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Consumer Perspectives Of Health During Prenatal Care In The Usa And Iceland: An Exploratory Study

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CONSUMER PERSPECTIVES OF HEALTH DURING PRENATAL CARE IN THE USA AND ICELAND: AN EXPLORATORY STUDY

by

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ABSTRACT

Purpose: Prenatal care (PNC) is the healthcare service most often provided to women of childbearing age throughout the world. Poorly understood and defined, based on culture, and expensive for any healthcare system, PNC remains a target for change and improvement. The purpose of this cross-national qualitative research study using narrative inquiry methods was to explore consumer perspectives of individual health and routine PNC in the USA and Iceland.

Methods: A purposive sampling technique was used to identify study participants (*n* = 32) from the United States (n = 16) and Iceland (*n* = 16). Data were collected via a semi structured interview which included demographic questions.

Results: Content analysis processes were used to analyze the transcribed narratives to identify common conceptual themes. Subsequently, the narratives of the women from the two nations were compared to identify cultural variations about PNC. In respect to the findings, demographically the two groups were similar. Respondents from both nations preferred a more supportive role from PNC providers with adequate time to explore important personal concerns and less emphasis on monitoring weight gain during the pregnancy. Variations between the two groups related to the health care delivery system

of the nation in which respondents resided. These findings have the potential for expanding the definition of PNC to include consumer perspectives.

Discussion/Implication: Additional research is needed with other groups of women to validate, clarify and expand identified themes, as they may improve PNC, and ultimately, perinatal outcomes. Improving PNC holds the promise of improving infant mortality while at the same time reducing healthcare expenditures for countries around the world.

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CHAPTER ONE: THE PROBLEM

Prenatal care (PNC), considered necessary for a safe pregnancy, is the primary public health effort to reduce infant mortality (American Academy of Pediatrics [AAP] & American College of Obstetricians and Gynecologists [ACOG], 2002; Banta, 2003; Chalmers, Mangiaterra, & Porter, 2001). Although routine PNC essentially focuses on healthy women, a medical or disease model has been used by policy makers and providers of service, to deliver services and define the state of pregnancy for women (ACOG, 2002; Alexander & Kotlechuck, 2001; Banta, 2003).

Infant mortality rates vary among nations, with industrialized nations having much lower rates than emerging nations (World Health Organization [WHO], 2006; United Nations Children's Fund [UNICEF], 2006a). Infant mortality ratings among industrialized nations routinely rank the United States of America (USA) at 26th through 28th and Iceland at 2nd or 3rd (March of Dimes [MOD], 2005; WHO). As infants born at the lowest gestational ages and birth weights have a large impact on overall infant mortality rates, PNC addresses health issues that lead to preterm delivery (Moos, 2003). In the U.S.A., more than half (55%) of all infant deaths occurred after 32 weeks of gestation in 2004, while 2% were born at less than 32 weeks of gestation (MOD, 2005).

Although PNC has evolved culturally, and varies among and within countries around the world, scientific evidence to support the benefits of most service components is lacking (Cochrane, 1989; Moos, 2006; Pittrof, Campbell, & Filippi, 2002). As one of the primary healthcare services to reduce infant mortality, PNC is a critical, yet ill-defined, health service for women and infants around the world (Banta, 2003; UNICEF, 2006a). As PNC is the primary public health effort developed to reduce rates of infant mortality, questions arise about how countries with low infant mortality rates compose and deliver PNC (Banta). What is the perception of women regarding their health and PNC? Can women identify components of PNC that could improve this service? Finally, what cultural differences might be involved with consumer-identified PNC services?

Background and Rationale

The phenomenon of PNC is poorly studied and poorly understood (Alexander & Kotlechuck, 2001; Banta, 2003; Carruthers & Jeacocke, 2000). The research that does exist has been conducted on the dimension of the provider and payer—the voices of women themselves have not been noted in the research on PNC (Carr, 2001; European Observatory on Health Care Systems [EOHCS], 2002; Kelson, 1999). In reviewing countries with low infant mortality rates, three countries were identified as being among those with the lowest rates: France, Japan, and Iceland. These three nations have consistently ranked in the top five countries for low infant mortality for the past 5 reporting years (WHO, 2006). Although all three countries have national standards and

delivery systems for PNC, Iceland's size allowed for visitation to a large sampling of its PNC clinics. Also, unlike residents of France and Japan, Icelanders study English as a second language in the primary and secondary school system, resulting in a majority of Icelanders under the age of 40 years speaking English (Statistics of Iceland, 2006). As the researcher is located in the USA and is not fluent in French or Japanese, these factors made Iceland a logical choice of location in which to conduct the present research.

This research gives women from two different countries and PNC systems with different infant mortality rates the opportunity to discuss PNC from their personal experiences. As consumers of healthcare, respondents in the present study provide valuable insight into the consumer's perspective (Carr, 2001; Chalmers, Mangiaterra & Porter, 2001). While acknowledging PNC as the primary public health effort to reduce infant mortality rates, it is also important that women view this service as necessary and satisfactory in order to encourage participation in PNC (Johnson, Langdon, Yong, Stewart, & Kelly, 2002). As third party payers and providers increase opportunities for consumer participation, consumers can assume a more active role in shaping programs that are more responsive to their needs, ultimately affecting the components, quality, and definition of PNC (Allsop, Jones, & Baggott, 2004; Anderson, Shephard, & Salisbury, 2006).

Although many researchers have called for the inclusion of consumers in healthcare and PNC development, research efforts directed at consumer opinions about PNC have been limited (Nigenda et al., 2003; Olin & Faxelid, 2003; Pelkonen, Perala, & Vehvilainen-Julkunen, 1998). Many industrialized nations have recognized this

discrepancy and are actively pursuing consumer participation in quality evaluations of healthcare (Carruthers & Jeacocke, 2000; Harrison & Verhoef, 2002). As governments increase opportunities for participation in healthcare development, consumers become active participants in shaping services that are more responsive to consumer needs (Allsop et al., 2004).

Research studies that have solicited consumer opinions have been quantitatively formatted with closed-ended questions contained in questionnaires and directed at process and procedures (Carruthers & Jeacocke, 2000; Emslie, Cambell, Walker, Robertson, & Cambell, 1999; Hildingsson, Waldenstrom, & Radestad, 2002; Hundley et.al., 2003). Although the standard questionnaire and survey, with close-ended questions, has the advantage of enabling the collection of a large amount of data from a large sample, it has the disadvantage of limiting direct, in-depth input from respondents. To address this methodological gap, the present qualitative study uses open-ended questions to promote dialogue from the consumer perspective in the Deschutes County, U.S.A. and Iceland. The open-ended question format will provide the consumer with the opportunity to fully explore and explain all of their healthcare related responses (Omar, Schiffman, & Bingham, 2001). Also, questions will focus on health during pregnancy in both countries, as opposed to identifying pregnancy as a disease (Emslie et al). Exploring the phenomenon of PNC from the consumer perspective may lead to further research and enrichment and improvement of the PNC process.

Definition of Terms

Two of the major terms for this dissertation are prenatal care and infant mortality rate. A brief description of each of these terms follows.

Prenatal Care

Defining PNC in all settings can be difficult associated with the wide array and types of providers, payers, and delivery systems that make up this service (United Healthcare, 2005; WHO, 2006). In a broad definitional sense, routine PNC is care from conception through gestation and immediately after pregnancy (Alexander & Kotlechuck, 2001; Banta, 2003; Berglund & Lindmark, 1999; Carroli, Rooney, & Villar, 2001). The varied components of PNC are directed at providing care by a trained person during and for some time after pregnancy, and encompass aspects of observation, assessment, education, screening, disease prevention, and making pregnancy and delivery a safe and satisfying experience.

Infant Mortality Rate

Infant mortality rate, or the death of an infant before the age of one year, is recognized internationally as the primary outcome indicator for PNC and as a principal indicator for the general health of any world population (Guttormsson & Gardarsdottir, 2002; MacDorman, Martin, Mathews, Hoyert, & Ventura, 2005; MOD, 2005; UNICEF,

2006a; United Healthcare, 2005). Though related to many factors, high infant mortality rates are often considered preventable and related to the quality of PNC (United Healthcare; WHO, 2006). The lower the infant mortality rate, the higher a country ranks in the general well being of its population when compared to other nations in the world (MacDorman et al.; WHO).

There are specific population attributes that support excellent infant mortality rates: high education level of women, low levels of poverty, good water and sanitation, modern medical care, comprehensive PNC, and birth control (supporting the ability to plan for pregnancy) (UNICEF, 2006a; WHO, 2006). However, a number of these attributes are common in industrialized nations but do not result in lower rates of infant mortality. This outcome gap suggests that other factors may be important to reducing infant mortality rates. Improving PNC from the consumer perspective may hold the key for lowering infant mortality rates (Rowin & Neuberg, 2005; WHO).

Historical Context of United States of America and Iceland Healthcare Systems

To understand PNC in the healthcare systems of the U.S.A. and Iceland, it is necessary to review the history of the general healthcare systems, PNC, and infant mortality in both countries. This section begins with an overview of healthcare, PNC, and infant mortality in the U.S.A. This is followed by an overview of the same topics in Iceland.

Healthcare in the United States of America

Unlike other industrialized nations of the world, the U.S.A. does not have a national healthcare plan that provides health coverage for all citizens (United Healthcare, 2005; WHO, 2006). The healthcare system in the U.S.A. developed in a privatized environment, and official U.S.A. policy views healthcare and social benefits as individual responsibilities (Davis, 1977). The government supports some health and social benefits, but these benefits are only available through state-sponsored programs based on need (Moos, 2006). Healthcare in the U.S.A. is procured through many sources, such as government programs, private insurance, private organizations, and individuals (UNICEF, 2006a). Compensation for healthcare services is regulated through each payment source, which can also limit coverage related to services. Access to healthcare can be limited by individual insurance coverage policies and procedures, the ability to qualify for special programs, and/or the ability to pay for services (United Healthcare; World Health Regional Office for Europe [WHO/Europe], 2007).

Prenatal Care

Prior to 1913, PNC was delivered by nurses and midwives at local clinics and in the home (Hawkins & Bellig, 2000). In 1913, a publication titled *Prenatal Care* was distributed to women in the U.S.A. by a newly formed agency called the Children's Bureau, defining pregnancy as a "medical condition" that required medical care from physicians (Davis, 1977). The American College of Obstetricians and Gynecologists (ACOG) refers to PNC as "a planned program of observation, education and medical

management of pregnant women directed toward making pregnancy and delivery a safe and satisfying experience" (ACOG, 2002, p.73).

By the later 1930's many women in the U.S.A. started to receive PNC from physicians, then delivering their babies in the hospital, leading to the medicalization of pregnancy (Alexander & Kotelchuck, 2001; Davis, 1977). Over the decades, coupled with third party reimbursement for health care services, PNC evolved into a predetermined number of scheduled visits and screenings from early pregnancy to delivery of the infant. Essentially, this number of 'designated' scheduled visits to a PNC provider have not been proven to be necessary, or effective, and are proscribed by third party payers and adhered to by PNC providers, who in the U.S.A. are predominately physicians (Carroli et al., 2001). Individual states are responsible for the licensure and the scope of practice for PNC providers, resulting in the potential for different services and providers in different localities (Moos, 2006). Currently, PNC visit schedules essentially remain the same as the early PNC standards that evolved during the 1930s.

Barriers related to access to PNC developed for some women in the U.S.A. due to their inability to pay for services, lack of transportation, and unique individual needs such as ethnicity, language, and poverty (Cokkinides, 2001; Davis & Prater, 2001; Jackson et al., 2003). In response to PNC barriers, the Institute of Medicine (IOM) was directed by Congress to evaluate PNC and make recommendations for improvements to care and to remove the barriers (IOM, 1985). The subsequent recommendations expanded PNC coverage for more women through the Medicaid system and expanded covered services, such as nutrition, education, and transportation for reimbursement purposes (IOM, 1985).

The IOM-directed expansion of coverage and services increased the availability of PNC and removed barriers to services for many poor women in the U.S.A. (Romero, Chavkin, Wise, Hess, & VanLandeghem, 2001). By 2002, of all live births in the USA 40.7% were funded by Medicaid (MOD, 2005).

In October 2005, the Family Care Act increased the eligibility of women for PNC through the Medicaid program (Committee on Energy and Commerce 110th Congress, 2005; U.S. Department of Labor, 2007). The Family Care Act allows individual states to pay for PNC services for undocumented pregnant women and women who do not qualify under the income restrictions for Medicaid coverage. The Family Care Act was directed at closing the gaps in coverage for all women seeking PNC in the U.S.A. (Committee on Energy and Commerce 110th Congress). While coverage for PNC improved with expanded Medicaid programs, the Institute of Medicine reported in 2006 that uninsured women received fewer PNC services and had greater difficulty accessing care than women with private insurance (IOM, 2006). Today, the composition of services and visit schedules related to PNC vary within the U.S.A. and between other countries in the world (Partridge & Holman, 2005; MacDorman et al., 2005; United Healthcare, 2005; WHO/Europe, 2003; WHO, 2006).

Early PNC (before 12 weeks) is encouraged nationwide to improve outcomes (Moos, 2003). Routine care consists of an array of basic screenings for abnormalities, fetal assessment, education, and medical support during pregnancy (Banta, 2003). Most consumers in the U.S.A. receive between 12 and 14 PNC visits during pregnancy (Pittrof et al., 2002). Once the consumer is discharged from the hospital after a normal vaginal

delivery, routine post partum care consists of one follow-up visit at the provider's office at approximately 6 weeks post partum (Valdes, Kurbasic, Whitfill, & Sessler, 2003).

Pregnant consumers in the U.S.A. experience a healthcare system that requires payment for services either from a government-supported health benefit, or individual health insurance coverage, and/or private payments to providers (Hall, 2001). Individual costs vary based on the coverage, provider, and composition of services (MOD, 2005). Costs also vary among countries according to the 2006 analysis by the Organization for Economic Cooperation and Development (OECDb), with the U.S.A. spending $6,102 per person each year on healthcare (2 times more than any other nation in the world), yet ranking at 22nd highest for life expectancy when compared to other industrialized nations (OECD, 2006b; WHO, 2006). The estimate for all spending related to PNC in the U.S.A. is greater than $9.1 billion/year, making this one of the most expensive costs for the U.S.A.'s entire healthcare system (Health Resources and Services Administration, 2007). Physicians provide approximately 85% of the PNC in the U.S.A. (ACOG, 2002; Moos, 2003; Romero et al., 2001; Thompson, Walsh, & Merkatz, 1990).

Infant Mortality

Prior to and in the early 1900s, many infants died in the U.S.A. before the age of one year due to problems with environmental issues (e.g., sewage, refuse disposal, and safe drinking water), gastrointestinal illnesses related to milk-borne diseases, and the general living conditions of the population (Brosco, 1999). In 1912, when infant mortality rates were 135 deaths/1000 births, S. W. Newmayer, a public health officer

from Philadelphia, publicized the need to improve basic health care for women and children in order to decrease the infant mortality rate in the U.S.A. (Brosco, 1999). Through Newmayer's efforts, the government supported public health improvements in sanitation, clean water, and healthcare, all of which improved the overall health of women and children. During the years of 1912-1946, the government-initiated Children's Bureau worked to improve infant mortality by defining and bringing the problem to national attention, and supporting infant welfare services and PNC (Brosco). The influence of the Children's Bureau began to diminish after 1946 and was finally eliminated in 1969, when Medicaid and other federal programs were implemented to address PNC and infant mortality (Davis, 1977).

Infant mortality rates in the U.S.A. declined from 100 infant deaths/1000 live births in 1915 to 7 infant deaths/ 1000 live births in 1996 (U.S. Census Bureau, 2007b). The infant mortality rate of 7 infant deaths/1000 live births has remained basically unchanged in the U.S.A. since 1996 despite changes in coverage and services related to PNC (WHO, 2006).

Healthcare in Iceland

Although Iceland was visited by the Vikings very early in history, it was not until the 9th and 10th centuries that Norwegian and Celtic (Scottish and Irish) immigrants settled permanently on the island (Government of Iceland, 2007). Independent for over 300 years, Iceland was subsequently ruled by Norway and Denmark, and obtained

complete independence in 1944 (Government of Iceland). Both Norway and Denmark influenced the development of Iceland's healthcare system, which today is based on a government-supported social welfare system (Rothstein & Stolle, 2003). Iceland has adopted a universal healthcare system based on the contention that healthcare is a right of citizenship (Guttormsson & Gardarsdottir, 2002). This approach is part of the broader concept of a welfare state, where the government through taxation provides for the basic healthcare and social welfare needs of the citizenry from the "cradle to grave" (Rothstein & Stolle, 2003).

Women in Iceland organized and gained the right to vote in 1915, giving them an early voice in the government and the development of the healthcare system (Bender, 1999). The participation of women in the government has influenced the current healthcare system, resulting in healthcare that is readily available and affordable for all citizens (Rupp, 1997). Healthcare in Iceland has been a public benefit since the conclusion of World War I in 1918 (Bender, Juliusdottir, Kristinsson, & Jonsdottir, 2002; Guttormsson & Gardarsdottir, 2002). Today, according to WHO data, Iceland has one of the healthiest populations in the world (WHO/Europe, 2007).

Spending approximately 10.5% of its gross domestic product on healthcare, the Icelandic healthcare system is supported by the National Institute of Social Security (financed through employer and employee contributions) and annual appropriations through general taxation (Statistics of Iceland, 2006; WHO, 2006). Whereas, the U.S.A. spends 15.2% of the gross domestic product on healthcare (Oreganization for Economic Co-operation and Development [OECD], 2006b). Although healthcare is readily

available to all Icelanders, many services require a small co-payment by the consumer (EOHCS, 2002). Healthcare services are available through clinics that are integrated into the local communities, often connected to schools and eldercare facilities. Recently, some physicians have left the local clinics to form independent private practices (O.Olafsdottir (personal communication, February 10, 2006). The government has responded by charging the consumer a higher co-payment for using services outside the local clinic system (EOHCS).

Prenatal Care

Iceland does not have a published standard for the definition of PNC, but would be included in the WHO definition of PNC as a dichotomous variable, having one or more visits with a midwife rather than a medical doctor during the pregnancy (Carroli et al., 2001, p. 2). Another report from the European Health Network identifies PNC as a complexity of interventions that a pregnant woman receives from organized healthcare services (WHO/Europe, 2007, p. 2). Comparing number of scheduled visits for 'routine PNC' (sometimes classified as women who are deemed to be 'low risk ' for a complicated pregnancy and/or delivery) in the U.S.A. pregnant women receive a few more than counterparts in Iceland. Further, in the U.S.A., PNC generally is provided by physicians and reimbursed by 3rd party payers while in Iceland PNC is provided by midwives who are employees of the government that pays for all citizens' health care.

Danish midwives sent to Iceland during Denmark's rule were instrumental in the development of PNC in Iceland (Gardarsdottir, 2002). Midwifery care during pregnancy

has persisted, with midwives today providing PNC to all women with routine or low-risk pregnancies and physicians managing all high-risk pregnancies. Midwifery care is based on a belief that pregnancy is a normal life process that should be supported by the caregivers (Varney, Kriebs, & Gregor, 2004). Physicians provide care to women who are determined to have high-risk pregnancies associated with medical problems before or during pregnancy (M. Hallgrimsson (personal communication, February 12, 2006; H. Hardardottir (personal communication, February 13, 2006).

The PNC in Iceland is similar to the U.S.A. in terms of components of care, but different in relation to providers and payers. The PNC system in Iceland is a single-payer system, with the government providing insurance for healthcare services (Guttormsson & Gardarsdottir, 2002; Statistics of Iceland, 2006). In the U.S.A., payers include the government, as well as private insurers and individuals (United Healthcare, 2005). Hence, PNC in Iceland is available at no charge to all women after 12 weeks of pregnancy (Statistics of Iceland). Most women confirm their own pregnancy with a home pregnancy test and then visit the gynecologist before officially obtaining PNC from local clinics at 12 weeks gestation.

It is estimated that over 90% of pregnant women in Iceland proceed through the entire pregnancy without ever having a physician encounter for care (H. Hardardottir (personal communication, February 13, 2006). The PNC visit schedule was recently reduced in mid-2006 to reflect the new European standards of approximately 10 scheduled visits during normal pregnancies (Chalmers et al., 2001; Villar, Bergsjo, Carroli, & Gulmezoglu, 2003). If abnormalities are identified during routine visits,

women are referred to a physician for follow-up and treatment (S. Jonsdottir (personal communication, February 13, 2006). After delivery, nurse midwives continue care through the eight postpartum home visits that are also part of the government-paid routine PNC (S. Sigurdsson (personal communication, February 13, 2006). These visits support the woman's need for childcare information, breastfeeding support, screening of both infant and mother, and general support and comfort during the postpartum period.

Infant Mortality

Although Iceland's current infant mortality rates are admirable and similar to those in most other industrialized nations, Iceland had severe environmental and public health problems in the pre-industrialized age, making infant survival perilous (Guttormsson & Gardarsdottir, 2002). Volcanic explosions with resultant ash clouds obscured the sun for more than three years (1783-1786), leading to the death of more than one-fifth of the total population (Gardarsdottir). As the fishing and shipping industries emerged, creating the backbone of the economy, foreign laborers were employed during seasonal work. These same foreign workers introduced infectious diseases previously unknown to this isolated population, resulting in the death of much of many Icelanders (Guttormsson & Gardarsdottir).

Gardarsdottir (2002) reported several factors which improved infant mortality rates in Iceland from one of the worst in the world in the 1800s to one of the best in the world, with current infant mortality rates of approximately 2.3/1000 births (Statistics of Iceland, 2006). During the 1800s and the early 1900s, customs regarding infant feeding,

lack of access to clean water, and poor sanitation led to high infant mortality rates due to diarrhea, dehydration, and bacterial diseases. In response to infant feeding problems, Danish midwives used prenatal education to promote the return to breastfeeding. Also during this period, the government supported the improvement of public infrastructures related to sanitation and clean water for the urban populations (Gardarsdottir). With these basic public health efforts, infant mortality rates declined dramatically in the early 1900s and have continued to improve with the modernization and improved accessibility of healthcare (UNICEF, 2006a).

Currently, infant mortality rates in Iceland (2.3/1,000) are three times better than the USA (7.8/1,000) (Statistics of Iceland, 2006; WHO, 2006). The explanation for this difference has not yet been identified. Many factors related to the PNC system, general economies, cultural practices, and the overall health of the population are possible influences (UNICEF, 2006a).

Experiential Context

The primary researcher of this qualitative study has extensive experience in the PNC system related to academia, work, and research. An education degree in health education prepared the researcher for the development of PNC classes for expectant parents in a large metropolitan area in the U.S.A.. Working as a nurse in hospital labor and delivery units, enabled the researcher to gain insight by witnessing the breadth of outcomes related to birth and delivery. Through policy work developing maternal child

programs for the state of Oregon, the researcher's ideas evolved about the role of government in supporting the health of mothers and children during pregnancy and early childhood. Matriculation with the ministers of health from countries around the world, and through the Hubert H. Humphrey Fellowship Scholars in the International Public Health master's program at Emory University, afforded the researcher added experience in global health issues, especially infant mortality. Achieving a Master's degree in Nursing with a specialty in midwifery, this researcher developed advanced skills and knowledge directed at women and infant health during and after pregnancy.

Working as adjunct faculty for East Carolina University, the researcher precepted students in the Midwifery program who provided PNC to women in North Carolina. As a midwife, the researcher also supervised physicians in PNC and delivery and was a partner in a large midwifery practice that provided care to thousands of women and delivered more than 2,500 infants a year for 13 years. During the past four years of study and research in the process leading to a PhD in Nursing, the researcher has focused on prenatal care and international health implications related to prenatal care.

Finally, extensive world travel has enabled the researcher to interview women informally about their prenatal experience in Scandinavia, Europe, Russia, Estonia, Africa, the Seychelles, South America, Central America, Mexico, Canada, Greenland, Iceland. This research is an extension of a life's work and interest.

Statement of the Problem and Purpose

PNC is the most common healthcare service provided to women of childbearing age throughout the world (Alexander & Kotelchuch, 2001). Poorly understood and defined, based on culture, and expensive for any healthcare system, PNC remains a target for change and improvement (Banta, 2003; Moos, 2003). Understanding and improving PNC holds the promise of improving infant mortality while saving precious healthcare costs for countries around the world (WHO, 2006). PNC, as it exists today, has developed culturally with little scientific evidence, as a myriad of services and procedures that have not been shown to improve infant mortality rates (Carroli et al., 2001; Cochrane, 1989; Hall, 2001). Further, PNC typically is studied from the provider and payer perspectives and seldom involves the consumer perspective (Ladfors et al., 2001)

Research has demonstrated that women either focus on the process of securing care and assume that the provider is giving them the proper care, not realizing that they can actively participate in the development of care (Hundley et al., 2003; Pittrof et al., 2002). Developing healthcare models that are based on health beliefs and consumer participation has been shown to improve outcomes (Pelkonen et al., 1998). Although consumers interact with PNC as receivers of care, they are rarely involved with defining, developing, or measuring PNC. Many health organizations, such as the World Health Organization, the Cochrane Collaboration, and United Healthcare have called for more consumer involvement in the development of healthcare services (Cochrane Collaboration, 2007; United Healthcare, 2005; Villar et al., 2003; WHO, 2006). Involving consumers also has been shown to have positive effects on all aspects of

healthcare systems, yet the consumer voice is rarely acknowledged (Cochrane Collaboration).

The purpose of this cross-national qualitative study using narrative inquiry approaches was to explore consumers' perspectives of their health during routine prenatal care in two different countries (U.S.A. and Iceland).

Research Questions

This exploratory study answered the following research questions:

1. What are consumers' self-reported health-related components of PNC?
2. How do the health-related components of PNC as stated by consumers from the U.S.A. and Iceland compare?
3. What cultural variations exist in consumer responses?

Significance of the Study

Nursing is involved with PNC at many levels, from assisting in the delivery of care with other professionals to developing PNC programs and delivering care. It is important that nurses become involved in identifying problems and working toward their solutions. Definitions of PNC vary among and within countries throughout the world (Banta, 2003). Without clear definitions and standards, it is difficult to measure and quantify PNC (Kochanek & Martin, 2005). Questions about the number of encounters and the components of care that improve outcomes continue to elude those delivering the

care (Alexander & Kotelchuck, 2001; Carroli et al., 2001). Until systematic research addresses these issues, the definition of PNC will continue to be based on personal opinion, advocacy group statements, weak study designs, and cultural overlays (Alexander & Kotelchuck, 2001; Cochrane, 1989; Moos, 2006).

More frequent and earlier encounters have not translated into better outcomes for the U.S.A. (MacDorman et al., 2005; Moos, 2003). Although infant mortality rates are significantly lower in some industrialized countries, such as Japan, France, and Iceland, little research has been directed at how these countries have achieved their low infant mortality rates (Pittrof et al., 2002). Countries with consistently low infant mortality rates may hold the key to reducing infant mortality rates in the U.S.A. and other countries struggling to make PNC more effective.

Although women receive PNC, their role has been that of a passive consumer of care (De Brouwere, Tonglet, & Van Lerberghe, 1998). If women become more active in their role as consumers of PNC, can care change to accommodate new directions? This research holds the potential for expanding the definition of PNC to include the consumer perspective. Understanding and supporting consumer health needs can have far-reaching implications for PNC as it is understood today, potentially affecting the lives of women and infants around the world.

In summary, this chapter presented the background focusing on the phenomenon of interest in this study that is, PNC. Rationales were discussed regarding the need of consumers' perspective of PNC activities, along with a description of the health care

systems of the two settings for this study, the U.S.A. and Iceland. The next chapter includes a review of relevant literature related to the phenomenon of interest. Subsequent chapters present the methods, findings and discussion of this study.

CHAPTER TWO: REVIEW OF RELEVANT LITERATURE

Although many researchers and healthcare organizations have called for the inclusion of consumers in healthcare and PNC development, few efforts have asked or included consumers in the development of any healthcare systems (Cochrane Collaboration, 2007; European Observatory on Health Care Systems Series: [EOHCSS], 2002; Nigenda et al., 2003; Olin & Faxelid, 2003; Pelkonen et al., 1998). This chapter reviews the literature that establishes a foundation for this study. The review highlights information about consumer perspectives about PNC from international and U.S.A. studies; and, existing gaps in the literature are identified that support the need for this study.

Literature Search Strategy

A search of the literature was conducted using two separate processes. The first search process included a review of research articles in the following databases: ECO, ERIC, CINAHL, Medline, Cochrane, and Blackwell synergy. The keywords *prenatal and antenatal care* were used and over 5,000 articles were found. Additional word combinations including *definitions, standards, perceptions, consumers,* and *healthy behaviors* were then used to narrow the search. The inclusion criteria were (a) articles

that were consumer focused, (b) related to PNC, (c) in English, and (d) contained definitions of PNC. The exclusion criteria were (a) non-English, (b) focused on process and procedures (such as specific tests), (c) no consumer voice in the study, and (d) studies that were not focused on PNC. The final article review included 186 articles, with 57 selected for incorporation into the analysis of PNC.

The qualitative studies relied upon interviews using open-ended question, focus groups and participatory action groups (PAR) (n = 16). The studies which used mixed methods,(n = 13) based their study in the quantitative realm and added the qualitative interviews or group processes after securing the quantitative data. The results from the qualitative aspect of the studies often added to the breadth of the data and opened up new areas for study.

The second process of the literature search focused on 12 different healthcare data systems that were included for statistical data related to prenatal care, infant mortality rates, and those that defined healthcare systems. These databases included the following: World Health Organization, the National Institute of Health (NIH), the Centers for Disease Control (CDC), the March of Dimes (MOD), the UNESCO, Statistics of Iceland, Europe's Health Evidence Network (HEN), the Organization for Economic Cooperation and Development (OECD), IOM, the American Council of Obstetricians and Gynecologists (ACOG), and the minutes from the House Committee on Energy and Commerce. These data sources were instrumental in grounding this research in published data from national and international statistics.

PNC: General Information

The literature related to the phenomenon of PNC is dominated by research directed at providers of care such as physicians and other care givers and payers, or those who pay for services such as insurance companies, governments, and hospitals (OECD, 2006b; WHO, 2006). The literature search demonstrated that there are different categories of consumer perceptions which are further categorized into expectations, satisfaction, and participation. Although research on consumer perceptions in the U.S.A. was available, research in Iceland is limited. Thus, international research was reviewed which contained relevant studies of women from nearby Scandinavia and other countries around the world. The research from countries other than the U.S.A. is categorized as *international* in the narrative contained in this document.

PNC: National and International Perspectives

Consumer expectations are an individual's understandings about a service before it is received and are rarely explored during pregnancy (De Brouwere et al., 1998). Consumer expectations regarding PNC, or the perceived value of the service, drive participation in healthcare and ultimately affect overall care (Alderson, Williams, & Farsides, 2004; Austin, 2005; Pender, Murdaugh, & Parsons, 2006). Existing research demonstrates that consumer and provider expectations can be very different, with providers focused on the procedures and consumers focused on the effects of care (Fagerskiold & Ek, 2003; Hildingsson et al., 2002; Jahn, Iang, Shah, & Diesfeld, 2000;

Langer et al., 1998; Manandhar et al., 2004; Stuart, Parker, & Rogers, 2003; Vonderheid, Montgomery, & Norr, 2003). This finding influences measurement efforts which assess the PNC process based on provider and payer expectations, and consumer expectations based on promptness and personality issues (e.g., respect, kindness) (Pittrof et al., 2002). The underlying assumption is that what is happening is necessary and carefully considered by the providers, but not the purvey of consumers (Hildingsson & Haggstrom, 1999; van Teijlingen et al., 2003).

U.S.A.

In an effort to address consumer expectations with PNC, Omar et al. (2001) developed the Patient Expectations and Satisfaction with Prenatal Care (PESPC) questionnaire/survey. The PESPCE was developed from a review of the literature and information emanating from focus groups. The initial questions were pilot tested with 114 pregnant women currently receiving PNC. The pilot testing resulted in a reduction of questions from 69 to 41. These questions were then administered to 587 pregnant women to verify the structural validity. Structural equation modeling and confirmatory factor analysis were used to support internal consistency.

The PESPC attempts to address consumer expectations and satisfaction with PNC by using quantitative methods based on closed-ended questions and statistical analysis to determine issues such as timeliness and courtesy. The findings from this quantitative questionnaire are directed at evaluating providers and the clinic operation with the consumer firmly in the role of the passive recipient of care. The findings indicated that

women with low expectations about receiving PNC were more satisfied than women with higher expectations for PNC. No findings were directed at improving PNC from the consumer perspective.

In a study conducted by Vonderheid et al. (2003) using a mixed method approach, women were obtaining PNC (n=159) were questioned about the health promotion content they received during PNC encounters..The initial survey was quantitative in nature comprised of closed ended questions that were developed by an expert panel's recommendations about the content of PNC, and standards from the American Academy of Pediatrics and American College of Obstetricians and Gynecologists, as well as from a panel of clinical experts who substantiated content validity for the study. The initial findings demonstrated basic satisfaction with health promotion content using univariate, bivariate, and multivariate analyses to support the validity of the findings.

Vonderheid then administered a second qualitative survey, composed of open-ended questions, allowing the women to comment freely about the health promotion content they received. The second survey found concerns with the same health promotion content during the same PNC. Women using the open-ended question format reported that the interview process was too long and the topics discussed were unnecessary. What women desired was more information about using seatbelts, dealing with stress/conflict, attending childbirth classes, family planning and infant care. The results from the first survey supported subjects' satisfaction with the health promotion information provided during the office visit. When these subjects were subsequently queried using open-ended questions that were qualitative in nature, participants expressed concerns about the lack

of information about health promotion. This mixed method study demonstrates the limitations with questionnaires containing closed-ended questions and answers, as well as the increased information obtained when participants can express other findings through open-ended questions (van Teijlingen et al., 2003).

International

The dimension of consumer expectations is just now emerging in international healthcare systems in an effort to improve services (Blackwell, 2002). Fagerskiold & Ek (2003) compared the expectations of Swedish women with home health nurses who conducted visits during the postpartum period. This qualitative study used open-ended interviews with consumers and providers to develop a narrative description of the post partum visit. The provider themes that emerged from this study focused on process and procedures (waiting time, friendliness of staff, ability to obtain appointments), while the consumer themes were directed at self-efficacy and the importance of the communication between the providers and consumers. For consumers, communication was more important than the actual medical care received.

In an ethnographic study from Canada, consumer expectations of PNC were explored with a group of Somalia women who had undergone genital mutilation (Chalmers & Hashi, 2000). Participants were involved in focus groups to develop a questionnaire with two related topics: (a) information about the act of the female genital mutilation and (b) perceptions of PNC. The women uniformly desired provider trust, respect for privacy, and cultural sensitivity. The application of these findings would

require changes at the provider level to include consumer needs for a more personal and respectful interchange during PNC service. These findings were verified with the participants and shared with the provider community in the hope that this information might change provider behaviors and improve participation in PNC services.

A number of mixed method studies have emerged from a large WHO effort to determine the safety and the acceptability of a reduced standard of PNC in four developing countries (Cuba, Saudi Arabia, Thailand, and Argentina) (Carroli et al., 2001; Langer et al., 1998; Manandhar et al., 2004; Nigenda et al., 2003; Villar, Bergsjo, Carroli, and Gulmezoglu, 2001). This massive research effort was initiated to explore the number of PNC visits necessary during routine pregnancy based on science. The quantitative aspect of this research involved more than 24,000 women who were randomly assigned to one of two groups. One group received the standard package of PNC visits (12-16 visits) and the second group received the reduced level of PNC visits (6-8). The qualitative aspect of these studies included women who had initially participated in the quantitative process and then were assigned to smaller community groups. Providers were also surveyed and interviewed to obtain their perspectives. Birth record data was used to determine outcomes in the quantitative studies, and themes were generated from the qualitative process of individual interviews. The results of this research led to substantial changes in the number of routine PNC visits in the participating countries while acknowledging the needs of both providers and consumers. The evidence garnered from this research supported reduced levels of visits during routine PNC. Although providers were willing to reduce levels of visits to those supported in the study, the

consumer participants expressed concerns about reduced visits. The final visit schedules that were adopted in the participating countries were adjusted and ranged from up to 8 and 10 visits prospectively to address consumer concerns.

Consumer Satisfaction

Consumer satisfaction can be defined as (a) a response (emotional or cognitive), (b) related to expectations, and (c) occurring after the encounter (McQuitty, Finn, & Wiley, 2000). The multidimensional nature of consumer satisfaction is based on the interaction between expectations and experiences, making efforts in measurement extremely difficult (Sixma, Kerssens, Campen, & Peters, 1998). Healthcare providers, hospitals, and organizations typically focus on outcomes to establish satisfaction ignoring the inherent relationship between expectations and experiences (Holroyd, Bailey, James, Pitman, & Whynes, 2002). Satisfaction surveys have a role in measuring PNC, but must be viewed as one of the data points picture and used with other measurement tools and methods to fully understand this complicated aspect of care (Johnson et al., 2002).

U.S.A.

Listening to Mothers, a large national survey, has been, used to explore women's satisfaction with the maternity experience in the U.S.A. (Maternity Center Association [MCA], 2004). This survey was developed by teams from the MCA, the Harris Interactive research group, and the Listening to Mothers National Advisory Council

(MCA). The MCA supports natural childbirth with dissemination of information through a computer web site and research. Women were selected for this survey through a telephone random-digit dialing method (n = 36) and self-selected through an internet campaign present on their web site (n = 1447). Participation included completing a survey, follow-up contact for some through telephone interviews, and optional open-ended questions in both the interview and survey. The largest group (n = 1447) was from a self-selected web access group containing women who are computer literate with access to a computer and the internet, as well as, an interest in natural childbirth. The bias related to this self-selected group led to the inability to generalize findings to all women in the U.S.A.. Most of the questions related to informed consent for procedures with the labor or delivery processes. The results demonstrated women's concerns with the consent process for procedures and the need for more research.

Handler et al., (2003) examined the relationship between satisfaction and increased involvement in PNC for African-American women in a large Midwest managed care organization. Using a modified Patient Satisfaction Questionnaire developed by Ware & Hays (1988), this quantitative research used closed-ended questions which were directed at the physical environment, access, availability, efficacy, cost, and continuity of care. Univariate and multivariable analysis examined the relationships between the variables of satisfaction and actual PNC attendance that was was verified with clinical records. Participation in PNC was measured with the Kotelchuck Adequacy of Prenatal Care Utilization Index which measures the number of visits related to the trimester of the pregnancy. This index is commonly used by

governments and organizations to determine adequate care during pregnancy (Alexander & Kotlechuck, 2001; CDC, 2004; HRSA, 2007). The women who participated in this research were self-selected and had a high degree of satisfaction with their care. Participants in the study expressed satisfaction with their clinic, actual participation in PNC was less than adequate. However, the findings of this study cannot be generalize due to the self-selection of the participants and the unique aspects of a managed care organization.

International

When measuring consumer satisfaction, many researchers have modified existing quantitative tools to meet the unique needs of their specific interests and populations (Barr & Vergun, 2000; Edwards, Staniszewska, & Crichton, 2004; Hundley et al., 2003; Johnson et al., 2002). Although consumer satisfaction is a multifactorial and complex phenomenon, the modification of existing tools does not substantiate reliability and validity for the modified tool. Johnson (2002) modified an existing tool known as the Mason Survey that was developed to measure aspects of PNC in Australia. After determining that the original tool was inadequate, additional attributes of consumer satisfaction were identified in the literature and enhancements were made to the Mason survey. Three phases were undertaken to support address validity and reliability of the Mason survey: 1.) All tests and surveys dealing with consumer satisfaction were reviewed for common core aspects, 2.) Comparisons were made between local and larger published research tools to address validity and reliability for the Mason Survey. 3.)

Finally, an expert panel reviewed and modified the Mason survey to reflect the relevance to Australian culture. The changes made were related to the locus of control, and consumer and provider definitions of quality. This modified tool was used with N=559 women. The study results found providers were concerned with the types of services rendered, and consumers were concerned with the effects of the services provided.

Hundley et al. (2003) developed a quantitative closed question survey based on "other valid questionnaires" which included four main themes: (a) understanding informed choices, (b) roles of providers, (c) choice of provider, and (d) continuity of care. Specific statistics for validity and reliability for the survey were not included in the published report. The women completing this survey (n=1137) reported satisfaction with their care regarding the punctuality of their providers, the ability to schedule appointments in a timely manner, completion of common medical procedures (weight, blood pressure, laboratory tests), pleasant staff, the office ambience, and other operational issues. The larger issues of expectations and subsequent satisfaction related to the fact that their expectations were not fully explored due to the limited possibilities in the answers. The responses supported the underlying hypothesis proposed by van Teijlingen et al. (2003) that states, "what is, must still be best." If a survey is limited to what is, or present practice, the outcomes will also be limited.

The connection between healthy behaviors and consumer satisfaction has been supported by provider groups and many governmental healthcare systems (Cole, Mackey & Lindberg, 1999; Duff, 2001; Paine, 1988; Rostant, Steed, & O'Leary, 2003; Smith, 2001; van Teijlingen et al., 2003). The countries of Sweden, Norway, Finland, and

Denmark routinely survey women about their maternity experiences using quantitative methodology and self-administered questionnaires monitoring the effectiveness of existing programs. Sweden has gathered surveys of over 5,000 women to assess expectations and satisfaction with PNC (Hildingsson et al., 2002; Hildingsson, Radestad & Waldenstrom, 2005; Ladfors et al., 2001). With the data from these quantitative questionnaires and the large scale participation, the findings have been used to build and improve PNC in the participating countries, but are limited to the questions and available answers contained within the questionnaires.

A qualitative study from Tanzania explored satisfaction by comparing PNC in public and private clinics (Boller, 2003). Both female consumers and providers were observed and then interviewed with open-ended questions to determine PNC quality and consumer satisfaction. Women defined satisfaction and quality as communication and standards of respect, while providers focused on the procedures and process (e.g., exams, monitoring the baby and mother, and general health indicators). This study demonstrates the linkage between consumer expectations and satisfaction and the discordance between providers and consumers in defining satisfaction.

Consumer Participation in PNC

Consumer participation is any activity ranging from a physical presence during PNC to participation in program development and evaluation. Historically, consumers receive services and are rarely viewed as active participants in the development, or

evaluation of this essential service (Hildingsson et al., 2002; Hindley & Thomson, 2005; Klima, 2003). Consumer participation has been shown to decrease infant mortality rates in poor and remote communities, and has a potential for impacting PNC in other parts of the world (Manandhar et al., 2004). Increased level of consumer participation is supported by statements from the WHO, the Cochrane Collaboration, and governmental organizations (Shea et al., 2005; WHO, 2006). Many industrialized nations are actively pursuing increased consumer participation in quality evaluations of healthcare (Brio, Walderstrom, Brown, & Pannifex, 2003; Carruthers & Jeacocke, 2000; Earle, 2000; Harrison & Verhoef, 2002; Manandhar et al.). As governments increase opportunities for participation, consumers become active players in shaping services that are more responsive to consumer needs (Allsop et al., 2004; Harrison & Verhoef, 2002; Janssen, Klein, Harris, Soolsma, & Seymour, 2000; Langer, 1996).

U.S.A.

Consumer participation in the U.S.A. healthcare system may differ based on culture and ethnicity thus impacting survey questions and responses (Alexander, Kogan, & Nabukera, 2002; Chalmers & Hashi, 2000; Handler et al., 2003). Sarnoff & Adams (2001) explored cultural differences in consumer participation related to the initiation of PNC. They found that Latino and African American women routinely initiated care after the first trimester and were satisfied with this event, whereas the providers in the USA expected care to begin in the first trimester. The findings support efforts to increase the perceived benefit of early initiation of PNC to all consumers, or participation during early

pregnancy will remain low for some culturally diverse groups of women (Kotelchuck, 1994; Pender et al., 2006).

Differences between provider and consumer perceptions of PNC participation were demonstrated in a study conducted in Arkansas (Teagle & Brindis, 1998). A convenience sample was selected of consumers (n=250) and providers (n=16) from local PNC clinics. This study used open-ended questions, with both providers and consumers receiving the same questions, however the themes that emerged from both groups were quite different. Providers indicated that the women participated in care to support their own healthcare needs, whereas consumers stated that they participated in care to support the health of the baby. Consumers also expressed fear related to the "unknown" about the PNC process, whereas the providers thought of themselves as helping and supportive. Consumers also expressed concerns that they were passively receiving care, while providers stated that consumers were not interested in participating in the care they received. With the use of simple open-ended questions, issues related to the locus of control, self-identity, and participation were identified as concerns from the consumer health perspective.

International

Convincing consumers to participate in their healthcare can be difficult for many reasons, ranging from a lack of understanding of the opportunities for consumer participation to the barriers organizations and providers place before them (Alexander et al., 2002; Quinlivan & Evans, 2004). The Cochrane Collaboration (2007), is an

international organization that obtains reviews of the effects of health care. It is required to have consumer participation in order to improve the way in which research is prioritized, administered, and disseminated (Kelson, 1999). When all Cochrane Review Groups (CRGs) in the United Kingdom were surveyed regarding participation by consumers, of the 42 possible groups, only 33 surveys were returned, and of those, only 22 demonstrated any consumer participation (Kelson). The reason cited for lack of compliance was difficulty with incorporating consumers into the process.

In the Scandinavian countries (Norway, Sweden, Denmark, and Finland), there is a strong history of researching consumer participation in maternity care using randomly assigned surveys that request consumer responses to their healthcare experiences (Hildingsson & Radestad, 2004; Pelkonen et al., 1998). The questionnaires were developed from variables identified in the literature as well as current issues in the national healthcare systems, such as; improving satisfaction with PNC through; finding opportunities for patient participation, fulfilling expectations of pregnant women. Data analysis involved developing confidence intervals for relative risk and logistical regression analysis using SPSS. Findings from the questionnaires included ; the need of providers to address the family unit during pregnancy, the promotion of continuity of care with caregivers, improving provider support for both medical and emotional needs to improve satisfaction with PNC; and, reiterating the importance of consumer input regarding health care decisions (Farian et al., 2005; Hildingsson & Radestad; Pelkonen).

Consumer participation is usually viewed as an adjunct to health care programs, not as a primary intervention, but in Nepal, women's groups were used to develop

methods to increase participation by local women in PNC (Manandhar et al., 2004). Local women were trained to encourage participation in PNC, use of hospitals for delivery purposes, access to trained birth attendants and basic hygiene. This participatory action research (PAR) project assisted with the identification and formation of matched pairs (controls and action) for the female facilitators and community-based women's groups. The action groups identified and formed interventions based on the needs of the women and community funds which generated monies for maternal and infant care, transportation schemes, the distribution of clean delivery kits, home visits from women in the groups to newly pregnant women and production of a film depicting local women during pregnancy. The women who joined the community groups increased participation in PNC and improved health outcomes, whereas in the control groups of women who did not participate in the community groups, no health improvements were noted.

Gaps in the Literature

In assessing gaps in the literature related to the phenomenon of interest in this study, the questions remain about the role of the consumer in improving PNC, the role of the provider during PNC, and the assessment of the quality of services to improve the PNC system (CDC, 2004; Ekele, 2003; Kochanek & Martin, 2005; Kotelchuck, 1994)? Quantitative methods are commonly used by governments and governmental agencies to calculate the numbers of services encountered during PNC to determine adequacy of care, with few studies examining the actual composition of the care (Carroli et al., 2001;

Cochrane, 1989; Kotelchuck; MacDorman et al., 2005). Assessing PNC in the USA healthcare system is complicated by the sheer number of differences in service components that are reimbursed by various third party health payers which ultimately are defined from the provider and payer perspectives (Cochrane; United Healthcare, 2005). Quantitative approaches have also limited the ability to assess consumer satisfaction with current processes and procedures related to clinic flow and timeliness (Edwards et al., 2004).

Although many researchers and organizations have called for the inclusion of consumers in healthcare and PNC development, interest in consumer perspectives of PNC has been limited (Cochrane Collaboration, 2007; EOHCSS, 2002; Nigenda et al., 2003; Olin & Faxelid, 2003; Pelkonen et al., 1998). The consumer is rarely acknowledged as an active participant in the development of the healthcare delivery system, yet studies demonstrate that consumer participation brings valuable added insight and improvement to healthcare systems (Carr, 2001; Kelson, 1999; Shea et al., 2005; Simmons & Birchall, 2005).

Internationally, there is an emphasis on active participation by consumers by the WHO to establish recommendations for essential components of routine PNC (Carroli et al., 2001; Nigenda et al., 2003; Villar et al., 1998; Villar, et al., 2003). Women who participated in this research reported that consumer-focused interventions have also shown to reduce infant mortality rates in poor and remote communities, and have a potential for improving PNC in other parts of the world, such as Brazil and Australia (Moos, 2006; Watson, Hodson & Johnson, 2002). Studies continue to demonstrate

women's unmet needs and missed opportunities to engage women in PNC. Simple changes that can occur as result of health education with women in the community can decrease infant mortality rates dramatically (Littlefield & Adams,1987; Paine, 1988; Watson et al.).

Consumer responses to surveys and satisfaction questionnaires are typically focused on issues of respect, timeliness of appointments, and the functionality of services (Edwards et al., 2004; Handler et al., 2003; Hundley et al., 2003). The consumer assumes a passive role commenting on how the system functioned with no impact on the actual care components (Hundley et al.; Pelkonen et al., 1998). The subsequent implication of this research is that the consumer can participate and make the current regime of care function more effectively, but they cannot impact the actual composition of the care (Rowe, Garcia, Macfarlane, & Davidson, 2002).

Cultural influences on PNC have been addressed by examining the effects of PNC usage, however, examination of PNC from an international perspective is lacking in the literature (OECD, 2006; WHO, 2006). How PNC is utilized and developed in countries around the world may hold some promise for improving PNC for all women. Additionally, the incorporation of consumer perceptions regarding PNC has the potential for improving healthcare for pregnant women throughout the world (Shea et al., 2005; De Brouwere et al., 1998). Current PNC programs in industrialized nations emphasize screening for problems, not the concerns of the local consumers leading to gaps between the concerns of the population (consumers), and the priorities of the professionals (providers) (De Brouwere et al., 1998).

As for the variations in perceptions between providers and consumers, Pittrof et al. (2002) noted that PNC should meet the needs of the consumer in a satisfying and safe manner, while also meeting the mandates expected of providers, as well as consumers' family members involved in this complicated and multifactorial phenomenon. Defining services; involving consumers; recognizing perceptions of consumers related to expectations, satisfaction, and participation; and recognizing the importance of individual health during pregnancy are but a few of the complex factors leading to many gaps in the literature. Researchers continue to explore the PNC process and procedures such as the pleasantness of the surroundings and wait time to see providers, while ignoring consumer perceptions and needs (Omar et al., 2001).

According to Omar et al. (2001) and Pender et al. (2006), consumers' needs to maintain a healthy state during a normal pregnancy are ignored in research efforts. In spite of being a service focused on essentially healthy women, routine PNC continues to be viewed as a medical service that requires little input from consumers (Emslie et al., 1999; Walsh, 1999). Ignoring the needs of consumers reinforces the inactive role of the consumer (Olin & Faxelid, 2003; Omar et al.). Consumers have lost their voices in this important service and efforts to maintain health during pregnancy are missing in the research.

In sum, the literature reveals that although PNC varies throughout the world, cross-national research has been limited when comparing services between countries. Many nations are achieving infant mortality rates well below the ongoing rates routinely measured in the U.S.A. (7%-8%). Research comparing PNC services between and among

different healthcare systems in other countries is lacking (Pittrof et al., 2002; WHO, 2006). The next chapter describes the methods of this qualitative study in order to explore PNC from the consumer perspective in the USA and Iceland. This is followed by Chapter Four which highlights the findings from the data analysis; and concludes with Chapter Five which discusses implications of the findings.

CHAPTER THREE: METHODS

This chapter describes the methods used in this cross national qualitative study to explore the phenomenon of consumers' perception of PNC. The discussion herein includes descriptions of the two settings (U.S.A. and Iceland), recruitment of study participants, the protection of human subjects, data collection instruments, and procedures.

Narrative Inquiry: Philosophy and Assumptions

An inductive approach to the phenomenon of interest, in this case PNC, is a means of analyzing and comparing data between countries to answer the following research questions:

1. What are consumers' self-reported health-related components of PNC?
2. How do the health-related components of PNC as stated by consumers from the USA and Iceland compare?
3. What cultural variations exist in consumer responses?

Narrative inquiry in particular elicits the 'story' using words of a participant. Content analysis, in turn, is a systematic approach to organize those words, thoughts, and ideas (Kaid & Wadsworth, 1989; Lindlof, T. R., 1995). Themes, categories and concepts

emerge from the communication through the presence or frequencies of words, thoughts, or ideas in the text. With qualitative approaches the researcher attempts to immerse himself/herself in the context of the phenomenon through observations, data collection, and analysis of the text. Qualitative approaches incorporate aspects of interpretation which can include deep, personal reading and more abstract findings from the narrative data (Krippendorff, 2004; Mayring, 2000).

The following discussion highlights philosophical underpinnings and assumptions that support selecting narrative inquiry as the strategy for data collection and using content analysis to analyze the qualitative data as the method for this cross national study.

1. Narrative inquiry elicits explicit statements from the participants about the relationships between PNC and their perceptions, which in turn through content analysis can be used to express the findings (Krippendorff; Nandy & Sarvela, 1997).
2. Narrative inquiry is an unobtrusive means of analyzing personal statements, stories and interactions (Giacomini & Cook, 2006; Mayring).
3. Narrative inquiry offers the ability to obtain and analyze direct communication with women who have recently experienced PNC (Denzin & Lincoln, 2003; Krippendorff),
4. Narrative inquiry is adaptable to stories and words in order to explore a phenomenon of interest PNC, in this case via personal interviews with women in Iceland and the USA (Frankel & Devers, 2000; Krippendorff):

5. Narrative inquiry, with content analysis of the qualitative data, provides a system for analysis of culturally-based perspectives elicited from interviews and participatory observation with respondents in their naturalistic settings (Giacomini & Cook; Mayring),
6. Narrative inquiry with content analysis of the data supports congruence in meaning of language (words) gleaned from the interviews which encourages moving between specific categories, conceptual meaning units, and relationships in coding and interpretation of those concepts and terms (Denzin & Lincoln; Frankel & Devers; Krippendorff).
7. Narrative inquiry with content analysis of data allows for theme development and possible influence on the expansion or exploration of a phenomenon such as PNC in other settings (Denzin & Lincoln).
8. Narrative inquiry and content analysis provides a means to explore important insights into simple and complex ways of thinking about PNC through the language of those receiving care (Krippendorff; Mayring).
9. Narrative inquiry with triangulation of participant observation allows for the comparison of differences in communication among women in different settings about PNC (Denzin & Lincoln).

Sample and Settings

Sample

A purposive sampling technique was used to select and identify women who fit the inclusion criteria. According to the underlying assumptions of narrative inquiry, the number of participants to be included in a study is dependent on the scope of the phenomenon of interest coupled with response redundancy and topic saturation. Thus, no precise predetermined number of participants was established by the researcher prior to implementing this study. Rather, the emphasis was directed at the wealth, depth and saturation of information about PNC provided in the responses provided by study participants (Denzin & Lincoln, 2003; Polit & Beck, 2003). In this study saturation and redundancy occurred during the 16^{th} interview in both the USA and in Iceland, resulting in a total of $N = 32$ participants being interviewed for this study.

Settings

The settings for this research involved two different nations: Reykjavik, Iceland and Deschutes County, Oregon, U.S.A.. Although separated by 3,795 miles (6107 km) the demographic profile of the populations is similar (Deschutes County Government, 2006; Statistics of Iceland, 2006;Vital Statistics System, 2005, see attachment 6). The data collection in both settings occurred during autumn and winter, with associated

inclement weather conditions, thereby, limiting outdoor activities for residents in the two regions. Interviewing consumers from two different industrialized nations with similar PNC systems and different outcomes provided an opportunity for exploring PNC from a new perspective.

USA: Deschutes County, Oregon

Deschutes County, located in the center of the state of Oregon, was created in 1916 and named for the Deschutes River which flows through the county (Deschutes County Government, 2006). Bend is the largest city east of the Cascade mountain range in Oregon and is located in Deschutes County Bend is also the outdoor recreation, political, and economic hub of central Oregon (Deschutes County Government). The landscape of Deschutes County is dominated by lava flows, snow-capped mountains to the west, and high desert to the east (Deschutes County Government). The climate of Deschutes County is a high desert, arid climate, with temperature and precipitation influenced by the proximity to the mountains and the local elevation (State of Oregon, 2007). Fall and winter temperatures range from highs in the mid-40's to lows in the mid-20's (Deschutes County Government).

All participant interviews were completed in November and February, which dictated that the interviews take place indoors. It was important for the participants to feel comfortable during the questioning process so that they could discuss their PNC experience without interruptions or stress from their environment (Hulley, Cummings, Browner, Grady, & Newman, 2001). As such, the interviews took place at each

participant's choice of environment and were scheduled according to the lifestyle of the participant. In Deschutes county, participants, chose to be interviewed in their homes (*n* = 4), a local coffee shop (*n* = 2), and in a private meeting room at a local health clinic (*n* = 10).

Iceland: Reykjavik

Reykjavik is the northernmost capital city in the world and the main port of Iceland. In Icelandic, Reykjavik means "Smoky Bay" because of the steam rising from geothermal springs, which provide heat and hot water for the city (Gardarsdottir, 2002; Guttormsson & Gardarsdottir, 2002). Reykjavik is a modern city located at the edge of Faxa Bay and surrounded by snow-capped mountains (Government of Iceland, 2007). Located just south of the Arctic Circle, Iceland receives only four hours of daylight on the shortest day in winter, and during the summer the evenings are almost as bright as the daytime (Nordal & Kristinssom, 1996). Despite its extreme northern location, Reykjavík is much warmer than most locations at similar latitudes due to the effects of the warm waters of the Gulf Stream (Statistics of Iceland, 2006). The average mid-winter temperatures are similar to those of New York City during winter months (Statistics of Iceland). Interviews with Icelandic women took place in February and early March, and all were conducted indoors to avoid the cold weather. In Reykjavik Icelandic participants chose to be interviewed in their homes (*n* = 6) and in a quiet sitting area in two separate shopping malls (*n* = 10).

Participatory Observation

Through initial participatory observation, in the community and at social and cultural events in both nations, the researcher was exposed to participants' day-to-day activities, their roles in the community, and became knowledgeable about their systems of PNC. Participatory observation also allowed for establishing rapport with the women and identifying and recruiting potential participants for the study. The researcher participated in several family gatherings with traditional foods and songs, which demonstrated some of the important cultural traditions, and visited museums and historical sites. Field notes were kept to record personal reactions and evolving insights gained from the interviews, interactions with participants, and other personal observations (Polit & Beck, 2003).

As a U.S. citizen, the researcher was quite familiar with the Deschutes County area through life experiences and work. She was raised in Oregon and had lived in the Deschutes County area during her youth; but relocated to other parts of the US during her adult years. Recently the researcher returned to live and work as a midwife in Deschutes County and resided there during the 6-week data collection process. Personal and professional knowledge about the community and healthcare system supported the researcher's entry into the Immunization Clinic at Deschutes County Health Department (DCHD) where a number of participants were recruited for this study. Additionally, the researcher was employed in the DCHD in the PNC Clinic. Other health professionals in the community also suggested names of potential participants for the study to the researcher.

With regard to Iceland, the researcher spent three weeks in that country in 2006 at the invitation of the Health Minister. The Minister of Health of Iceland, Siv Frioleifsdottir, facilitated site visits, contact with PNC program managers and providers, who provided a general review of the PNC system in Iceland. The researcher met with women, midwives, and physicians at three rural clinics, the main PNC clinic/women's hospital in Reykjavik (Landspital), as well as two other hospitals in the area. During this time, the researcher interviewed Icelandic physicians and midwives who provided PNC in the Reykjavik area. The researcher was privileged to be included in midwives' family events and participation in meals at their homes. Icelandic nurse scholars were identified who would be willing to participate in a cross national study focusing on the PNC phenomenon. In 2007, when this study took place the researcher returned to Reykjavik for another three weeks to collect data and reconnect with Icelandic friends.

Protection of Human Subjects

Institutional Review Board (IRB) approval was obtained to implement this study in the U.S.A. and in Iceland (U.S. Department of Health & Human Services, 1985; U.S. State Department, 2007). The IRB approval was secured from the University of Central Florida in the Fall of 2006 (see Appendix, Table 1). Securing IRB approval was a much more complicated process in Iceland. The researcher collaborated with a nurse researcher in Iceland to secure the IRB approval from the Icelandic government in the winter of 2007 (see Appendix, Table 2).

A consent form was developed to inform participants about the study (see Appendix, Table 3). The form explained the purpose of the research, what was expected of participants involved in the study along with the risks and benefits. Minimal risks were identified other than the potential for embarrassment about certain questions in the interview. Participants were informed if they were uncomfortable in answering a certain question they could decline to discuss that item. Likewise, no specific benefits were identified other than, perhaps, the therapeutic nature that sometimes is an outcome of the narrative inquiry process. Contact information for the researcher was provided to all participants should they have additional questions after the interview encounter. Finally, it was emphasized that participation was voluntary and the individual could withdraw from the study at any time without any deleterious outcomes for the participant. The consent form was read by each potential participant, discussed with the researcher; then, if the woman agreed to participate, the form was signed. A copy of the form was given to each participant in the study, and another maintained by the researcher in a secure locked file cabinet.

Confidentiality

To protect the identity of the participants in this study all consent forms, field notes, audio cassettes with the interviews, and transcriptions of the narratives were securely locked, and only accessible by the primary researcher. A master list of participants with numerical codices was secured as a file in the researcher's password

protected computer. All interviews were transcribed and saved as a file on the computer by the primary researcher. No participant was identifiable by name in the transcribed documents. Numerically coded transcribed narratives were transmitted as secure e-mail attachments to a nurse scientist in Iceland for review and analysis purposes.

Recruitment and Selection of Participants

Inclusion and Exclusion Criteria

Inclusion criteria for recruiting participants into the study included women over the age of 18 years who had given birth after routine PNC in the past 3 to 12 months; received care in one of the settings and, able to speak English. Exclusion criteria included women who were under 18 years of age, not being able to speak English and documented a non-routine prenatal experience. A non-routine experience would have been identified by the woman's PNC provider and subsequently impacted the course of her PNC. Non-routine PNC is typically directed at high risk maladies which could promote premature delivery, and/or, chronic illnesses such as; lupus, cancer, diabetes, epilepsy, sickle cell disease, genetically-linked disorders, and/or uncontrolled hypertension (American Academy of Pediatrics & the American College of Obstetricians and Gynecologists, 2002; Health Resources and Services Administration, 2007).

Purposive sampling was used to recruit women who met the inclusion criteria. Purposive sampling is often used in qualitative exploratory studies to secure opinions of

the target population but, the findings cannot be generalized to a larger population (Denzin & Lincoln; Tashakkori & Teddlie; Polit & Beck). However, themes that emerge in the content analysis may be transferable to similar groups in other settings experiencing the same phenomenon.

In the USA, recruitment activities were coordinated by the researcher through personal contacts and professional referrals in Deschutes County, Oregon. Women who met the selection criteria were identified through the Deschutes County PNC program (n = 2) and by referral from two local PNC providers (n = 4). Subsequently, the researcher contacted these women by phone to provide details and invite them to participate in the study. All women contacted by the researcher agreed to participate. Through participant observation, other potential participants were identified in the DCHD Immunization Clinic in which women with infants who appeared to meet the inclusion criteria were approached by the investigator (n = 10); all who were approached, agreed to participate. A mutually convenient meeting was scheduled with all the women (n = 16) in order to complete the informed consent and participate in the tape recorded interview.

In Iceland recruitment activities were coordinated by the Director of the Midwifery School at the University of Iceland. Midwives in Reykjavik were asked to identify participants who met the inclusion criteria of the study and refer them to the researcher. Potential participants (n = 6) were contacted by the researcher to verify their willingness to participate and to arrange a mutually convenient setting for the interview. During winter months, to escape inclement winter weather, many Icelandic mothers with their infants stroll in shopping malls. Through participant observation by the researcher,

additional subjects (n = 10) were identified and recruited at two shopping malls. Women who appeared to meet the inclusion criteria were approached and asked if they would be willing to participate in this study. If so, a mutually convenient time was arranged for the audio taped interview. Only one woman who was approached in the mall declined to participate, stating that she was "in a hurry to get home with [her] baby."

Instrumentation

Two instruments were developed by the researcher to collect data for this exploratory study; a demographic data form and an interview guide with a ten open ended questions to ensure that all topic areas were addressed in the interview.

Demographic Data Form

Demographic information was secured using the Demographic Data form (see Appendix, Table 4) before the interview process was initiated. The form included information about participants' place of residence, age, family and living arrangements, level of education, brief obstetrical history and usual provider of PNC, and payer-related information .

Interview Guide

Ten open-ended questions were developed by the investigation to learn about a participant's recent prenatal care experience and to ensure that all content areas were addressed in each interview (Brink & Wood, 2001). The open ended questions and

unstructured format provided flexibility and allowed the participant to reflect on her PNC experience and provided opportunities for the researcher to ask questions to amplify, validate and clarify comments in the interview (Oman; Waltz et al., 2005).

Questions in the Interview Guide were based on relevant literature, the experience of the researcher and other professionals in the field of obstetrics, and the expertise of members on the researcher's dissertation committee (see Appendix, Table 5). To address content and cultural validity the interview guide was reviewed by physicians and midwives providing PNC in Iceland. The interview guide focused on participants' perceived health status during pregnancy, what they and their providers did to support their health during pregnancy, and any informational resources they used. Questions were also involved their expectations from PNC, as well as what occurred, what was needed, along with any suggestions to improve the PNC process. All interviews were conducted in English. The face-to-face interview allowed the researcher to clarify responses and address difficulties with participants' responses (e.g., language, concentration, boredom). The researcher completed all of the interviews in both settings, thereby enhancing the reliability of the findings. All of the participants who were recruited completed the interview process; no one dropped out of the study.

Procedures

Upon meeting and greeting a potential participant for the study, the researcher conversed informally in order to establish rapport. Potential participants were then

provided with written and verbal information about the study and any questions were answered by the researcher. Upon agreeing to participate, the consent form was signed by the participant and they received a copy of the consent form.

Field notes were written by the researcher during and after each audio taped interview to document unique aspects of the interview or the participant. (Waltz et al., 2005). The interviews ranged in length from 30-60 minutes. After the tape recorder was turned off, the researcher asked the participant if she had additional information or questions (Denzin & Lincoln; Tashakkori & Teddlie). Each participant was asked if she was interested in receiving information about the study findings and this was provided to those who requested information, personal contact information of the participants was maintained by the researcher with other confidential materials. Finally, the participant was thanked by the researcher for her time and willingness to participate in this study

At a later time, audio recordings of the participants' narratives were transcribed verbatim by the researcher using Microsoft Word software. An electronic copy of the file was sent to the Icelandic researcher; another copy was maintained by the researcher in the United States. Subsequently, using content analysis methods the transcribed narratives were analyzed, cross referenced and triangulated by researchers (2 OBGYNs (MN, VB) and 2 midwives (SK, AK) /USA and two midwives (SS, OO) /Iceland)in the both settings (Denzin & Lincoln; Tashakkori & Teddlie).

Challenges of Cross-National Exploratory Research

Recruiting participants for any study can be challenging; however, this aspect of the research process can be daunting with international and cross-national studies (Tashakkori & Teddlie). Language always is a consideration even when the researcher speaks and understands the native language (UNESCO, 2006b; Waltz et al., 2005). Iceland requires English as a second language from primary school through high school (Statistics of Iceland, 2006). Thus, all Icelanders less than 40 years of age - the age group of participants in this study are proficient in English, albeit a dialect. Hence, no interpretive services were used for this cross national study.

Perhaps, the most profound challenge of cross national studies with face-to-face interviews by the same investigator are the financial costs, including travel and meeting in a setting that is convenient for study participants. The time and cost of collecting, transcribing and analyzing data also can be daunting. Over time, costs for each of these items escalates (Denzin & Lincoln; Tashakkori & Teddlie).

In respect to attribution bias on the part of the interviewer, this can be considered both a benefit as well as a disadvantage (Hulley et al.; Polit & Beck); in this case, a Caucasian, middle-aged woman who is a midwife practitioner who provides PNC. All but two of the women self-identified as white females below 40 years of age (two were of Latino origins). The researcher was educated as a midwife in the U.S.A., but care the women received in Iceland was distinctly Icelandic. Other than through participatory observations the researcher had no personal or professional experiences with Icelandic PNC.

Credibility & Trustworthiness

A variety of strategies were implemented to ensure and enhance credibility and trustworthiness of the data in this exploratory study (Denzin & Lincoln; Hulley et al.; Polit & Beck).

Credibility

Credibility includes confirming the researcher's qualifications, experiences, perspectives, and assumptions (Denzin & Lincoln); and, ensures findings are credible (believable) relative to the phenomenon under investigation. Efforts taken to support credibility in this study included the following. Coupled with the researcher's extensive background in PNC, linguistic verification was assured with other researchers (Iceland: O.A.O, S.S., and U.S.A.: V.B., S.K. and M.N.), who are all providers of PNC familiar with the cultural context of meaning embedded in language. Interviews were audio taped for reviewers to verify and critique the responses of the participants in order to enhance the credibility of the findings.

Dependability

To address dependability of the data the researcher accounted for the context, or environment, in which the interviews took place. Efforts to support data dependability during this research included the following. Data were supported over time by monitoring

and reporting the environment and context during the research process; field notes were used, one person (the researcher) completed all of the interviews in both settings; peer insights and feedback were sought to address content validity, and audio taping of the interviews were maintained.

Confirmability

Confirmability refers to the degree to which the results can be confirmed or corroborated by others (Polit & Beck, 2003). For this study the following methods were utilized to enhance conformability. Results of the data analysis were verified by the experts used to verify credibility and the collaborating researcher in Iceland participated in the content analysis of the interviews. The researcher maintained an extensive journal which served as an audit trail to document insights, decisions and study procedures (e.g., audiotapes, transcripts, observation notes). For the purpose of validation, the researcher considered findings from research reports, peers and participants in the study.

Transferability

Transferability refers to an ability to relate the results to the same phenomenon in other contexts or settings (Polit & Beck, 2003). Because qualitative research is usually limited to the findings related to a specific group of participants, transferability is dependent on the views of the individual responsible for making a judgment about the application of the findings central to the phenomenon. Specific strategies used in

qualitative research to support transferability include thick descriptions and purposive sampling. Thick descriptions of data can offer insights to others about a particular phenomenon associated with themes, labels, categories, or constructs of a study (Polit & Beck).

Summary

This chapter examined the methods that were used in this exploratory study focusing on the phenomenon of PNC including recruitment of participants, protection of human subjects, instrumentation and procedures to ensure conformability and trustworthiness of the data. The next Chapter (Four) focuses findings from the data analysis; to be followed in Chapter Five with a discussion and implications related to nursing education, policy, research and practice.

CHAPTER FOUR: FINDINGS

The purpose of this cross-national study was to explore consumer perspectives of health during routine prenatal care of participants in the U.S.A. and Iceland. This chapter provides demographic information about participants and discusses the findings for the three research questions focusing on the phenomenon of interest.

Demographics

Generally speaking, the demographic profile of Deschutes County and Iceland is similar (see Appendix, Table 6) In respect to participants in this study, demographic information was collected using a Demographic Data Form developed by the researcher. The next few paragraphs highlight the demographic characteristics of study participants in the two groups (U.S.A. and Iceland) (see Appendix , Table 7)

Marital Status

Regarding marital status, for all participants (N = 32), the majority 53% (n = 17) were married and the remainder 47% (n = 15) were single. Of the U.S.A. participants 50% (n = 8) were married and 50% (n = 8) were single. Of Icelandic participants 56% (n = 9) were married and 44% (n = 7) were single. Of note, however, is the term "committed relationship" used by Icelandic women (n = 7). These relationships are not a legal

marriage. Rather this refers to a relationship in which both partners have a long term commitment to be faithful to each other; and, may be of the same or different gender. In Iceland these couples are assured the same legal rights as 'legally' married heterosexual couples. None of the U.S.A. women used this term to describe their relationship.

Age

Demographically, the age of all participants (N = 32) ranged from 18 years to 40 years, the average age being 28 years and 12 days. For U.S.A. participants (n = 16), the age range was from 18 years-to 38 years, the average being 27 years, 6 months and 7 days For Icelandic participants (n = 16) the age range was from 20 years to 40 years; the average age being 29 years, 5 months and 5 days.

Education

Although the education systems differ in the U.S.A. and Iceland, the researcher inquired about level of education in respect to completion of high school (or the equivalent) and college. For U.S.A. participants (n = 16), all had completed high school; and, 37.5% (n = 6) attended or graduated from college. In Iceland, all the participants (n = 16) were high school graduates; and 62.5% (n = 10) attended, or graduated from college.

Occupation

Among both groups of participants occupations varied from not working outside of the home to working fulltime outside of the home in a professional role. Some women indicated they were not working at the time of this study, but reported having worked outside of the home before the birth of their child. Of all the women, (n = 32), about one quarter (n = 8) had returned to working outside of the home and the remainder (n = 24) were not. Of U.S.A. participants, about one third were either working outside of the home 37.5% (n = 6) , actively seeking a job 31.5% (n = 5) or, did not work outside of the home in order to care for their child 31.5% (n = 5). Among Icelandic women, only 2 (12.5%) had returned to working outside of the home after the birth of their child; the remaining n = 14 (87.5%), 50% (n = 8) were planning to return to their previous employment positions at some time in the future and 37.5%, (n = 6) had no plans to work outside the home in order to care for their child(ren).

Birth date/Age of Infant

For all the participants (n = 32) the ages of the infants ranged from three months to 11 months; the average age was 6 months and 15 days. For U.S.A. participants, their infant ages ranged from 3 months to 11 months; the average being 5 months and 7 days. Icelandic infants were slightly older ranging in age from 3 months to 11 months; the average being 9 months and 16 days.

Breastfeeding duration

Initially all women in the study (*n* = 32) breastfed their infant the first 6 weeks after delivery; 78% (*n* = 25) were still breastfeeding at the time of the interviews. Of U.S.A. participants (*n* = 16) breastfed for the first 6 weeks and 9 (56%) were still breastfeeding at the time of the interview. All the Icelandic participants (*n* = 16), even though the infants were slightly older, were still breastfeeding the child when this study took place.

Site of PNC

All participants (*n* = 32) received PNC in an outpatient clinic setting. For most U.S.A. participants, the clinic was located in the city (*n* = 12) in which the woman lived and for the remainder (*n* = 4) the clinic was located about 20 miles from their home. Among Icelandic participants, all but one woman received care in a clinic located in Reykjavik; one woman received PNC in Selfoss, a nearby town.

Provider Type

For all the participants (*n* = 32) midwives provided PNC 62.5% (*n* = 20) and the remainder 37.5% (*n* = 12) were cared for by a physician. For the majority of U.S.A. participants (*n* = 12/75%) physicians were their PNC provider and the remaining 25% (*n*

= 4) received PNC care from a midwife. All Iceland participants (*n* = 16) received PNC from a midwife.

Payer-Type

For all participants the payer source was predominately publicly funded (62.5%, *n* = 20) and the remainder (37.5%, *n* = 12) was private health insurance coverage. Among U.S.A. participants, private insurance reimbursed 75% (*n* = 12) of the PNC; and the remaining 25% (*n* = 4) was public assistance. All Iceland participants (*n* = 16) had government sponsored healthcare coverage.

Planned/Unplanned Pregnancy

In respect to whether or not the pregnancy was planned, of all participants (*n* = 32) about one third (32%, *n* =10) were unplanned and the remainder (78%, *n* = 22) were planned. Among U.S.A. participants about half were planned (*n* = 8); the remainder were unplanned. Comparatively, Icelandic participants reported only two unplanned pregnancies (12.5%) and the reminding fourteen were planned pregnancies(87.5%).

Parity

In respect to the number of pregnancies, half (50%) of all the participants (*n* = 32), reported this was their first pregnancy. The remainder (*n* = 16) reported having one

other living child (37.5%, *n* = 12) and all others had two or more living children. Similarly, half of the U.S.A. participants and half of the Icelandic participants reported this was their first child. The other participants reported having two or more living children.

PNC visits

When asked about the number of scheduled visits with their caregiver during pregnancy, none of the participants recalled a precise number. Interestingly, when asked to recall 'when' formal PNC began in their pregnancy all U.S.A. participants (*n* = 16) reported it began before 12 weeks of gestation. Comparatively, Icelandic participants (*n* = 16) recalled their PNC began after 12 weeks gestation.

Delivery-Type

Of the total group (*n* = 32), "normal" vaginal delivery was most common (72%, *n* = 23) and the remainder (28%, *n* = 9) had a cesarean section. Of U.S.A. participants (*n* = 16) the majority had a vaginal delivery (62.5%, *n* = 10); the remainder (37.5%, *n* = 6) had a cesarean section. Of Icelandic women the majority (82%, *n* = 13) had a vaginal delivery; the remainder (18%, *n* = 3) had a cesarean section.

Father of Infant

Demographic information was collected on participants' significant other (the father of the child). The age of all fathers ranged in age from 18 to 42 years of age; the average being 29 years and 4 months. For U.S.A. participants, the fathers' ages ranged from 18 to 42 years; the average age being 27 years and 6 months. For Icelandic participants, the fathers' ages ranged from 22 to 42 years; the average being 31 years. In respect to the living arrangements, all fathers (n = 32) were living in the same home as the study participants and their infants. Participants also reported all of these men had been supportive during and after their pregnancy. As for the education of fathers, (n = 32), most completed high school (93%, n = 30) and the remaining 7% did not (n = 2). Of USA fathers, 87.5% (n = 14) had completed high school or its equivalent, and (12.5%, n = 2) had not; slightly more than a third completed some college (37.5%, n = 6). All Iceland fathers (n = 16) completed high school or its equivalent; about three-fourths of these men (75%, n = 12) completed college or college courses. As with the respondents, fathers' occupations varied depending on their level of education. Not all participants responded with specifics to this question but women in both settings indicated their partner was gainfully employed.

Support Systems

Support systems are important for the pregnant woman and can include extended family, friends and even the community as a whole. In this study, participants used the

term ‘family’ in a broad sense, making reference to mothers, fathers and siblings dominating the conversation. Friends and close acquaintances were also mentioned as part of their support systems. The majority of (n = 20) participants reported having family and friends living nearby. Of U.S.A. participants, half reported having family living nearby. The remainder (n = 8) had relocated in recent years and no longer had family and friends living close to them. Comparatively, Icelandic participants had closer geographical access to extended family (87%, n = 14) and a low number (12.5%, n = 2) had relatives residing in another country.

Essentially, demographic findings of the participants in this cross nation study were more similar than different in respect to education and living arrangements. Differences were noted relative to financial reimbursement for PNC based on the health care infrastructure unique to the U.S.A. and Iceland. The next section of this chapter describes the content analysis process, and the findings for each research question.

Content Analysis Processes

Content analysis is a systematic, replicable technique for compressing numerous words or statements of text into major content categories. This study used the transcribed narratives of interviews with women who recently used the PNC systems in Iceland and the U.S.A.. The process used to analyze the transcribed narratives follows.

All of the tape recorded interviews were transcribed. Then, the researcher perused the transcribed narratives to glean an overall impression of information included therein.

Next, transcribed narratives were separated into two subgroups (U.S.A./Iceland). Subsequently, each narrative in a subgroup was read with greater scrutiny for the researcher to develop general insights and identify unique terms as used by participants in the two settings. Next, the researcher honed in on the narratives for one group, then the other group and identified specific themes relative to each of the three questions in this study.

To facilitate the analysis process, formatting features of Microsoft Word software were used; specifically, Icelandic comments were italicized to differentiate those from U.S.A. responses. This facilitated clustering words, sentences or paragraphs in to 'meaning units' (Graneheim & Lundman, 2003). In turn, meaning units were clustered into content categories; which, subsequently were refined into a "concept." For this study, the identified concepts included Individual Health Status (see Appendix, Table 8), Individual Health Maintenance (see Appendix, Table, 9) Basic Components of Prenatal Care (see Appendix, Table 10), Time (see Appendix, Table 11), Provider Relationships (see Appendix, Table 12) Communication (see Appendix, Table 13), and Weight (see Appendix, Table 14). Meaning units, categories, and concepts were contrasted between the two groups (U.S.A./Icelandic participants) in order to answer the first and second research questions.

The final phase of the content analysis process focused on the third research question. To address cultural preferences and interrater reliability of the narratives, researchers from Iceland discussed findings with the principal researcher in the U.S.A. Reviewers included two Icelandic midwives, four U.S.A. midwives and two U.S.A.

obstetrical-gynecologists. Their insights validated and enhanced the principal researcher's preliminary findings (UNESCO, 2006b). Differences in perspectives of individuals and by nation were discussed, and resolved by reaching a consensus of opinion.

The next section of this chapter discusses findings of the content analysis for each of the three research questions to address the phenomenon of interest (PNC) in this study.

Question 1: What are the Self-Reported Health-Related Components of PNC?

In general, participants were eager to discuss perceptions of their health and most recent PNC and expressed a desire to share this experience with other women. Statements from the participants from both countries revealed strong opinions of PNC components which they believed should be directed toward healthy women. In the content analysis of the reported health-related components of PNC, seven concepts were identified: Individual health status, individual health maintenance, basic care components of PNC, time, provider relationships, communication and weight. Each emerged separately as a significant health related component of PNC, but all of these themes are highly interrelated.

Individual Health Status

In regard to the first question, "What are consumers' self-reported health-related components of PNC?" all participants considered themselves to be healthy during their

recent pregnancies (see Appendix, Table 8). This finding has an impact on the role of the PNC provider. Participants, as healthy individuals, were seeking support, communication, information, education, and a relationship from their providers. For the provider, from the consumer perspective, this infers changes from managing a disease, to support for a healthy pregnancy.

Individual Health Maintenance

Maintaining health during pregnancy is one of the primary goals of PNC (Attar, Hanrahan, Lang, Gates, & Bratton, 2006; Belizan, Cafferata, Belizan, Tomasso & Chalmers, 2005). Individually, each woman requires different guidance and education throughout PNC and must develop a relationship with the provider to accomplish the optimum level of health for the pregnancy (Beldon & Crozier, 2005).

Health maintenance was stressed by all the participants. Meaning units about maintaining individual health during pregnancy were: "attention to dietary needs" which encompassed eating habits, "supplemental dietary needs" which addressed vitamins, "physical exercise," "reduction of toxins" or exposure to toxins during pregnancy and "minimize stress." The meaning units were further reduced to the categories of maintaining physical and mental health.

The narratives of the women describe how they supported their health during pregnancy in the following ways (see Appendix, Table 9). Dietary: "I tried to eat healthy (n = 4)," " I would try to eat more salads and greens," "kind of following the food pyramid," "I tried not to eat a lot of junk food," " I stay away from caffeine, it's very

important," "drank a lot of water and eat right (n = 6)." Taking supplements such as vitamins and folate were also mentioned. The Icelandic women (n = 4) stated they used dietary supplements such as prenatal vitamins with folate. Physical exercise was also important for maintaining physical and mental health, evidenced in the following responses: "I went to yoga (n = 6)," "I did water exercises," "swimming lessons for pregnant women," "I did aerobics," "I exercised all the way through my pregnancy," "exercise (n = 5), I tried to walk," "I walked through the fields and stuff." Reduction in exposure to toxins also was mentioned, and included not smoking, drinking and taking drugs as important for maintaining physical health during pregnancy. Other behaviors identified by the participants to support a healthy pregnancy included: education and support for a healthy diet, exercise, rest, mental health and avoidance of drugs and alcohol. Providers were viewed by participants as necessary to support efforts to maintain health throughout the pregnancy (Vonderheid, Norr, & Handler, 2007).

Basic Care Components of PNC

Participants in both settings stated that they believed they received routine PNC during their most recent pregnancy (see Appendix, Table 10). Moreover, these women describe themselves as "being healthy" during that time and further reflected in the following comments: "I was really healthy." Discomforts of pregnancy included a variety of descriptors common to the pregnancy experience, including "morning sickness," "elevated blood pressure," "feeling tired," "back and pelvis pain," and "edema of the feet and hands."

Meaning units derived from the participant statements contained the basic care components of PNC as delineated by professional organizations related to caring for pregnant women: Specifically, to do medical procedures, provide preventative care, and to supply information (AAP & ACOG, 2002; Handler et al., 2003; IOM, 2006). Participants expressed a need for "complete care," or, "giving you everything you need," and addressing "known and unknown expectations," which were reduced to the meaning units to give complete care and known and unknown expectations.

These statements revealed that participants expected to receive 'medical' procedures and preventative measures: "To make sure she (the baby) was ok," "overall just to check to make sure the baby is healthy," "that they would check and everything would be OK with me and the baby," "I expected that they would look at the baby," "make sure everything was as it was supposed to be," "to know that everything is going on is normal."

Health promoting information and anticipatory guidance were identified as very important for most women, especially: "general information (n = 4)," "advice for anything," "my health and my baby's," "any questions (n = 3)," "the pregnancy and the growing of the baby, blood pressure, heartbeat, how you feel," "about my baby." The importance of such individualized education was expressed in statements about their lack of knowledge on the progression of pregnancy; "It wasn't what I expected," "I really wasn't sure," "I had no idea" (n = 4). Additionally, women expected their care to be "complete," or "to take care of me," "complete care," "I got just what I needed," "I think it was very complete" (n = 4), "they are giving you everything you need."

Time

The concept of time emerged as an important element in receiving PNC for participants. (see Appendix, Table 11). Meaning units associated with time were expressed as time-restricted appointments, not having time to answer questions or explain procedures, and returning a response to participants in the expected time frame. These meaning units were classified into two categories: restricted and unrestricted time.

Commonly used statements throughout the narratives related to the time participants actually spent with PNC providers during a scheduled visit. Their statements regarding 'time' ranged from the very negative to the highly satisfied. Examples of negative comments about time included: "I wasn't in there more than 15 minutes for any appointment," "most of the appointments were about 15minutes long," "say everything was fine or good, then they'd make another appointment" to "really didn't have time to answer any questions," "they were pretty busy," "they don't have time to get to your questions and you're scared to death, you don't have the time," "she just checked me, she didn't really explain anything to me."

Examples of positive comments related to time included: "When I called up and had concerns they'd get back to me in a timely manner, I know doctors are fairly busy," "I could contact the midwife at any time," "I could always call her, if something happened or I was worried about myself," "I know that she is busy, but I always felt that I was very special, almost like her only pregnant woman she was caring for." In brief, participants were frustrated with imposed time restrictions during their PNC and were

much more satisfied with PNC when they felt time was allocated to discuss their particular concerns.

Provider Relationships

Provider relationships during pregnancy were important for all participants. Meaning units about provider relationships that emanated from the statements of the participants were support, security, pleasant attributes, personal interest, and distant. (see Appendix, Table 12). Meaning units were related to this theme included concepts of sanctuary, friendly attention, and remoteness.

Participant statements that reflected support included: "They were a lot of support for me," "helped me," "constant encouragement, so it made my pregnancy a lot better," "I was looked after and she actually cared about me," "she was supportive," "I always thought that I knew what was happening, what I was feeling and what I should be doing," "she made sure I was still healthy." Statements that reflected security were expressed as: "She made me feel more comfortable," "same person you create trust," "it was a good thing to go and talk to her because I was more relaxed," "always felt like I was special and that gave me a sense of security that I needed," "I felt so secure or safe."

Participants' statements that reflected pleasant attributes and a personal interest in the woman and her pregnancy were: "A friendly relationship really," "personal relationship or a welcoming approach to me as a person and welcoming as a couple," "it was the relationship with the midwife which I cherished," "I think the most important thing is to have this relationship with the midwife," "everyone was so interested in me

and how I was feeling she always gives herself to me," "they would just put their arms around you and hug you and you would feel better." Several participants were dismayed with the perceived remoteness of their providers as reflected in the following comments: "She just checked me, she didn't really explain anything to me," "the way he worked with me wasn't very good," "usually, I just saw the nurse," "the nurses that helped me."

Communication

Communication between participants and their providers was another reoccurring concept (see Appendix, Table 13). Two communication styles emerged in the analysis, directive statements and conversational statements; meaning units were expressed as 'telling me', 'gave me', 'to listen', 'communicated well'.

"Telling me" directive statements are reflected in the following comments: "Told me to," "to start," "to eat," "to quit," "got done," "nothing," "She talked," "talked about," "said it," "I knew and take care," "to coach," "advised me and do," "to exercise, eat healthy and listen," "take it slower," "to rest," "I should eat." Examples of "gave me" included: "She gave me (n = 4)," "giving me advice on staying in shape," "she offered some solutions."

Others focused on 'listening" with statements, such as: "To be listened to and talk about any of my worries," "about work situations," "they would be kind and listen to me." Finally, the meaning unit of "communicated well" was supported by the statements, "I could talk with," "they asked how it was going," "just having that person there to ask," "I asked questions had information (n = 4)," "We connected well and communicated very

good," "we had a good communication and I felt safe with her," "they are very open minded," "you can discuss," "knows you and cares," "I discussed this with my midwife," "we would discuss this," "we decided that it would be very good for me to go to yoga.".

Weight

Not surprisingly, the topic of weight during pregnancy dominated many of the interviews when discussing health during pregnancy. Meaning units were separated into the two different perspectives of provider and consumer concerns about weight, "provider concerns with statements about weight and monitoring weight gain" and "consumer statements and concerns about weight gain" (see Appendix , Table 14). When developing the meaning units during the content analysis process, it became apparent that the notion of 'weight' was described from two different perspectives. That is to say, there were providers' statements about weight gain and monitoring weight and consumer perceptions about the importance of weight gain and losing weight as part of a normal and healthy pregnancy.

Statements related to the providers concerns about weight gain were: "The doctor told me I was gaining too much weight," "he was not happy with the weight I gained," "he said it wasn't good for the baby," "he badgered me about it." Provider emphasis related to weight in many cases was linked to the consumer perception of a "problem" with the overall health status during pregnancy. Providers emphasized monitoring weight with statements such as; "They [prenatal care provider] watched my weight and diet," "were always inquiring about my intake on food," "weighing me," "checking my weight

or eating habits," "to see how my weight was maintaining," "That's all, I thought they were really checking for," "they weighed me," "he was aware of weight gain, and lack of weight gain."

Participants expressed individual concerns about their weight changes throughout the pregnancy and postpartum with comments such as: "I gained 60 pounds throughout the course of the pregnancy, and you're only suppose[sic] to gain about 45 pounds," "Hum, I was doing pretty good on my weight, I gained a little too much," "I tried not to gain too much weight, I gained 25 pounds," "I didn't want to gain too much," " I had a problem with my weight," "I haven't got all my weight off," " I'm obviously overweight," "I am overweight," "overweight when I got pregnant." Further, this concern persisted among participants after delivery of the baby with statements like, "I'd like to lose a little weight," " I was trying to lose weight before I became pregnant," " I gained so much weight that it has taken me awhile to return to my old pants," "I'm a bit heavier than I used to be," "I've always been kind of overweight, so that's why I still have it."

Question 2: How Do the Health-Related Components of PNC as Stated by Consumers From the USA and Iceland Compare?

An analysis of the narratives revealed similarities and differences of PNC among participants from the U.S.A. and Iceland. The most obvious healthcare differences related to differences in the nations' health care delivery systems, 3rd party payers, and provider-types. For instance, Icelandic women used local neighborhood clinics for care while most of the U.S.A. participants' sought care in terms of their 3rd party payers. Essentially,

Iceland has a single payer system, whereas the U.S.A. has a variety of 3rd party payers. Another difference related to the type of PNC providers. In Iceland, routine PNC is solely delivered by midwives. In the U.S.A. there are two types of providers (physicians/midwives), but the dominant model is based on physician care. In spite of those differences, the two groups of participants' comments were similar in most respects and reflected in the following concepts: Individual Health Status During Pregnancy, Individual Health Maintenance, Components of Routine Prenatal Care, Time, Provider Relationships, Communication and Weight.

Individual Health Status During Pregnancy

All participants (*n* = 32) considered themselves to be healthy during and after the pregnancy (see Appendix, Table 8). Participants from the U.S.A. discussed normal discomforts of pregnancy (*n* = 5) less often than the women of Iceland (*n* = 15). Icelandic participants also spoke at length about how they coped with the discomforts of pregnancy based on information received from the midwives who cared for them. None of the U.S.A. participants commented about methods to cope with the normal discomforts of pregnancy or discussed how the providers assisted them to decrease symptoms of discomfort.

Individual Health Maintenance

Sustaining good mental health while acknowledged less frequently was associated with reducing stress and resting (Iceland n = 7/ U.S.A. n =1) (Table 9). Controlling stress

was most often mentioned by the Icelandic participants, for instance: “I tried to have a stress free environment as possible,” “stayed calm,” “just try to think more positively for my life.” The importance of resting was reflected with statements such as “rested and tried to make myself feel good (*n* = 3),” “rested my back as much as I could,” “stopped working three months before I delivered.” Several Icelandic (*n* = 6) women also discussed how their midwife suggested different classes to attend during pregnancy to help them feel better, both mentally and physically.

Basic Care Components PNC

Both groups of respondents expected basic procedures to occur during their PNC (e.g., labs, exams to assess health of woman and fetus), health promoting information, anticipatory guidance). (see Appendix, Table 10). However each group identified particular concerns and needs.

For instance, U.S.A. participants specifically listed “depression,” “breastfeeding education,” “understanding infant behavior,” “information about body changes,” “knowing about possible problems and preparation for birth.” None of the participants discussed postpartum follow-up visits at home and almost half (*n* = 6) reported not having any idea as to what to expect with PNC.

The majority (*n* = 9) of Icelandic participants were satisfied with their PNC. Almost all (*n* = 15) were not able to think of additional components they needed or wished for in PNC; one mentioned access to childbirth classes. In Iceland, childbirth

classes have a related cost; hence, are not available to all women (H. Hardardottir (personal communication February 12, 2006).

Contrasting the two groups' expectations, Icelandic participants stressed the expectation for "complete care," which was never mentioned by the group from the U.S.A.

Further, the issues identified by U.S.A. participants are considered to be standard PNC in Iceland. Post partum care in Iceland is considered part of PNC, such as, providing care to women in their homes for the first 6 weeks after delivery. Generally, that is not the case in the U.S.A.. Even though women are scheduled for at least one post partum visit to their PNC provider from 4-6 weeks after deliver, only half (n = 8) of U.S.A. participants followed up with this appointment (S. Jonsdottir, personal communication February 15, 2006). A U.S.A. participant, who received PNC in Iceland, reported during her postpartum care, "I just felt like there were a lot of people checking up on me. It was the darkest part of the year here, so it was someone to engage you in conversation and reassure me that I was doing the right thing as a parent."

Time

In addition to the discussion for the first research question on the concept of time with the PNC provider during a scheduled visit, several differences emerged between the two groups. (see Appendix , Table 11). All participants regardless of country of origin alluded to "time." Some USA participants (n = 6) complained about the lack of time with providers during appointments where they could discuss issues of concern. This was

evidenced in the following comments. “I wasn’t in there more than 15 minutes for any appointment,” “most of the appointments were about 15 minutes long,” “say everything was fine or good, then they’d make another appointment,” “really didn’t have time to answer any questions,” “they were pretty busy.” Only one participant from the U.S.A. indicated that her provider responded to her needs in a timely manner.

Icelandic participants never identified concerns with time constraints during their PNC scheduled visits and a few reported always having immediate access to their provider (n = 4). For this group, availability and the ability to share the pregnancy experience with a ‘trained’ person were valued as much as the PNC procedures themselves.

Provider Relationships

In addition to the discussion for the first research question on the concept of provider relationships several differences emerged between the two groups. (see Appendix, Table 12). For U.S.A. participants PNC provider relationship expectations were expressed as “to take care of me,” “making sure I did things right,” “to check me and the baby.” One woman and the physician PNC provider were friends; thus, reported having a meaningful relationship but that was not the case for others (n = 15) who never discussed a close relationship with any of their providers. Additionally, no U.S.A. participant mentioned ‘family’ as part of PNC even though all of the women were in a stable relationship during that time.

Icelandic participants reiterated having a personal connection with their PNC provider and considered this to be an important component of this service, evidenced by the following statements; "They would just put their arms around you," "you knew they were taking care of you," "she always gives of herself," "interested in me," "I felt safe with her." The concept of a family also emerged as part of the relationship with their provider to include partners and in some cases the entire family unit. One Icelandic participant stated her expectation of her provider was "a welcoming approach to me as a person and welcoming as a couple, a friendly relationship"

Communication

In addition to the discussion for the first research question on the concept of communication with PNC providers several differences emerged between the two groups. (see Appendix, Table 13). Essentially, for all Icelandic participants this took the form of a conversation, whereas for all U.S.A. participants this reportedly took the form of directives. Comments from U.S.A. participants that reflect their views included: "Let me know what I needed," "told me everything was fine," "told me I gained too much weight," "gave me a lot of things to do and not to do." Comments from Icelandic participants that reportedly preferred a conversation style are reflected in the following remarks: "It was a good thing to talk to her [midwife] because I was more relaxed," "she encouraged me," "you are part of a situation where you can discuss it with someone who knows you and cares," "we connected well and communicated." Many Icelandic participants expressed the level of communication with feelings of "respect" and

"concern" for their individual pregnancies. On another note, an Icelandic physician involved with this study reported, " I regularly consult with the midwife about [her] pregnancy and find those answers reassuring and valuable."

Weight

Participants stated that their providers seemed very concerned about their weight, monitored it every visit and chastised them at every visit when their weight was increasing (see Appendix, Table 14). Although participants from the U.S.A. stated they were healthy during the pregnancy, many (n = 9) referred to their weight as a problem. Weight was never mentioned as a problem during the pregnancy by the Icelandic participants. Somehow in the U.S.A., the health status of the pregnancy seemed to focus on weight management. Although the physical attributes of the participants from both groups were similar, with none appearing to be morbidly obese, the theme of weight dominated responses from the U.S.A.. The most common statement made by participants from the U.S.A. was related to "I watched my weight." Only three participants from Iceland mentioned "weight," and this was in reference to post delivery.

Question 3: What Cultural Variations Exist in Consumer Responses?

Culture as a concept is complex and the cultural preference groups vary widely. Moreover, there are wide variations in cultural beliefs and practices regarding pregnancy and childbirth within a particular population, more specifically, U.S.A. and Iceland.

Consequently, to provide a structure for the ensuring discussion Leininger's (1997) cultural dimensions were used as a reference point for the content analysis of the narratives. Leininger lists the following cultural dimension: technical, religious and philosophical, kinship and social systems, cultural beliefs and lifeways, political and legal, economic, education.

Technical

Both Icelandic and U.S.A. participants discussed pregnancy and use of technology as part of routine PNC, such as ultrasound, laboratory tests, and health screening devices. Emphasis was placed on monitoring the woman's health and, in particular, the developing fetus; evidenced by the following comments; "To make sure she [the fetus] was ok," "overall just to check to make sure the baby is healthy," "making sure everything was still going ok," "that they would check and everything would be OK with me and the baby," "I expected that they would look at the baby."

Religious and Philosophical

While the emphasis of this study was directed at PNC, one can not discount religious and philosophical beliefs that permeate all dimensions of life. In Iceland while religious freedom is guarantteed, Lutheran is the national religion (Nordal & Kristinssom, 1996). Thus, about 83% of the population is affiliated with the state church, but only 10% actually attend religious services (Statistics of Iceland, 2006). Of note is Icelandic participants common use "*Bless*" when bidding farewell; but, whether or not this has

religious significance is uncertain. In the USA, religious prefernces and practices vary widely and the U.S. Consitituion separates religion and government. In the state of Oregon a setting for this study, of the total population 68% are not affiliated with any religion (Kosmin & Mayer 2001; Oregon State Statistics, 2007).

Kinship and Social Systems

Kinship and social systems refers to nuclear and extended family relationships of the participants in this study. Iceland's low population (305,309 people), coupled with prolonged winter months promotes strong kinship and social systems (Statistics of Iceland, 2006). Although the current family size is small, historically, Icelandic families were very large; thus, extended families and communities have an important role in the life of Icelanders. The local clinic that provided PNC also provided healthcare throughout the lives of the participants and their families. In addition, the midwives visited the participants in their homes after the birth for the first two weeks. During these visits, the midwives shared conversations, educated new mothers about infant care, and provided emotional support to the family.

As for participants living in the U.S.A., the majority (n = 12) had recently relocated for the available economic opportunities in Deschutes County Oregon (U.S. Census Bureau, 2007). The effect of relocation was the lack of family support and knowledge of PNC provider networks in the community. The providers for the U.S.A. participants were not part of an integrated care clinic, but rather had individual practices.

Some participants (n = 3) used midwives for their care who practiced in a small community and access to these providers required commuting for PNC.

After the birth of the infants, the participants who accessed follow-up care, visited the providers one time in the clinic office and never saw the providers again. While family was discussed throughout the interviews with the participants in Iceland the topic was never mentioned by U.S.A. participants.

Cultural Beliefs and Lifeways

Cultural beliefs and lifeways have a great influence on health care expectations and delivery modes, in particular PNC. In Iceland, the core of PNC is provided by midwives who view pregnancy as normal and a healthy state of being (Varney et al., 2004). When participants described discomforts of pregnancy, these discomforts were described as routine and part of the pregnant condition. Examples of this collaboration and support as described by the Icelandic participants were: "[the midwife] gave me a sense of security," "it was the relationship that I cherished," "so interested in me and how I was feeling." The language in Iceland that was used to describe provider interactions was conversational and supportive.

For the U.S.A. participants (n = 12) who used physician services, they voiced interactions with their providers in terms of directives that told them what they needed to know. The expressed role of the participants was to receive care rather than be involved in care: "he just told me," "to start eating better, let me know what I needed to do,"

"expected information," "let me know what I needed." Provider relationships described by the participants were more distant, formal, and temporary.

Political and Legal

Politically, healthcare is a direct result of core principles of a given nation (WHO, 2006). Healthcare in Iceland, is deemed to be a right of citizenship (Statistics of Iceland, 2006; EOHCS, 2002). Standards for health care are determined at the national level, and, in particular, PNC is based on those standards (Olafsdottir, 2006). All participants (n = 16) in Iceland receive the same PNC from the same type of provider that is a midwife. One participant changed providers because she wanted to deliver at a particular hospital in a nearby town. She arranged this through her local clinic and midwife. None of the PNC services received by the Icelandic participants were outside of the national standard. In Iceland, this mother's concern would have been addressed with more frequent midwife interactions to effectively address her preferences.

In the U.S.A., accessing healthcare is the responsibility of the individual, and PNC is provided by various types of providers (obstetrical specialist medical doctors, family practice medical doctors, certified midwives, and lay midwives). In this study, a few participants (n = 4) received care from midwives and all others (n = 12) received their care from physicians. One participant from the U.S.A. discussed her personal need for multiple ultrasounds to reduce her anxiety related to the health of her developing infant. She was granted multiple ultrasounds by her physician due to her worries and the availability of payment by her third party payer. This practice is not uncommon,

however, as PNC providers grapple with the potential malpractice litigation related to care they provided during pregnancy (Moos, 2006). Unlike the Icelandic healthcare system, the legal system in the U.S.A. significantly drives PNC services and legal risks always are a consideration for PNC providers (Kessler, Sage, & Becker, 2005).

Economic

Economic factors have a definite impact on health care policy and delivery models. Iceland's economy is closely aligned with a Scandinavian-type economy and some capitalistic principles but it has an extensive welfare system (including generous housing subsidies, health benefits, subsidized daycare and maternity leave), low unemployment rates, and a somewhat equal distribution of wealth (CIA, 2005; Rothstein & Stolle, 2003). The participants from Iceland were able to stop working during and after pregnancy without concerns about the basic needs for living, as paid maternity leave for both parents is guaranteed by the government.

Even though more than half of U.S.A. participants were on public assistance, access to care was reported to be an issue by some (n = 6), particularly post partum. Although maternity leave is offered by some employers, paid maternity leave is not guaranteed (U.S. Department of Labor, 2007). None of the U.S.A. participants was working at the time of the interviews, and only two mentioned unpaid maternity leave after their deliveries. Most U.S.A. participants (n = 12) anticipated returning to work and expressed concern about the costs related to childcare services, healthcare, insurance and increased living expenses.

Education

The structure of the educational system differs between Iceland and the U.S.A.. The Icelandic system is similar to many European countries, with compulsory education until the age of 16 years, when the basic education is completed (Statistics of Iceland, 2007). Those continuing in the educational system either pursue a university degree or attend a vocational training school. In the U.S.A., each state is responsible for enacting rules for school attendance. Although high school education is commonly completed at an age of 18 years old, most states require attendance through the age of 16 years (Institute of Educational Sciences, 2007).

Education by providers is a key component of PNC, and the ability to understand body changes, the developing infant, and maintaining health during pregnancy is paramount in supporting a healthy pregnancy (Turnoch, 2004; Rowe et al., 2002). All of the participants (n = 32) in this study had attained a high school education. The participants from Iceland had a higher level of education than those from the U.S.A. and were more reflective in their answers to the questions. This could be related to a higher level of education or to differences in the use of language by participants.

In summary, this chapter described the demographic makeup of participants from two nations, the U.S.A. and Iceland; and, highlights findings for each of the three research questions based on the content analysis of the narratives. Chapter five follows, and includes discussion of implications and recommendations based on the findings.

CHAPTER FIVE: DISCUSSION

The previous four chapters present a statement of the problem, review of the literature, discussion of the methodology and analysis of the data. This chapter discusses implications and recommendations based on the findings of this exploratory study focusing on PNC as perceived by participants from Iceland and the U.S.A. Discussion pertinent to each research question follows in the next section of this chapter.

Question 1: What Are Consumers' Self-Reported Health-Related Components of PNC?

Maintaining a woman's health during pregnancy is one of the primary goals of PNC to ensure delivery of a healthy baby. Individually, each woman requires different guidance and education throughout PNC and the relationship with her provider is critical to achieve optimum pregnancy outcomes.

The majority of participants' concerns could be addressed with increased time and mindful conversations on the part of PNC providers. The participants expected PNC to include; screening procedures, preventative care, information, comprehensive care, and address known and unknown expectations. Common expectations were related to monitoring the wellbeing of the baby and the general state of the pregnancy. Common

concerns were expressed about the unknown aspects of pregnancy and the provider's ability to anticipate and prepare the participant for the total pregnancy experience. For those whom this was the first pregnancy, providers definitely can influence women's concerns as to what they can expect as the pregnancy progresses and preparing for the birth process.

Time was identified by participants in both groups but even more so for U.S.A. women as a critical factor and of significant importance for routine PNC. Both groups desired 'adequate' time to discuss the progression of the pregnancy and life events surrounding the pregnancy during a PNC visit. Reduced time during a scheduled office visit was interpreted as the woman's concerns and were not of importance to the PNC provider. Extending the allocated scheduled time for PNC visits for the women from the U.S.A. may improve communication, provider roles of support and improve overall individual health.

Even though participants expected that their medical needs would be addressed as part of routine PNC, emphasis was placed on the provider relationships. Interestingly, the term "professional" was never used by any participant. Some described the relationship with their PNC provider as distant, or remote and undesired; the preferred characteristics were listed as; pleasant, friendly, reassuring, supportive, and displaying a personal interest in the woman and her pregnancy. Those who perceived the PNC provider as supportive and friendly expressed complete satisfaction with the PNC experience (Elsenbruch et al., 2007). Providers who interact with the pregnant family, as opposed to

only treating the women, are more likely to be perceived in a positive and supportive light.

Communication emerged as an important concept of PNC and two approaches were noted - directive and conversational. Some provider styles were described as directive because they told the participants what to accomplish during the pregnancy. Other communication styles were conversational, involving; listening, discussing issues, and answering questions. A conversational style of communication was valued by the participants in this study and the directive approach was deemed to be less effective nor desired by participants in this research. In brief, the healthy participants in this study wanted the focus of PNC services to be directed at their unique individual health and family needs during and after pregnancy.

The topic of weight emerged as a dominate topic and it was discussed by many participants. In fact, no other aspect of the pregnancy was so commonly referred to during the interview process. The majority of women who were concerned with weight were from the U.S.A.. Although dramatic increases in weight during pregnancy can be a marker for impending problems, weight in and of itself is not the principal component of PNC. Yet, participants were consistent in their perceived negative focus on weight. Perhaps the emphasis on weight using an objective measurement (the scale) is most easily understood by the pregnant women. The topic of weight surely is less complex to understand and discuss than topics such as relationships, stress or depression – and usually requires less time to address.

Visually, participants from the two groups appeared similar in weight to the principal researcher, ranging from quite thin to mildly obese. Unlike Icelandic participants who rarely mentioned it, the topic of weight during and after pregnancy dominated the responses by U.S.A. participants. Perhaps undo emphasis is being placed on this number, leading participants to use weight as the most important health indicator during the pregnancy.

Question 2: How Do the Health-Related Components of PNC as Stated by Consumers From the U.S.A. and Iceland Compare?

Although, there are differences in the healthcare delivery systems in Iceland and the USA participants from both countries identified commonalities in their PNC experiences. In respect to routine PNC protocols, the U.S.A. and Iceland health care systems stipulate similar protocols to manage the pregnancy.

All participants received routine PNC and expressed, overall, they were healthy during and after their pregnancy. Common behaviors to sustain health were directed at diet, exercise and avoidance of toxic substances. All participants expressed concerns over health maintenance during pregnancy and the effects of health on the developing fetus. Mental health was stated as important more often by Iceland participants with only one U.S.A. participant listing this as important. This could be related to the emphasis of the health care system and PNC in particular. Moreover, discussing stress and mental health concerns during a routine PNC requires additional time on the part of the providers. With

current efforts in the U.S.A. to reduce and streamline PNC, mental health concerns must not be ignored!

The components of PNC which were important to all participants were similar and based on national protocols, i.e., screening procedures to monitor the health of the mother and the developing infant, prevention of illness, education and anticipatory guidance (AAP & ACOG, 2002).

Initially, participants focused on monitoring the wellbeing of the baby and the state of the pregnancy, then, began to focus on their health during the pregnancy. Although infant wellbeing is valued, tasks related to verifying infant stability are brief, and women in this study desired adequate time to discuss all aspects of the pregnancy. The provider was considered to be an important resource for education, information and screening for abnormalities. Yet, several participants from the U.S.A. complained about the inadequacy of this interaction. Providers of PNC should understand that the needs of women during pregnancy are not limited to simple procedures to assess the infant and mother, but rather include the concerns of women as the pregnancy impacts their day-to-day activities.

Participant's desired increased time with the PNC provider to discuss topics of interest which often included the extended family. During PNC, providers can obtain screening services and also focus on improving the confidence and the emotional states of the pregnant women in their care by extending time that is allotted to each visit. Increasing the amount of time available for PNC visits in the U.S.A. might allow women

and families to more fully participate in the prenatal experience. Devoting adequate time for PNC visits is at the center of many of the negative comments by the women from the U.S.A. about the focus on the procedures rather than the transitional state of the women who is pregnant. In the U.S.A., "time is money" and extending visits would be associated higher reimbursement. In Iceland, 45 minutes is allotted for the first PNC visit and 30 minutes for each subsequent PNC visit during the pregnancy.

Participants desired provider relationships that were; supportive, offered feelings of security, and a personal interest in the woman and her family. The Icelandic participants expressed personal relationships with their providers that extended to their entire family. This relationship extended into the postpartum period when the midwives visited the homes of the mother and her new infant. The participants from the U.S.A. indicated their provider interaction was limited by time in the office with no contact after the birth.

Participants from both countries desired communication styles with providers which were conversational and supported their current health status and the promotion of healthy behaviors. Developing conversations with women during pregnancy involves time and interest in the woman and her family. In the U.S.A., medical efficiency is driven by increasing the number of patients to be seen for an office visit. To alleviate this problem, changes related to the allotment of office visit time would be necessary. Also, physicians would need to be more adept at slowing down their pace to converse with patients.

Question 3: What Cultural Variations Exist in the Consumer Responses?

In communities and cultures that emphasis a continuum of PNC, participation by clients is strengthened and outcomes improve as measured by infant morbidity and mortality rates.

The Icelandic government provides national healthcare whereas the U.S.A. adheres for the most part to a free market model. Likewise, the rights of the state in many instance supersede those of the Federal government. For instance, the State of Oregon provides public assistance for PNC during pregnancy (Medicaid) to those who meet poverty guidelines and undocumented women. Other types of social services that may be needed for PNC tend to be under funded or non-existent, resulting in gaps in services for some pregnant women who could benefit from these services.

In Iceland, PNC is based upon a midwifery model, whereas, the PNC system in the USA is based upon a medical model. The philosophical implications are that the midwifery model is focused on supporting the health of the pregnancy, and the medical model is based on preventing disease, relieving suffering, treating illness and avoiding premature death (ACOG, 2002; Hanson & Callahan, 2001; Varney et al., 2004). Both populations valued PNC, each received similar basic screening services, but the interactions between participants and providers appear to be different. The relationships between the providers and participants in Iceland were reported to be very close and personal throughout and beyond the actual pregnancy. The relationships of the participants from the U.S.A. were described as distant and formal.

Politically, the economy in Iceland is based on a strong welfare system for women during pregnancy and the postpartum time period (Rothstein & Stolle, 2003). The Icelandic system allows women to avoid concerns about housing, food, employment and other forms of social support during pregnancy. Whereas, participants from the U.S.A. expressed concerns during their interviews about access to healthcare, food, housing and employment during and after their pregnancies. The costs of an extensive support system during PNC can be exhaustive to any society, yet, this type of healthcare system may hold the key to improving infant mortality rates in the U.S.A. This political and ethical debate as to whether or not healthcare is a right or responsibility continues; and is at the core of any healthcare system a nation adopts for its citizens.

The kinship and social network factors in Iceland are strong and participants expect to be cared for in their communities. Most of the Icelandic women (n = 14) had lived in their communities for many years. The participants in the U.S.A. were more transitory, with most (n = 12) having relocated to the community during the past two years. The transitory nature of the women from the U.S.A. seems to limit the family support that is afforded compared with the Icelandic women. Building support networks and communities during pregnancy can be complicated when a family relocates. The concept of family was emphasized during the interview process in Iceland and never discussed by the participants from the U.S.A.. Whether the lack of discussion was related to the absence of family, or merely not discussed for other reasons is unknown. Although the PNC experience varied for the participants interviewed, PNC was valued in both cultures from the perspective of maintaining and supporting the health of the pregnancy

and developing infant. Provider education through positive interactions can increase the probability of a commitment and actions related to maintaining healthy behaviors.

Limitations

Limitations of this study relate to the challenges associated with a cross-national exploratory study that might not occur if the study was implemented where the researcher lives and works.

More specifically, limitation hinges on the time and cost to travel to another nation, the resources required to access and interview informants, and measures to assure credibility and reliability of the findings. Consequently, trade-offs required on the part of the researcher were to manage costs/ resources versus implementing strategies to access and enhance data.

Another limitation is associated with contrasting PNC services provided to pregnant women who live in two nations with widely different health care delivery systems (U.S.A./Iceland). Realistically, findings from one nation may not be relevant to those of another nation. However, that is not to say, that a researcher should not or cannot learn from the insights and models of another nation that could improve programs or health outcomes, in this case infant mortality.

Language also can pose challenges in cross-national studies. Fortunately, for this study all participants spoke English; albeit two different dialects based on the setting (U.S.A./Iceland). Even so, linguistic nuances, local vernacular and cultural nonverbal

communication can be misinterpreted by the researcher who speaks the same language (English) as study participants.

Implications for Nursing

This study identifies many areas in the delivery of PNC that have implications for nursing education, practice, policy, and research.

Education

The findings of this study have implications for nurse educators who prepare clinicians responsible to provide prenatal care. Basic education for nurses should include information about PNC such as;

1. advocating for an individual woman and women as a group who are consumers of PNC;
2. developing communication skills that encompass; validating consumer perceptions about the progression of their pregnancy and exploring issues that are pertinent to each woman;
3. stressing the importance of provider support to the pregnant woman and her family; and
4. valuing consumer's perspectives regarding PNC services and the manner in which it is delivered.

Practice

The findings of this study have implications for practice, whether supporting physicians, or advanced practice nurses. This study gives nurses insight into the concerns of women during pregnancy to include clinical advocacy. Strategies include;

1. forming relationships with women (know their names, living situations, and family support systems);
2. promoting optimal support systems;
3. providing emotional support, appropriate education and resources to facilitate outcomes that sustain health;
4. encouraging woman to maintain optimal health during and after pregnancy;
5. decreasing the emphasis on weight during the prenatal period;
6. developing basic knowledge and understanding for other cultures, behaviors, language and experiential meanings;
7. addressing time constraints during office encounters such as, extending the time for scheduled appointments to explore issues that are important to each woman, and,
8. promoting a holistic perspective on health and well being.

Policy

The implications from this study related to policy are particularly relevant for maternal and child health programs. Nurses are one of the largest professional groups providing healthcare in countries around the world (WHO, 2006). As stakeholders in the healthcare system, nurses can advocate for consumers by promoting policies which address many of the issues found in this research such as (a) efforts to increase office visit encounter time, (b) providing individualized services for consumers, (b) as well as, including families in the care dynamic, and (d) encouraging a supportive role in the provider community.

Research

The field of research in PNC is ripe with opportunities for additional research for nursing, particularly from the consumer perspective (Banta, 2003; Kelson, 1999). The World Health Organization has addressed minimal levels of PNC related to visits and laboratory testing, but the composition of the care is culturally driven and varies from one to another country (United Healthcare, 2005; Elsenbruch et al., 2007). The findings from this research demonstrated that the participants desired several aspects to the PNC services which were not readily available to them. Specifically, actions of providers during PNC, such as, developing a more personal relationship with women and their families, supporting the health and health maintenance of a normal pregnancy, being

more accessible during the pregnancy, devoting adequate time with women during the prenatal care visits, and engaging in meaningful conversations with women during PNC.

The following are a list of potential research questions:

1. (How) Is limited time during PNC visits affecting perinatal outcomes?
2. Can providers modify PNC practice to support for healthy behaviors in pregnant women?
3. Expand the meaning of concepts of provider relationships, communication, time, care and relationships for women receiving PNC?
4. Explore models from other nations for PNC that contribute to pregnancy outcomes.
5. Explore what women from non-industrialized nations value in PNC and how this could improve pregnancy outcomes.

In summary, this chapter discusses the findings of a cross-national exploratory study that focused on the phenomenon of consumers' perception of PNC. Implications for education, practice, research and policy were highlighted, weaknesses were identified and future research questions proposed.

APPENDIX: DATA COLLECTION TOOLS AND TABLES

Table 1
IRB UCF

University of Central Florida

Office of Research & Commercialization

August 14, 2006

Claudia Wiseman
65465 Cline Falls Road
Bend, OR 97701

Dear Ms. Wiseman:

With reference to your protocol #06-3639 entitled, "Consumer Perceptions of Health During Prenatal Care in the USA and Iceland" I am enclosing for your records the approved, expedited document of the UCFIRB Form you had submitted to our office. **This study was approved on 8/14/06. The expiration date for this study will be 8/13/2007.** Should there be a need to extend this study, a Continuing Review form must be submitted to the IRB Office for review by the Chairman or full IRB at least one month prior to the expiration date. This is the responsibility of the investigator.

Please be advised that this approval is given for one year. Should there be any addendums or administrative changes to the already approved protocol, they must also be submitted to the Board through use of the Addendum/Modification Request form. Changes should not be initiated until written IRB approval is received. Adverse events should be reported to the IRB as they occur.

Should you have any questions, please do not hesitate to call me at 407-823-2901.

Please accept our best wishes for the success of your endeavors.

Cordially,

Joanne Muratori

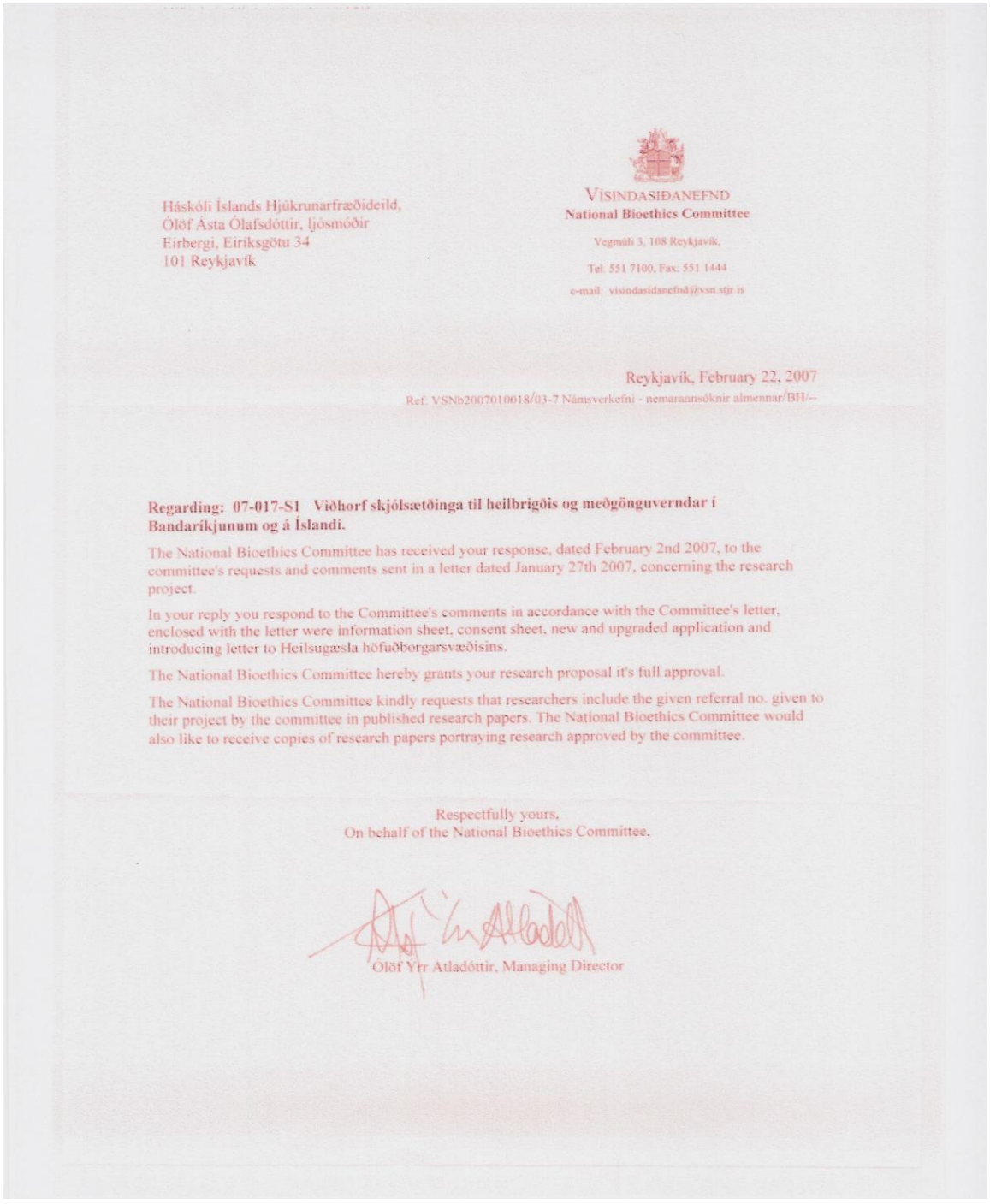
Joanne Muratori
UCF IRB Coordinator
(FWA00000351 Exp. 5/13/07, IRB00001138)

Copies: IRB File
Ermalynn Kiehl, Ph.D.

JM:jm

12201 Research Parkway • Suite 501 • Orlando, FL 32826-3246 • 407-823-3778 • Fax 407-823-3299

Table 2
IRB Iceland



Háskóli Íslands Hjúkrunarfræðideild,
Ólöf Ásta Ólafsdóttir, ljósmóðir
Eirbergi, Eiríksgötu 34
101 Reykjavík

VÍSINDASIÐANEFND
National Bioethics Committee
Vegmúli 3, 108 Reykjavík,
Tel: 551 7100, Fax: 551 1444
e-mail: visindasidanefnd@vsn.stjr.is

Reykjavík, February 22, 2007
Ref: VSNb2007010018/03-7 Námsverkefni - nemarannsóknir almennar/BH/--

Regarding: 07-017-S1 Viðhorf skjólsætðinga til heilbrigðis og meðgönguverndar í Bandaríkjunum og á Íslandi.

The National Bioethics Committee has received your response, dated February 2nd 2007, to the committee's requests and comments sent in a letter dated January 27th 2007, concerning the research project.

In your reply you respond to the Committee's comments in accordance with the Committee's letter, enclosed with the letter were information sheet, consent sheet, new and upgraded application and introducing letter to Heilsugæsla höfuðborgarsvæðisins.

The National Bioethics Committee hereby grants your research proposal it's full approval.

The National Bioethics Committee kindly requests that researchers include the given referral no. given to their project by the committee in published research papers. The National Bioethics Committee would also like to receive copies of research papers portraying research approved by the committee.

Respectfully yours,
On behalf of the National Bioethics Committee,

Ólöf Yrr Atladóttir, Managing Director

Table 3
Consent to Participate in a Research Study

IRB Study #__00001138 (UCF), ref: 07-017-SI (Iceland)

Title of Study: Consumer Perceptions of Individual Health during Prenatal Care in the USA and Iceland
Principal Investigator: Claudia Wiseman
Email Address: cwiseman@cfl.rr.com
Faculty Advisor: Ermalynn Kiehl
Funding Source: private
Study Contact telephone number: 336-880-5453
Study Contact email: cwiseman@cfl.rr.com

What are some general things you should know about research studies?
You are being asked to take part in a research study. To join the study is voluntary. You may refuse to join, or you may withdraw your consent to be in the study, for any reason, without penalty.

Research studies are designed to obtain new knowledge. This new information may help people in the future. You may not receive any direct benefit from being in the research study. There also may be risks to being in research studies.

Details about this study are discussed below. It is important that you understand this information so that you can make an informed choice about being in this research study. You will be given a copy of this consent form. You should ask the researchers named above, or staff members who may assist them, any questions you have about this study at any time.

What is the purpose of this study?
The purpose of this research study is to learn about what women's perceptions of prenatal care are in this country (Iceland) and America.

You are being asked to be in the study because you have recently delivered a baby and received prenatal care before the birth of you baby. You opinions about prenatal care are important and the basis for this study.

Are there any reasons you should not be in this study?
You should not be in this study if you do not want to share your opinions about prenatal care and if you do not want the video representations of your opinions shared with others.

How many people will take part in this study?

If you decide to be in this study, you will be one of approximately 30 people in this research study (15=Iceland and 15=America).

How long will your part in this study last?
This conversational interview video will last approximately 30mins-2hours, depending upon how much you have to say about prenatal care. No formal follow-up interviews are planned.

What will happen if you take part in the study?
If you take part in this study, an interview time and place will be arranged in advance and will be at your convenience. This will be an informal interview about your experiences with your recent prenatal care before the birth of your child. The interview process will be in English and video taped for use in data collection in this research, and a possible pictorial representations about prenatal care experiences in Iceland and America.

What are the possible benefits from being in this study?
Research is designed to benefit society by gaining new knowledge. You may not benefit personally from being in this research study.

What are the possible risks or discomforts involved from being in this study?
There are no known physical risks to participating in this study.

How will your privacy be protected?
Participants will be identified by their first names only in any report, publication or pictorial representation about this study. Although every effort will be made to keep research records private, there may be times when federal or state law requires the disclosure of such records, including personal information. This is very unlikely, but if disclosure is ever required, I will take steps allowable by law to protect the privacy of personal information. In some cases, your information in this research study could be reviewed by representatives of the University, research sponsors, or government agencies for purposes such as quality control or safety.
Any video taping will be discontinued at the request of any participant at any time during the interview process.

Will you receive anything for being in this study?
You will not receive anything for taking part in this study.

Will it cost you anything to be in this study?
There will be no costs for being in the study.

What if you have questions about this study?

You have the right to ask, and have answered, any questions you may have about this research. If you have questions, or concerns, you should contact the researchers listed on the first page of this form.

What if you have questions about your rights as a research participant?

All research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have questions or concerns about your rights as a research subject you may contact, anonymously if you wish, the Institutional Review Board at or by email to

- -

Participant's Agreement:

I have read the information provided above. I have asked all the questions I have at this time. I voluntarily agree to participate in this research study.

_______________________________________ ________________

Signature of Research Participant Date

____

Printed Name of Research Participant

_______________________________________ ________________

Signature of Person Obtaining Consent Date

____

Printed Name of Person Obtaining Consent

Table 4
Demographic Data Form

Today's Date		Participant number:
Mother Information		
Name:		Marital Status: Single ☐ Married ☐ Separated ☐ Divorced ☐ Widow ☐ Partner ☐ Other Support ☐
Former Name:		Age:
Contact Information:		Cell phone: Home phone:
Email address:		
Education: HS ☐ College ☐	Occupation:	
Infant Information		
DOB:	Age at Interview:	Breastfeeding Y ☐ N ☐ Duration:
Prenatal Information		
Prenatal Care Received at:	Close to home or work Y ☐ N ☐	Provider: Dr ☐ NM ☐ Other ☐
Planned Pg: Y ☐ N ☐	Payer: Private ☐ Public ☐	
G P	# Visits	Delivery: NSVD ☐ C/S ☐ Reason:
BC:	Comments:	
FOB Information		
First name only:	Birth date or age:	Lives at same address: Y ☐ N ☐
Supportive: Y ☐ N ☐	Occupation:	Education: HS ☐ College ☐
Comments:		
Other Support Systems		
Family and friends:	Relationship:	Contacts/Month

Table 5
Interview Guide

Health Related Questions
1. How healthy are you now?
2. How healthy were you when you were pregnant?
3. What did you do to stay healthy?
4. Thinking about staying healthy during the pregnancy, what happened during prenatal care to support your health?
5. Where did you get information during the pregnancy?
PNC Related Questions
6. What was the best part of your care?
7. What did you expect during your prenatal care?
8. What did you receive?
9. Knowing what you know now, what more could you have done to prepare for your birth and baby?
10. If you could improve your PNC, what would you do?

Table 6
Demographics: Iceland and Deschutes County Oregon

	Deschutes County, OR	Iceland
Population	141,400	305,309 114,4800 (Reykjavik)
Average age	38	35.9
Ethnicity	94% Caucasian	94% Caucasian
Education-High School (+)	88.4%	99%
Median Household Income	$44,111	$46,320
Infant Mortality Rate	6.0 (2004) 7.2-10.0 (2001-2003)	1.4 (2006 est.) 2.5-3.3 (2001-2005)
Unemployment Rate	4.5% (2006)	2.6% (2006)
Life expectancy	80.0 (F); 75.5 (M)	83.1 (F); 79.2 (M)
Live births	1783 (2005)	4415 (2006)

Note. Sources are; Deschutes County Government, 2006; Statistics of Iceland, 2006; OECD, 2006a.

Table 7
Demographic Data of Participants (*N* = 32) (Iceland/U.S.A.)

	All Participants (*n* = 32)	Iceland (*n* = 16)	U.S.A. (*n* = 16)
Married	53% (*n* = 17)	56% (*n* = 9)	50% (*n* = 8)
Age range in years	18-40	20-40	18-38
Average age	28 years and 12 days	29 years 5months 5 days	27 years 6months 7 days
Education: High school	100% (*n* = 32)	100% (*n* = 16)	100% (*n* = 16)
Education: College	50% (*n* = 16)	62.5% (*n* = 10)	37.5% (*n* = 6)
Occupation/returned to work after birth	25% (*n* = 8)	12.5% (*n* = 2)	37.5% (*n* = 6)
Average age of infants	6months 15 days	9 months 16 days	5 months 7 days
Breastfeeding at time of interview	78% (*n* = 25)	100% (*n* = 16)	56% (*n* = 9)
Site of PNC	Clinic 100% (*n* = 32)	Clinic 100% (*n* = 16)	Clinic 100% (*n* = 16)
Providers/ MD's	37.5% (*n* = 12)	None	75% (*n* = 12)
Providers/midwives	62.5% (*n* = 20)	100% (*n* = 16)	25% (*n* = 4)
Payer source/Government	62.5% (*n* = 20)	100% (*n* = 16)	25% (*n* = 4)
Payer source/private	37.5% (*n* = 12)	None	75% (*n* = 12)
Planned pregnancy	78% (*n* = 22)	87.5% (*n* = 14)	50% (*n* = 8)
Unplanned pregnancy	32% (*n* = 12)	12.5% (*n* = 2)	50% (*n* = 8)

	All Participants (*n* = 32)	Iceland (*n* = 16)	U.S.A. (*n* = 16)
Parity/first baby	50% (*n* = 16)	50% (*n* = 8)	50% (*n* = 8)
PNC start		>11 weeks	< 12 weeks
Delivery/vaginal	72% (*n* = 23)	82% (*n* = 13)	62.5% (*n* = 10)
Delivery/C-section	28% (*n* = 9)	18% (*n* = 3)	37.5% (*n* = 6)
Father/average age	29 years 4 months	31 years	27 years 6 months
Fathers in household/supportive	100% (*n* = 32)	100% (*n* = 16)	100% (*n* = 16)
Father's education/High school	93% (*n* = 30)	100% (*n* = 16)	87.5% (*n* = 14)
Father's education/college	56% (*n* = 18)	75% (*n* = 12)	37.5% (*n* = 6)
Family support close by	62.5% (*n* = 20)	87% (*n* = 14)	50% (*n* = 8)

Table 8
Content Analysis Major Themes: Individual Health: Comparisons U.S.A./Iceland, Meaning Units, Categories, Concepts[a]

Status	Statements	Meaning Units	Categories	Concept
Current	I am pretty healthy (*n* = 5)," "Really healthy I would say," "lot more healthy than before I got pregnant," "I had a longer recovery time but now that all that's good," *"Fairly healthy," " I'm healthy now, very healthy (n = 9)," "I have never felt healthier, I am very good," "Less strong, but healthy."*	Generally healthy	Healthy state	
Pregnancy	"I had morning sickness the entire time I was pregnant," "they were really supportive, saying it was normal," "I was really healthy, until my blood pressure, started to act up, I felt really great," "still very happy," *"The only problem I had was a little water retention at the end," "edema on my legs," "OK, but I always had something in my nose," "I had to rest in bed during much of the pregnancy," "Oh, I was tired you know the normal stuff and trouble sleeping the last weeks (n = 4)," ".The first five months I didn't feel very well, but then I felt better," "I had back problems during the last part of the pregnancy," "My pelvis hurt very bad," " I had some high blood pressure, but otherwise I felt healthy (n = 4)."*	Normal discomfort of pregnancy	Healthy pregnancy	Individual health
	"Very healthy(*n* = 3)," "I was really healthy (*n* = 4)," "Same healthy I would be right now," "Physically healthy I would say pretty healthy," "I think I was more healthy than I am now," *"Quite healthy," " healthy," "I stayed very healthy," "no problems."*	Generally healthy		

[a]USA statements are non-italicized; Icelandic statements are italicized.

Table 9
Content Analysis Major Themes: Individual Health Maintenance Comparisons U.S.A./Iceland, Meaning Units, Categories, Concepts[a]

Statements	Meaning Units	Categories	Concept
"I tried to eat healthy (*n* = 4)," "I would try to eat more salads and greens," "Kind of following the food pyramid," "I tried not to eat a lot of junk food," "I stay away from caffeine, it's very important," "doctor put me in touch with a dietician in the hospital," "Eat solids, eat healthy food," "I ate a lot better when I was pregnant," "drink lots of water (*n* = 2)," *"I made sure to eat healthy (n = 4)," "Just tried to eat right," "Drank a lot of water and eat right (n = 6)," "I had very good meals," "Not too many sweets, which is a problem of mine," "Thinking about the kind of food I was eating and drinking," "I tried to eat properly, good healthy foods,"*	Attention to dietary needs		
"Take vitamins (*n* = 3)," *"took foliate."*		Maintaining physical health	Health Maintenance
"I went to yoga," "I did yoga," *"Breathing," "I did yoga," "Get enough exercise, something easy that keeps the blood flowing, like yoga," "I went to yoga and I think that was pretty important," "That helped me, these yoga classes."*			
"I did water exercises," "*Swimming lessons for pregnant women," " swim with other pregnant women".*	Physical exercise		
"I did aerobics," "I was working, so that helped me stay active," "I tried to walk," "I walked a lot," "I walked through the fields and stuff," *"I exercised all the way through my pregnancy I worked out three and four times a week," "exercise (n = 5)," "I walked a little," "go walking," "Walking outside," "I tried to do some exercise like walking."*			
"I cut back on smoking, I got down to 2 cigarettes a day," "I quit smoking," "Make good choices, no smoking, no drinking," *"I didn't drink alcohol or do drugs."*	Reduce toxin exposure		

Statements		
"I tried to have a stress free environment as possible," *"Stayed calm," "Just try to think more positively for my life," "Rested and tried to make myself feel good (n = 3)," "Rested my back as much as I could," "Stopped working 3 months before I delivered."*	Minimize stress levels	Maintaining mental health

[a]USA statements are non-italicized; Icelandic statements are italicized.

Table 10
Content Analysis Major Themes: Basic Prenatal Care Components Comparisons U.S.A./Iceland, Meaning Units, Categories, Concepts[a]

Statements	Meaning Units	Categories	Concept
"I expected to go in and have my blood pressure checked, fetal heart tones," "tests and things," "my health, like my blood pressure," "just checking in my vagina area," "they checked my baby's heart beat," "listen to the heart beat, weight me and do my blood pressure," "Measure me ", "Measured, weight, blood pressure and peed in a cup," "One blood sample," "My belly was measured, my weight was measured too," "urine tested for glucose and protein."	To do screening procedures	Provide preventative care	
"To make sure she was ok," "overall just to check to make sure the baby is healthy," "Preventive type of care and any problems to treat it," "making sure everything was still going ok," *"That they would check and everything would be OK with me and the baby," "I expected that they would look at the baby," "Make sure everything was as it was supposed to be," "to know that everything is going on the normal."*	Provide preventative care		Basic Prenatal Care Components
"I expected general information (*n* = 4)," "Maybe any advice for anything," "I wanted to know as much as I could about my health & my baby's," "any questions I had (*n* = 3)," "let me know what I need to do," *"Tell me about the pregnancy and the growing of the baby, blood pressure, heartbeat, how you feel," "information about my baby," "They gave me information," "Lots of information and answered questions."*	To supply information	Information	

Statements	Meaning Units	Categories	Concept
"To take care of me," *"Complete care from the midwife," "I got just what I needed," "I think it was very complete (n = 4)," "They are giving you everything you need," "Just what they did, I was pretty content with my care."*	To give complete care	Complete care	
"It wasn't what I expected," "I really wasn't sure," "I had no idea (*n* = 4)."	Unknown expectations		
"I didn't have super high care expectations," *"knew what to expect (n = 4)," "didn't expect too much because I have done this before."*	Knowing expectations	Expectations	

[a]USA statements are non-italicized; Icelandic statements are italicized.

Table 11
Content Analysis Major Themes: Time Comparisons U.S.A./Iceland, Meaning Units, Categories, Concepts[a]

Statements	Meaning units	Categories	Concept
"I wasn't in there more than 15" any appointment," "Most of the appointments were about 15" long," "say everything was fine or good, then they'd make another appointment."	Limited appointment times	Restricted Time	Time
"Really didn't have time to answer any questions, they were pretty busy," "they don't have time to get to your questions and you're scared to death, you don't have the time," "She just checked me, she didn't really explain anything to me."	No time to answer questions or explain		
"When I called up & had concerns they'd get back to me in a timely manner, I know Dr.'s are fairly busy."	Get back to me in a timely manner	Unrestricted Time	
"I could contact the midwife at any time," "I could always call her, if something happened or I was worried about myself," "I know that she is busy, but I always felt that I was very special, almost like her only pregnant woman she was caring for."	available at any time		

[a]USA statements are non-italicized; Icelandic statements are italicized.

Table 12
Content Analysis Major Themes: Provider Relationships Comparisons U.S.A./Iceland, Meaning Units, Categories, Concepts[a]

Statements	Meaning Units	Categories	Concept
"They were a lot of support for me," "they helped me," "constant encouragement, so it made my pregnancy a lot better," "I was looked after and she actually cared about me," *"she was supportive," "I always thought that I knew what was happening, what I was feeling and what I should be doing," "She made sure I was still healthy."*	Support	Sanctuary	Provider Relationships
"She made me feel more comfortable," *"same person you create trust (n = 3)," "It was a good thing to go and talk to her because I was more relaxed," "always felt like I was special and that gave me a sense of security that I needed," "the same person every time made you feel safe," "I felt so secure or safe."*	Security		
"I met some nice people, some really nice people," "they were very nice," *"all of the midwives were so good to me," "They were wonderful to me."*	Pleasant attributes		
"I had a pretty casual relationship with my OB," "He was my sounding board," *"A friendly relationship really," "personal relationship or a welcoming approach to me as a person and welcoming as a couple," "it was the relationship with the midwife which I cherished," "I think the most important thing is to have this relationship with the midwife," "Everyone was so interested in me and how I was feeling she always gives herself to me . . . They would just put their arms around you and hug you and you would feel better."*	Personal interest	Friendly attention	

Statements	Meaning Units	Categories	Concept
“She just checked me, she didn’t really explain anything to me,” “the way he worked with me wasn’t very good,” “Usually, I just saw the nurse,” “the nurses that helped me.”	Distant	Remote	

[a]USA statements are non-italicized; Icelandic statements are italicized.

Table 13
Content Analysis Major Themes: Communication Comparisons U.S.A./Iceland, Meaning Units, Categories, Concepts[a]

Statements	Meaning Units	Categories	Concept
"He just told me," "to start eating better," "I needed to eat a lot better foods," "to quit smoking," "all the blood work got done," "nothing," *"She talked about ways to keep my blood pressure down," " also she talked about eating healthy," "said it would be better if I did any exercise," "made sure that I knew not to smoke or drink and take care of myself," " tried to coach me to lean towards good eating," "She advised me about eating right, resting and do some exercises," "Encouraged me to exercise, eat healthy and listen to my body and take it slower if I needed to," "to rest,""Recommended which food.*"	Told me	Directives	
"She gave me a couple pamphlets," "gave me information about the food I can eat," "giving me advice on staying in shape," *"gave me all of the information I needed," "gave good answers," "She offered some solutions."*	Gave me		Communication
"To be listened to and talk about any of my worries," "about work situations," *"they would be kind and listen to me."*	To listen	Conversations	

Statements	Meaning Units	Categories	Concept
"I went to several nurses in there I could talk with, whether I had an appointment or not, which is really good ", "about what was happening," "They asked how it was going," " just having that person there to ask," "I asked questions," " I asked questions, like what should I be eating," " maybe help with any questions that I had," "the questions I had always got answered," *"we connected well and communicated very good," "communicated very good," "good communication and I felt safe with her," "they are very open minded," " you are in a situation where you can discuss it with someone who knows you and cares," "I discussed this," " we would discuss this," " we decided."*	Communicated well		

[a]USA statements are non-italicized; Icelandic statements are italicized.

Table 14
Content Analysis Major Themes: Weight Comparisons U.S.A./Iceland, Meaning Units, Categories, Concepts[a]

Statements	Meaning Units	Categories	Concept
"After starting to gain so more weight my doctor told me I was gaining too much weight," "but he was not happy with how much weight I gained, he said it wasn't good for the baby," "pretty much every time I went in there he badgered me about it," "hopefully I wasn't gaining too much weight," "he was aware of weight gain, & lack of weight gain."	Provider statements about weight gain	Provider emphasis on weight	Weight
"they watched my weight & diet," "they were always inquiring about my intake on food, always weighing and making sure my weight or eating habits," "my weight, to see how my weight was maintaining, that's all I thought they were really checking for," "they weighed me."	Providers concerns with monitoring weight		
"I gained 60 lbs throughout the course of the pregnancy, and you're only suppose to gain about 45 lbs," "Hum, I was doing pretty good on my weight, I gained a little too much," "I tried not to gain too much weight, I gained 25 lbs," "I didn't want to gain too much," "I had a problem with my weight ", "I haven't got all my weight off," "obviously overweight," "I am overweight," "overweight when I got pregnant," "I've always been kind of overweight, so that's why I still have it."	Consumer statements about weight gain	Consumer emphasis on weight	
"I'd like to lose a little weight," "I was trying to lose weight before I became pregnant," *"I gained so much weight that it has taken me awhile to return to my old pants," "I'm a bit heavier than I used to be."*	Consumer statements about losing weight		

[a]USA statements are non-italicized; Icelandic statements are italicized.

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