwife?" and "If today, you found yourself to be an expectant parent, how likely would you be to consider each of the following locations?" A Likert scale of 1-5 was used to evaluate their likeness. Participants who had heard the term midwife prior to participating in this study (n=178, mean score of 1.65 (sd=.96)), were significantly more likely to score higher regarding the "home" location than participants who had not heard the term midwife prior to the study (n=52, mean score of 1.37 (sd=.69); $F(1,228)=4.03$, $p<.05$).

Figure 4: Prior Awareness and Likeliness to Consider Home Birth in Specific Scenarios



As it was observed that participants familiar with the term midwife were more likely to choose a home birth, we investigated further. A cumulative score was taken on participants' response to several circumstances that may warrant a home birth. This included a natural disaster, you could have a doctor present, you were convinced it was as safe as a hospital birth, your partner wanted it, you were living in a country where it was common, you could have a licensed midwife present, it was the only affordable option, and you or your partner had a previous traumatic hospital experience. Participants who responded "yes" to the question, "have you heard the term midwife?" were also significantly more likely to consider homebirth in specific scenarios (n=178, mean score of 25.94 (sd=7.207)) than participants who had not heard the term (n=51, mean score of 23.31 (sd=6.89); $F(1,227)=5.36$, $p<.02$).

Figure 5: Significant Differences Observed Between Those Who Read the Pamphlet, "The Rights of Childbearing Women" and Those Who did not Read the Pamphlet



Several questions were asked of participants regarding their opinions on matters surrounding home birth and midwifery. Participants were asked how much they agreed with the following statements, given a Likert scale of 1-5. Trends were observed on four questions and an analysis was conducted. In response to "insurance should cover out of hospital births," pamphlet readers scored higher (n=116 mean of 3.53 (sd=1.083)) than non-readers (n=113 with a mean score of 3.17 (sd=1.09); $F(1,227)=5.89$, $p<.02$). When asked how strongly they agreed with the statement, "where a woman chooses to give birth is completely up to her," pamphlet readers (n=115, mean score of 4.51(sd=.820)) scored higher than non-readers (n=113, mean score of 3.96 (sd=1.056); $F(1,226)=19.853$, $p<.016$). Likewise, when asked how strongly they agreed with the statement, "a woman should birth where she feels most safe-be it home or hospital," pamphlet readers (n=116 with a mean score of 4.52 (sd=.81)) scored higher than non-readers (n=113 with a mean score of 4.04 (sd=.98); $F(1,227)=15.995$, $p<.00$). The opposite effect

was found when evaluating the participants' response to the statement; "a woman should obey all instructions given by her doctor." In this instance pamphlet readers (n=116 with a mean score of 3.67 (sd=.98)) scored lower than non-readers (n=113 with a mean score of 4.15(sd=.88), F(1,227)=15.149, p<.00).

Further investigation of participant response to the statement "insurance should cover home birth" was conducted and is outlined in Figure 6. Notably, 32% of the control group and 48% of those who read the pamphlet agreed that insurance should cover home birth, while only 23% of the control group and 15% of the pamphlet readers disagreed.

Figure 6: Insurance Should Cover Home Birth

	Male	***Female***	***Total***	***Male***	***Female***	***Total***	***Male***	***Female***	***Total***
Read	*12%*	*17%*	*15%*	*50%*	*27%*	*37%*	*39%*	*56%*	***48%***
Did Not Read	*25%*	*19%*	*23%*	*46%*	*44%*	*45%*	*29%*	*37%*	***32%***
	Disagree			***Neutral***			***Agree***		

Chapter V: Discussion

While this study did not find a significant increase in demand when using this particular pamphlet, participant likeliness to choose a home birth did significantly correlate with having heard the term midwife. This indicates a relationship between awareness and demand. While it may have been that this pamphlet did not appear to increase readers' likeliness to choose home birth, another explanation could include that students may have needed more time to integrate the information before they applied it on a personal level. That familiarity probably has to be more comprehensive and established than occurred when reading the particular pamphlet used in this study. This information supports earlier exposure to the concepts of home birth and the midwifery model of care, as opposed to introduction at the time of pregnancy.

The pamphlet also included information that helped students begin to think about all the options available. To create a better understanding and familiarity with the options of home birth and the varying types of practitioners, explicit definitions and examples should be used in future studies. This would likely have a much greater effect as many students gave extremely inaccurate definitions and comments regarding the reasoning for their answers. These inaccuracies made clear the gross misunderstanding of the various practitioner titles and birth location options.

It is a possibility that the pamphlet had an effect that was not verifiable. Significantly more participants who had read the pamphlet replied yes to having heard the term midwife previously. As knowledge of the term also correlated with likeliness to choose a home birth, the link between reading the pamphlet and likeliness to consider a home birth should be more thoroughly investigated in future research. The question arises that perhaps an equal number of participants in both groups were familiar with the term midwife, but by reading the pamphlet

prior to completing the survey, that group was more likely to have recalled the term while those who had not read the pamphlet had less time to recall any previous memory of the term. If that were true, additional research should ask this question prior to reading the pamphlet and compare results for any increases that can be attributed strictly to the reading of the pamphlet.

Participants did seem to take on some of the convictions expressed through the pamphlet. The pamphlet focused on the rights of childbearing women and reading the pamphlet increased participant acceptance of the right to choose home birth and midwifery care and to have insurance coverage for it. These phrases refer generically to all persons, rather than to one's own self. There is much less commitment to the idea as a theoretical option, as compared to actually choosing this option for the birth of one's own child, but it is important to note that the majority of participants did not feel that the right to choose should to be taken (i.e. legislated) away.

As observed, significantly more females had previously heard the term midwife. It is the female that fears and ultimately feels the pains of child birth. Females are more sensitive to the information surrounding the subject. This seems to match logically with the idea that girls are more likely to hear and remember birth stories, as they may feel they are more likely to need the information contained within the story. Although less so, childbirth does appear to be a subject of interest to many males as well. They may be intrigued by their own birth story, the subject alone, or the investment in the safety of their own potential children. However, it appears to be a less common topic of discussion amongst males leading to the supposition that males may feel less inclined to form strong opinions on the subject until having chosen a mate. Males reported a higher likeliness to consider a home birth if their partner wanted one. This coincides with the participants' level of agreement on the statements "where a women chooses to give birth is

completely up to her" and "a woman should give birth where she feels most safe; be it home or hospital."

As evidenced by participant scores as to how much they agreed with the statement, "A woman should obey all instructions given by her doctor," readers of the pamphlet appeared more "empowered" to act upon their own judgment, as compared to the control group, in the event that they were not comfortable with a doctor's recommendation. This could be extended to the idea that they would be more likely to seek out another care provider in the event that they did not feel safe or satisfied with their current provider. Part of trusting a doctor's opinion comes from the respect a doctor expresses in the client's ability to understand the problem. In an ideal world, doctors would always know the right thing to do, but reality being what it is; the medical model of care is more and more influenced by litigation, which may be increasing practitioners' fear of open communication with their clients (Hauser M., Commons M., Bursztajn H., and Gutheil T., 1991). The idea of "do no harm" looks to have been contorted as doctors now often actively manage labor. One doctor was quoted as having said "the saying in the profession is that nobody is ever sued for the cesarean delivery they did too soon" – defensive medicine, or the fear of lawsuits, has increased the likeliness of doctors ordering cesarean surgeries too soon. At the same time, this same doctor claimed, it's clear that doing more cesareans hasn't improved the health of mothers or infants (Goodman, 2011).

Limitations

While this study aims to provide some insight into the attitudes of students who are of childbearing age, many of them may have never considered what they would do if they found themselves to be an expecting parent. This may explain some indifference in completing the survey. Additional limitations include problems with self-reporting and the inability of students

to predict their future actions. Despite students' best intentions or assertions, they may not act in the way they believe they would, once faced with the reality.

Results are also dependent on assessment validity and reliability. Students' moods and attention could differ on given days or the context surrounding the occasion of filling out the survey. These factors could influence the reliability of the assessment. Additionally, in the interest of keeping the survey short, there were only multiple questions on a few of the topics. Notably they were on the main focus of the hypotheses and reported results, but the questions regarding insurance coverage and doctor patient relationship were only asked once. Given that there was not a measure to assure that students read the pamphlet, validity may have suffered. The use of some language that could have multiple meanings may play into validity as well. An example of this would be the word obey, which may have invoked different reactions for students.

A greater number of participants would have created a larger pool of individuals who were not familiar with the term midwife prior to the study and allowed for more significant outcomes when measuring the effect of the educational tool. The pamphlet included information that helped students begin to think about options available. However, it did not include definitions or specific explanations of what the options entailed. To create a greater understanding and familiarity with the options of home birth and the varying types of practitioners, explicit definitions and examples, would likely have a much greater impact.

Education level of the participant group should be considered when evaluating these results. As students of a four-year institution they are more educated than the general public and as a whole, likely more tolerant of different perspectives. Interestingly so, the recent rising trend of home births has been attributed mainly to educated middle class women (Goodman, 2011).

Conclusions

An extensive literature review found that evidence supports the practice of home birth as safe for low risk mothers when a backup relationship is in existence in the event that a referral is needed. However, the current American health care system does not support the use of direct entry midwives: State legislations, hospitals, insurance companies, and professional organizations have created a hostile environment for home birth advocates in many areas of the country. In our culture of insurance steered health care, insurance companies and legislators possess an enormous amount of power in determining the type of care Americans receive. Introducing students to the concepts of midwifery care and home birth as valid options for the modern family will likely increase the number of families able to confidently request insurance coverage for a home birth with a CPM.

Nationwide governmental support of home birth and midwifery is needed. As we consider the growing costs of health care, we see that our nation can no longer afford to pretend it is respectfully caring for its mothers and infants. Something needs to be done to provide more thorough holistic care for our families. We need solid investments to be made in the education and prevention of complications of pregnancy and child birth as well as the lifelong consequences of such complications. In several countries with the world's best birth outcomes, there is a model of care practiced which American policy makers have not yet fully adopted. These countries integrate the care and wisdom of traditional midwifery practices with the wonders of modern technology (Weigers, 1998). Serious consideration of this proven model is advised for American policy makers. Commitment to such a change could prove to greatly increase mother and infant health while significantly reducing our nation's health care costs. The Midwifery Model of Care is a philosophy to be integrated within the American health care

system. The first steps toward integration are awareness and acceptance. This can be encouraged through education.

The questions that motivated this thesis were "How do we inspire young people to learn about all options available?" and "How do we assure availability of those options through legal and financial means?" This study proved helpful in providing information about the next generation of parents. The study was created to evaluate university students' likeliness to choose home birth and midwifery care and to examine the effectiveness of educational media in increasing demand. A norm group was evaluated as compared to a group of participants who read a pamphlet entitled "The Rights of Childbearing Women." The pamphlet expressed among other things that home birth and midwifery care were normal healthy choices and that it is a woman's right to make those choices. The information gathered supported that it is not too soon to educate the general public on midwifery and home birth in secondary and post-secondary institutions as opinions are already being formed at this point, well before they find themselves to be expecting parents.

The "right", as it is called by many, to choose where a mother will give birth is obviously not available to all American mothers. In order for women to realize their "rights as childbearing women," we must increase awareness of all options, system support, and the financial ability (i.e. insurance coverage and legal protection) to make those choices. An increase in public media campaigns and public education would educate parents and policy makers alike - effectively addressing the critical matters at hand. These matters include the empowerment of expecting parents to demand the full range of options, collaboration of practitioners and hospitals supporting the choice to deliver in out-of-hospital settings through an efficient, non-hostile referral system, and finally, equal coverage under insurance policies which will assure the

financial ability to exercise the established right to safely birth in an out-of hospital setting with the provider of choice.

Recommendations

Ultimately, several things will need to happen concurrently in order to increase the numbers of home births in America. Public awareness campaigns will need to be implemented to educate policy makers and consumers alike of home birth and midwifery care. Changes will have to occur in hospitals' and insurance companies' policies, including system financing and personal health and professional liability insurance coverage. Legislative support for home birth and licensure of all certified midwives will need to be developed. Doctors and home birth providers will need to collaborate. Lastly, public education regarding these changes and the safety outcomes of home birth will have to occur. Together, these things could create the needed confidence in the midwifery model of care and home birthing, and assist in the creation of a paradigm shift in the American birth scene. Weigers (1998) stated, in reference to the Netherlands' decline of homebirths from two thirds to one third since 1965, that one important aspect of preserving the home birth option is, "giving women with uncomplicated pregnancies enough confidence in themselves and the system to feel safe in choosing a home birth."

For those creating curriculum on the subject, significant results would likely be produced through a variety of methods including the following: discussions, definitions, and reading materials. Additionally, videos of births in a variety of birth settings with varying practitioners, or thorough question - answer sessions with parents and professionals from within the home birth community would likely prove to have the greatest impact. This was evidenced by some of the comments made by survey participants. Secondary and post-secondary education would be the likely areas of exposure, as well as media. Funding for future research on such public education

efforts' effect on increasing consumer confidence would be needed to verify this. Research to examine the effectiveness of the above mentioned educational methods would prove to be cost efficient if considered an investment aimed at reducing health care costs while increasing maternal and infant health and overall satisfaction. Larger campaigns are needed to include the general population. Research should evaluate the effectiveness of public education curriculum at varying age levels, as well as public health campaigns run through advertisements, continuing education accredited course work for health care providers and informational packets given to legislative persons and insurance companies.

Gender differences observed in this research are notable when considering implementation of future research and education. While middle and high school sex education is often unique to the gender being instructed, education of both males and females on this subject is warranted. The main goal at that age would be to normalize home birth and midwifery care. This could be accomplished mainly by talking about it along with all of the other matters. Education could focus on teaching males of the basic concepts of midwifery and home birth; while greater detail could be focused on educating females of the benefits of home birth and midwifery. This would have the greatest effect on consumer demand. When considering system wide support and the need for policy change it would make sense to emphasize the safety outcomes to those most likely to impact such policies. Since change in legislation as well as insurance and hospital policies is essential, upper level pre-medicine and law classes should be targeted, reaching both the males and females likely to enter the fields.

The midwifery model of care strongly emphasizes the collaborative relationship that develops when a midwife and client are able to spend many hours communicating about the mother's family, culture, and beliefs as well as discuss questions and concerns about childbirth.

As a result of the hierarchical relationship developed between many doctors and clients, it seems many Americans feel intimidated and discouraged from asking questions about their care and worry that there may be repercussions if they come across as challenging their provider's recommendations. It is important to respect the training and wisdom of our practitioners, as we ultimately trust them with our lives. However, even the best of doctors may misinterpret information or make decisions that do not sit right with a client's moral convictions, personal knowledge and experience, or even their gut instinct. The author asserts that the litigious atmosphere present surrounding American obstetrics would likely diffuse significantly if doctors were to make use of the Midwifery Model of Care. In doing so, they would invest more time informing their patients of all of their options, including no treatment and all alternative treatments known to be used for given conditions. Informed consent would be brought to the forefront. This would effectively empower clients by giving them the final say as to what treatment they receive; additionally encouraging patients to take responsibility for their own health through changes in lifestyle activities and nutrition. Americans must learn to collaborate, parents and providers empowering one another to come up with solutions that are specific to the individuals seeking care.

In conclusion, I contend that it is time to reevaluate how we are rooted; it is time to restore our foundations. If we are to look at our accomplishments as structures built upon the achievements of our past generations, we can see that obstetrics is built up from and out of midwifery. Historically, both midwifery and obstetrics have some very frightening practices which obviously teach us what not to do. By taking from the positive contributions of both areas of practice, we truly have the opportunity to create the best of experiences possible. Respect for the specialization of each of the fields can unify midwifery and obstetrics as they are two arms of

the same body, two rooms within the same home; all practitioners laboring together for women and their infants. As the nation that is renowned around the world for its doctors and hospitals, it would be wonderful if we could also achieve the world's best birth outcomes. I suggest we continue to utilize all that we have learned from the fantastic accomplishments achieved through the scientific research within the field of obstetrics, using it only when it is truly deemed necessary. Meanwhile, we shall return to the use of the fundamental concepts, well established in the midwifery model of care, which empower women as they begin a most arduous journey into motherhood. The foundational stones shall be love and support, nutrition and exercise, family and friends, community and relationships, and last but not least, education and empowerment.

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a. Appendix 1-Survey titled "Attitudes Regarding Options Surrounding Childbirth". Robin Cline and Dominic Barraclough, PhD., 2011.

b. Appendix 2-Pamphlet titled, "The Rights of Childbearing Women". Childbirth Connection, 2006. Available at www.childbirthconnection.org.

Appendix 1

Wives' tales…

1) Prior to participating in this study, had you ever heard the term midwife? Yes No

   a) What is your understanding of the term midwife?

   _____
   _____
   _____

2) Have you had any personal experience with a midwife? Yes No

   a) If yes, could you briefly explain?

   _____
   _____
   _____

An out of hospital birth…

3) If you were planning for the birth of your child, how likely would you be to consider a home birth?

not likely		possibly/would look into it		likely
1	2	3	4	5

4) If you were planning for the birth of your child, how likely would you be to consider a home birth in each of the following scenarios?

		not likely		possibly/would look into it		likely
a)	a natural disaster caused the hospital to be unsafe	1	2	3	4	5
b)	you could have a doctor present	1	2	3	4	5
c)	you were convinced it was as safe as a hospital birth	1	2	3	4	5
d)	your partner wanted it	1	2	3	4	5
e)	you were living in a country where it was common	1	2	3	4	5
f)	you could have a licensed midwife present	1	2	3	4	5
g)	it was the only affordable option	1	2	3	4	5
h)	you or your partner had a previous traumatic hospital experience	1	2	3	4	5

Pertinent Information…

Please circle one of the underlined options.

5) Have you ever been pregnant or impregnated someone? Yes No Unknown

6) Have you ever thought about the birth of your own child? Yes No

7) Have you ever given birth? Yes No Not Applicable

8) Are you a parent? Yes No Unknown

9) Do you want to be a parent? Yes No Unknown

10) Have you helped, in any way, a mother prepare for childbirth? Yes No

11) Have you ever attended a birth? Yes No

12) Have you ever watched the birth of a child on television? Yes No

13) Have you ever known a person who intentionally gave birth to their child outside of a hospital? Yes No Unknown

14) For women only. Men, please skip to Question 15.

Which type(s) of care provider(s) have you seen for pelvic exams? (Mark all that apply.)

a) ___I have never had an exam.

b) ___Nurse Practitioner (NP)

c) ___Physician's Assistant (PA)

d) ___Family Practice Physician (MD)

e) ___Midwife (CNM or LPM)

f) ___Obstetrician/Gynecologist (OB/GYN)

g) ___Do not know

h) ___Other _____

15) Have you heard any of your own birth story? Yes No

a) If you have heard the story of your own birth, could you rate how it made you feel?

Negative		Neutral		Positive
1	2	3	4	5

b) If you answered yes to question 11, what, if anything, stands out about your own birth?

_____

_____

_____

16) What questions/thoughts do you have about childbirth?

_____

_____

_____

If today, you found yourself to be an expectant parent…

17) How likely would you be to use each of the following health care providers for the birth of your child?

	Not likely	possible/would look into it			likely	don't know
a) Certified Nurse Midwife (CNM)	1	2	3	4	5	-
b) Family Medicine Doctor (MD)	1	2	3	4	5	-
c) Licensed Professional Midwife (LPM) (trained for out of hospital births)	1	2	3	4	5	-
d) Nurse Practitioner(NP)	1	2	3	4	5	-
e) Physician's Assistant (PA)	1	2	3	4	5	-
f) Obstetrician (OB)	1	2	3	4	5	-
g) Unassisted (no professional present)	1	2	3	4	5	-
h) Other _____	1	2	3	4	5	-

18) Please circle the letter before each type of provider listed in question 17 that you are unfamiliar with.

19) Which type of practitioner would you most prefer to use? (a-h) _____

a) Why? _____
_____

b) Would you be willing to pay out of pocket to get the provider you preferred? Yes No

20) How likely would you be to choose each of the following locations for the birth of your child?

	not likely	possible/would look into it			likely
a) Birth center (without a hospital)	1	2	3	4	5
b) Home	1	2	3	4	5
c) Local hospital	1	2	3	4	5
d) Large hospital (with Neonatal Intensive Care Unit)	1	2	3	4	5
e) Out of Doors	1	2	3	4	5
f) Other _____	1	2	3	4	5

21) Which location would you most prefer for the birth of your child? (a-f) _____

a) Why? _____
_____

b) Would you be willing to pay out of pocket for the location you preferred? Yes No

In your opinion…

22) Please indicate your level of agreement with the following statements.

		Strongly Disagree		Neutral		Strongly Agree
a)	Insurance should cover out-of-hospital births.	1	2	3	4	5
b)	Where a woman chooses to give birth is completely up to her.	1	2	3	4	5
c)	A woman should obey all instructions given by her doctor.	1	2	3	4	5
d)	A father should have a say in how and where the birth of his child occurs.	1	2	3	4	5
e)	A woman should give birth where she feels most safe; be it home or hospital.	1	2	3	4	5

Your demographics…

Please fill in the blank or circle the answer that fits your situation best.

Age _____

Sex M / F / Transgender

Sexual Orientation G / L / B / Heterosexual / Other _____

Year of Education FR / SO / JR / SR Other _____

Major _____

Racial Identification

Asian / Black / Hispanic / Native American / Pacific Islander /

White / Other _____

Hometown Urban / Suburban / Rural / Other _____

Is your health care a financial burden? Yes, a lot. / Yes, some. / No.

Appendix 2

 Double Click box to access brochure.