THE DEVELOPMENT OF THE PAGEL PRENATAL TEACHING RECORD FOR PRIMARY HEALTH CARE PROVIDERS WORKING WITH PREGNANT MIGRANT WOMEN

BY

RENEE PAGEL

1997

THE DEVELOPMENT OF THE PAGEL PRENATAL TEACHING RECORD FOR PRIMARY HEALTH CARE PROVIDERS WORKING WITH PREGNANT MIGRANT WOMEN

By

Renee B. Pagel

A SCHOLARLY PROJECT

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

MASTER OF SCIENCE IN NURSING

College of Nursing

1997

ABSTRACT

THE DEVELOPMENT OF THE PAGEL PRENATAL TEACHING RECORD FOR PRIMARY HEALTH CARE PROVIDERS WORKING WITH PREGNANT MIGRANT WOMEN

By

Renee B. Pagel

The infant mortality rate in the migrant population is twenty-five times higher than the national average (Casetta, 1994). This statistic suggests the need for improved prenatal care for migrant women This scholarly project, the Pagel Prenatal Teaching Record (PPTR), focuses on improving a vital component of prenatal care which is prenatal education through the development of a teaching record for this high-risk population. It is proposed that this record be incorporated during the prenatal visits and be utilized by primary health care providers to facilitate comprehensive prenatal education. The PPTR includes content that is specifically relevant to the unique concerns of the migrant population. It also provides an efficient means for providers to document their teaching during the visits and record the client's comprehension of the teaching. The record provides a means of communication between the various providers involved in the client's care so that comprehensive client-centered prenatal teaching can be achieved. This record presented is in the initial stage of development and requires further evaluation by health care providers and clients regarding usability, appropriateness, and effectiveness.

This scholarly projected is dedicated to my best-friend and husband

Michael James Pagel.

ACKNOWLEDGMENTS

This scholarly project would not have been possible without the assistance of my scholarly project committee. I would like to thank the chairperson, Joan Wood, R.N., Ph.D. who went "beyond the call of duty" to facilitate the completion of this project. I appreciate your dedication, valuable insights, and PATIENCE in assisting me throughout this endeavor.

I would also like to thank Lee Ann Roman, R.N., Ph.D. and Jacqueline Wright, R.N., M.S.N. for also serving on my committee. I appreciate all of your feedback, encouragement, and flexibility.

I also want to thank the Migrant workers that I have been privileged to work with over the past several years. Their friendship, hospitality and openness has been a blessing in my life and has provided me with valuable insights for this scholarly project. My hope is that this project in some small way will "return the favor" for their kindness.

Table of Contents

List of Figures

Introduction

According to the National Migrant Program, there were more than four million migrant workers in the United States in 1994 (Casetta, 1994). Many of these migrants face multiple barriers to health care which impact their health status. For example, the average life expectancy of a migrant farm-worker is only forty-nine years and the incidence of malnutrition among migrants is higher than among any other subpopulation in this country. Furthermore, the infant mortality rate in this population is 25 times higher than the national average (Cassetta, 1994; Decker and Knight, 1990).

There are often several different types of providers that serve the migrant population. These include physicians, advanced practice nurses, nurse midwives and physician assistants. Regardless of the specific title and background, each provider shares the goal of positively impacting the outcomes of these migrant women and their babies. Thus, the intent of this scholarly project is to address the common goal of providers and respond to the barriers and health care needs of the migrant population by enhancing prenatal education. It is proposed that this will be accomplished through the provider's use of a newly developed prenatal teaching record that is appropriate for this special population and designed for use by all types of primary health care providers.

The migrant population faces many barriers that impact infant morbidity and mortality rates. These include poverty, lack of insurance coverage, language and cultural issues and long and hard working conditions which limit access to health care (Mountain & Hill, 1992; Rust 1990; Slesinger, 1992; Watkins, Larson, Harlan, & Young, 1990).

When health care is obtained, the care may be substandard because of the high demand for services which is coupled with a limited amount of federal grant funds for health care providers and staff to meet those needs. The nomadic life-style of migrant workers can further complicate their health care. Specifically, in terms of prenatal care, migrant workers frequently relate to multiple health care providers. Prenatal care often is interrupted by a move between harvest seasons which necessitates that they seek a new health care provider. Frequently, they experience difficulty in locating one. These combined conditions create a challenging situation for delivering quality prenatal care (Mawby, A. M., personal communication, May 1, 1997).

Prenatal teaching is an essential aspect of prenatal care. Unfortunately, due to the aforementioned issues, teaching is one of the components of care that is often neglected for this special population (Freda, Anderson, Damus, & Heilemann, 1993; Mawby, A. M., personal communication, May 1, 1997). The prenatal period is a time of profound change in a woman's life and that of her family. It is a time when intrinsic motivation to learn is strong and the need to learn is imperative in order to attain a positive pregnancy outcome (Bobak, Lowdermilk, Jenson, 1995).

Statement of the Project

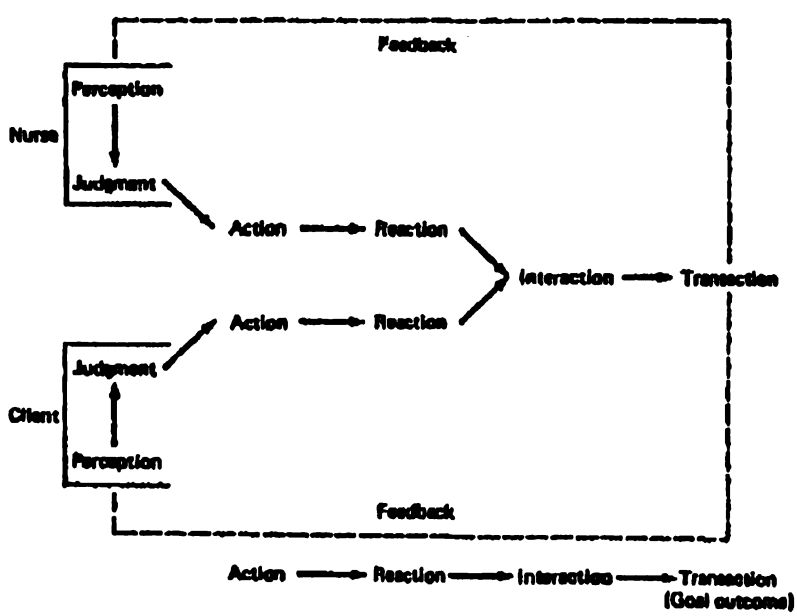
The purpose of this scholarly project is to develop a prenatal teaching record which can be utilized by various primary health care providers to enhance prenatal education delivery for pregnant migrant women. Current migrant health statistics and the identified barriers to migrant health care served as an impetus for this scholarly project.

This author's personal experience and discussion with health provider colleagues about their experiences, also suggested that this record is needed as a means to provide comprehensive prenatal teaching to the migrant population. In order for it to be an effective educational approach, it needs to address the unique cultural, socioeconomic and lifestyle issues of migrant workers.

Conceptual Framework

Imogene King's Theory of Goal Attainment (1983) reflected in the "Interaction" schematic, Figure 1, was selected to provide the theoretical framework for this scholarly project. Imogene King is a systems theorist and views nurse-client transactions as essentially goal directed. In her theory, the setting of the goals and the means for reaching the goals are mutually established by the nurse and the client (King, 1971; Meleis, 1985). Her theory states that human beings (nurses) interact with clients as human beings and both are open systems who also interact with the environment. Therefore, the personal systems of the nurse and of the client interact with each other in an interpersonal system and with the environment that King refers to as the social system or society (King, 1971; Meleis, 1985).

Figure 1



Interaction. *(Adapted from King, I. M. Toward a Theory of Nursing General Concepts of Human Behavior, New York: Wiley, 1971, pp. 78, 82.*

King's Theory of Goal Attainment presents eight predictive propositions. The propositions reflect the open-system framework from which the Theory of Goal Attainment was derived. Within this framework, the nurse's role as educator, client-centered teaching and mutual goal setting are incorporated (George, 1992; King; 1971) The propositions are:

- If perceptual accuracy is present in nurse-client interactions, transactions will occur.
- If nurse and client make transactions, goals will be attained.
- If goals are attained, satisfaction will occur.
- If goals are attained, effective nursing care will occur.
- If transactions are made in nurse-client interactions, growth and development will be enhanced.
- If role expectations and role performance as perceived by nurse and client are congruent, transactions will occur.
- If role expectations and role performance as perceived by nurse and client are different, stress in nurse-client interactions will occur.
- If nurses with special knowledge and skills communicate appropriate information to clients, mutual goal setting and goal attainment will occur (George, 1992, p. 125).

Before reviewing the basic assumptions of this theory, it is essential to have an understanding of the basic conceptual definitions that are central to King's theory.

Conceptual Definitions:

King (1983) proposed five major domain concepts in her theory; they include the following:

- **Nursing**: A process of human interaction between nurse and client whereby each perceives the other in the situation and through communication they set goals, explore means, and agree on means to achieve goals.

- **Goal of Nursing**: To help individuals to maintain their health so they can function in their roles.

- **Health**: A dynamic life experience of a human being, which implies continuous adjustment to stressors in the internal and external environment through optimum use of one's resources to achieve maximum potential for daily living.

- **Environment**: The internal environment of human beings transforms energy to enable them to adjust to continuous external environmental changes. The external environment is the formal and informal organization. A social system is defined as an organized boundary system of social roles, behaviors, and practices developed to maintain values and the mechanisms to regulate practice and rules. The nurse is part of the client's environment.

- **Nursing Process**: A focal concept in King's theory. The goal of nursing is to help clients attain their goals. The mechanism for that is the nursing process. Through this process nurses interact purposefully with clients. The purpose is information sharing, setting of mutual goals, participation in decisions about goals and means and implementing plans and evaluations. (Meleis, p. 233, 1992).

The Modified King's Theory of Goal Attainment

This section describes the relevance of King's Theory of Goal Attainment to this scholarly project. The schematic representation of King's Theory of Goal Attainment (Figure 1) has been modified for this scholarly project and is presented as Figure 2, King's Revised Goal Attainment Theoretical Framework. This framework demonstrates the interrelationships between King's theory and concepts; it also highlights the components relevant to this scholarly project.

The Pregnant Migrant Worker (PMW) and the provider are conceptualized within King's schematic of the dynamic interacting systems. This demonstrates that both are impacted by their individual experiences, relationships, culture, and society, and effect their individual perceptions of themselves, others, and how they perceive situations.

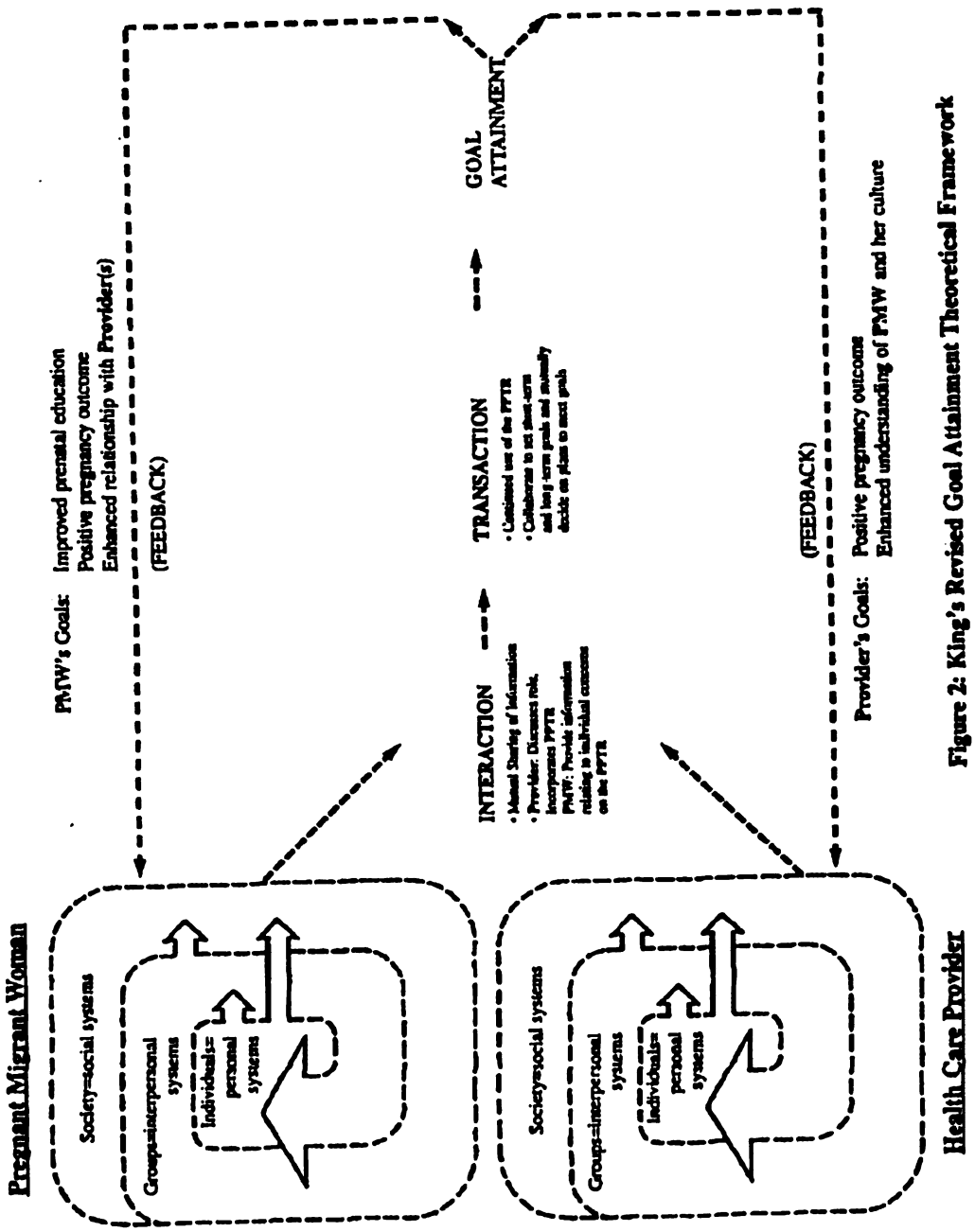


Figure 2: King's Revised Goal Attainment Theoretical Framework

The concept of social support fits in the dynamic interacting system. Social support is defined as the indication that one is valued and is an integral part of a group. It is the woman's self-perception of intimacy, opportunity for nurturance, and the availability of informational, emotional, and material help (Higgins, Murray, & Williams, 1994). Social support also influences health-seeking behavior (Higgins et al., 1994). For this reason, the prenatal teaching record needs to assess the social support of the PMW.

In the interaction phase, the PMW and provider interact with each other to share information about themselves. For example, the provider would discuss the dynamic of his or her role so that the PMW would realize that addressing concerns or issues that may or may not be perceived as being directly related to the pregnancy is accepted and encouraged. The role of the provider needs to be incorporated into the proposed prenatal teaching record.

The PMW might discuss cultural issues related to her pregnancy, i.e., health attitudes, and specific health practices. This information is needed in order to develop a culturally specific plan of care with the PMW. This also is of benefit to the provider in that it enhances the provider's experience and learning so that he or she can also deliver culturally sensitive care to other clients. In other words, it provides a feedback mechanism back into the provider's dynamic interacting system. It is proposed that during the interactive phase, the provider would introduce the prenatal teaching record.

The transaction phase includes the use of the prenatal teaching record, the identification of barriers to care, and the incorporation of the PMW feedback to arrive at goals. The approaches to achieve short-term and/or long term goals would also be

discussed and mutually decided upon. The next phase is actual goal attainment e.g., a healthy mother and baby or interval goal.

The feedback mechanism demonstrates how this whole process continues to influence the provider and the client within their dynamic interacting systems. Figure 2 demonstrates that this is not a linear process but that feedback continues to have a mutual cyclical influence. It not only influences the PMW and provider in their relationship during the prenatal period, but also impacts later perceptions related to health care. For instance, the PMW may have a change in her perception related to the provider(s) and/or health care in general as a result of this experience. The provider may also be impacted by the relationship. For example, he or she may incorporate the "tried and true" suggestions and interventions in future interactions with other clients and/or seek to revise or omit those that were ineffective.

In general, King's conceptual definitions guide this project. However, for the purpose of this scholarly project, King's concepts of "nursing" and the "goal of nursing" will be substituted respectively with "primary health care provider" and the "goal of the primary health care provider." The definitions of these concepts, however, will be unchanged. The nursing process is unique to the science of nursing and is the major concept of this scholarly project and therefore, will not be modified. The operational definitions relating to the above concepts will now be reviewed as they are used in this project.

Primary Health Care Provider: A health care professional or "provider" who represents any type of primary care provider including an advanced practice nurse,

physician, or physician's assistant who delivers prenatal care to the migrant population. This term will be referred to as "provider" throughout this scholarly project.

- **Goal of the Primary Health Care Provider:** The intent of providing quality, comprehensive, client-centered prenatal education for the purpose of reducing preventable disease or negative outcomes to pregnant women and their babies.
- **Health:** The subjective description of personal wellness in the physical, emotional and spiritual realms of the pregnant woman as well as her perception of her baby's wellness and consistent with the objective data obtained about the pregnant woman and baby by the health care provider.
- **Environment:** The plethora of external variables experienced by the pregnant woman and her health care provider that will impact their transaction and perceptions of each other and the care that is given and received.
- **Nursing Process:** The utilization of the prenatal teaching record by the health care provider. This includes information sharing between client and provider, their setting of mutual goals, and their collaboration regarding goal setting and the method(s) to attain these goals in order to achieve positive pregnancy outcomes.

There are two additional concepts, "migrant worker" and "prenatal period," that need to be conceptually and operationally defined as they are directly related to this scholarly project and to the development of a prenatal teaching record.

- **Conceptual definition of migrant worker:** The United States Department of Agriculture (USDA) and Public Health Service (PHS) define migrant worker as one who earns more than 50% of his/her earned income harvesting or performing agricultural labor and spends the night away from home (or cross a county line) in

order to perform agricultural work (Slesinger, 1992). Other definitions include the individual who works only in "perishable crops," i.e., excluding the poultry worker, meat packer, fisherman, cattleman, or forestry worker, (Slesinger, 1992). Another definition refers to only those who work in food and food products, i.e., this excludes the person who works in tobacco fields or in plant nurseries, (Slesinger, 1992).

- **Operational definition of migrant worker:** For the purpose of this project, the USDA and the PHS definition of a migrant worker will be utilized, however, it will pertain to only the pregnant migrant woman (PMW).
- **Conceptual definition of prenatal period:** The prenatal period refers to the period of time from conception to delivery that can be influenced by a plethora of variables which may impact the outcome of the development and health of the baby and the health of the pregnant woman (Bobak et al., 995).
- **Operational definition of prenatal period:** For the purpose of this project, the prenatal period begins with the pregnant woman's first contact with the health care system following the diagnosis of pregnancy and continues through the delivery.

Significance of King's Theory of Goal Attainment to this Scholarly Project

King's Theory of Goal Attainment was selected to provide the theoretical foundation for this scholarly project for two primary reasons. First, the systems framework demonstrates how clients and nurses are part of an open system and therefore are influenced by the variables in their relationships and environment. This concept is imperative to this project in that there are many cultural, socio-economic, and other

issues that present in the life of a PMW which will likely have a profound impact on goal setting.

The second reason that this theory was selected is that it proposes that both the nurse and the client share responsibility to reach mutually acceptable goals. This is in contrast to a more traditional view of nursing which suggests that the nurse teaches and gives direction to the client and evaluates the client's response to the intervention is terms of compliance.

Thus, King's theory is consistent with the intent of this scholarly project, i.e., to incorporate goal setting and goal acquisition as a mutual responsibility between the nurse (provider) and the client via the prenatal teaching record. If the goals are not achieved they may be more likely a result of "non-alliance" instead of "non-compliance." This approach assumes that there is mutual responsibility of sharing of information, perceptions, and goals between both client and nurse in order to achieve mutual "alliance" in goal setting. Barriers to goal attainment then represent a need for additional goal setting to modify the original goal or to focus on alleviating or reducing the impact of the barrier involved.

Review of the Literature

The review of the literature for this scholarly project is organized according to key relevant topics. These include the following: Overview of the Problem; Migrant Worker Issues; Mexican-American Family; Culture and Health Issues; Pregnancy as a Transitional Life Event; Concepts in Teaching and Learning; and Utilization of the Prenatal Flow Record and Health History. The relevance of the literature review and a discussion of its' relationship to the modified theoretical model (Figure 2) and scholarly project will be presented within each section.

Overview of the Problem

Statistics regarding the status of maternal-child health care in the United States are quite alarming. In 1991, the United States ranked twenty-second worldwide in infant mortality and had an infant mortality rate for African-Americans (17.6) twice that for Caucasians (7.3). This ratio has remained unchanged for at least four decades (Wegman, 1993). Further statistics which reflect the magnitude of the concern with maternal-child healthcare include: 42.7 percent of African-American children are poor; 37.1 percent of Hispanic children are poor; 19.8 percent of all children are poor. Poor children are twice as likely as non-poor children to be born at low birthweight (Wegman, 1993).

Low-birthweight infants are 20 more times more likely to die during their first year of life than normal-birthweight babies (Wegman, 1993). In 1988, the United States ranked twenty-ninth worldwide in low-birthweight births. Between 1983 and 1985, non-white maternal mortality rose ten percent nationally. Non-Caucasian women suffer a maternal death rate nearly four times that of white women (Wegman, 1993). The United States is

the only industrialized nation, except for South Africa that does not ensure basic minimal maternity and pediatric services for all women and children (Wegman, 1993).

In 1996, both national and State of Michigan statistics revealed that Hispanic infant mortality closely paralleled that of Caucasian infant mortality (Ah-Shab, A., Kent County Epidemiologist, personal communication, June, 1997). Although health statistics for migrant workers in the United States are not available, it is generally thought that the statistics would be much less favorable for migrant workers than those of the Hispanic population as a whole (Cassetta. 1994, Rust, 1990, and Watkins et al., 1990). The rationale for this is discussed further in the migrant section of the literature review.

Numerous studies have demonstrated that a relationship exists between late, inconsistent, or no prenatal care and a negative perinatal outcome. However, a high percentage of today's pregnant migrant population still lacks appropriate prenatal care (Center for Disease Control, 1997, Goss, Lee, Koshar, Heilemann, & Stinson, 1997, Higgins, Murray, & Williams, 1994, Rust, 1990, Watkins et al., 1990). The effect of late prenatal care is likely more pronounced in this population which has many additional pregnancy-related risk factors. The exposure to potentially teratogenic pesticides and the psychologic and physiologic stress involved with the nature of their work can contribute to a negative perinatal outcome. Therefore, these also need to be assessed on the prenatal teaching record (Decker & Knight, 1990, Magann, Evans & Newnham, 1996, and Wadhwa, Sandman, Porto, Dunkel-Schetter, & Garite, 1993).

A recent study published in Morbidity and Mortality Weekly Report characterized pregnancy related behaviors and outcomes among migrant farm workers. The Center for Disease Control (CDC) analyzed data for the period 1989 - 1993 on prenatal care use,

weight gain during pregnancy, and birth outcomes among migrant farm workers enrolled in four states in the Special Supplemental Nutrition Program for Women, Infants, and Children (CDC, 1997). This study found that migrant women were more likely than non-migrant women to have initiated prenatal care during the third trimester (8% versus 5%, respectively). The proportion of women who gained less than the recommended weight index was higher among migrant women (52%) than non-migrant women (32%). Mean weight gain was lower for migrants (22.9 lbs.) than for non-migrants (29.7 lbs.). Prevalences were similar for low birthweight, preterm births and small-for-gestational-age infants between the migrant and non-migrant groups (CDC, 1997).

Another study by Watkins, Larson, Harlan, and Young (1990), analyzed the health of 359 pregnant migrant women. This study revealed that 43% of the women had a hematocrit of less than 34% sometime during their pregnancy. Eighty-four percent of the women had dietary recalls showing caloric intakes at less than 90% of their recommended daily allowance. Specifically, dietary intake from the dairy and fruit and vegetable food groups was found to be especially inadequate. The incidence of urinary tract infections at some time during pregnancy was 23% (Watkins et al.,1990). The higher rate of urinary tract infections in this population is likely related to their working conditions, i.e., limited access to toilets and drinking water.

There has also been a reported increase in the incidence of domestic violence in the migrant population (Decker & Knight, 1990, Martin, Gordon & Kupersmidt, 1995). This is likely related to their stressful living and working conditions. It has also been found that the incidence of domestic violence and the severity of the violence increases during pregnancy. One study stated that 29% of postpartum women in the overall

population had reported an increase in abuse during pregnancy (Parker, McFarlane, Soeken, Torres, Campbell, 1993).

The findings of these studies underscore the need for delivery of timely prenatal care and other health services to pregnant migrant women and/or their families. One goal of the "Migrant and Seasonal Farm Workers Health Objectives for the Year 2000" is that at least 90% of pregnant migrant women be enrolled in prenatal-care services by the first trimester (CDC, 1997, United States Department of Health and Human Services, Public Health Service, 1991). Improvements in pregnancy-related care are also needed to improve the aforementioned statistics relating to migrant prenatal risk factors. Thus, the goal of the prenatal teaching record is to impact these statistics by targeting specific prenatal risk factors of PMW by focusing on the educational component of prenatal care. These risk factors include inadequate maternal weight gain, anemia, increased incidence of cystitis, increased incidence of low-birth weight babies, and increased incidence of domestic violence in the migrant population.

Migrant Worker Issues

To really understand the impact of the barriers to care and the health care risk factors of the migrant population, it is imperative to understand the definition of "migrant worker." The previously identified variations in the conceptual definition of "migrant worker" reflect the fact that there is little agreement in the literature regarding the definition. It seems that there are virtually as many definitions as there are agencies that try to serve migrant and seasonal farmworkers (Sloesinger, 1992).

The lack of a universal definition of "migrant worker" does have serious consequences. Statistics including basic data such as crude death rates, median survival,

infant and maternal mortality, and incidence of permanent disability are lacking (Rust, 1990). The difficulty in obtaining these statistics is further complicated by the migrant's transitory lifestyle. Also, there are illegal immigrants performing migrant work who believe that if they provide information they are at greater risk of being reported to immigration officials (Rust, 1990).

Migrant work is not a new trend. Since the 1800's when farmers needed more help planting and harvesting their fields than family, friends, or a few hired hands could provide, they employed transitory workers who counted on farm jobs as their primary source of income. The laborers followed the harvest season, moving from South to North as crops ripened. In the early 1900's, many European immigrants who lived in cities also joined the flow, moving seasonally from city to countryside and back (Slesinger, 1992).

Since the 1940's, the majority of migrant workers have been Mexican-Americans. There are, however, other migrant worker populations that come from Central America, the Caribbean Islands, and the Southern United States. (Slesinger, 1992) Statistics regarding the exact ethnic composition of the migrant work force in the United States varies considerably. The percentage of the migrant population that is "Spanish-speaking" is quoted to range from 58 to 75 percent. This discrepancy is due to the difficulty in obtaining accurate migrant health statistics and because different migrant ethnic groups follow certain predictable and specific routes from South to North (Rust, 1990; Slesinger, 1992; Watkins et al., 1990). This project's focus is on Mexican-Americans since this is the predominant culture of the migrant population.

Migrant workers receive inadequate income, often live in substandard housing, and perform intense physical labor (Casseta, 1994). Regardless of ethnic group, very few

workers complete a high-school education. The average educational level of this population is sixth grade with many migrant workers being illiterate in their own language (Decker & Knight, 1990). Because of their nomadic lifestyle, migrants often cannot qualify for Medicaid, do not have knowledge of the resources available in different communities, and are often uneducated about their own health care needs (Mountain & Hill, 1992). Insufficient financial resources, uncertain immigration status, lack of a permanent address and cultural and language differences between the health care provider(s) and the migrant worker result in barriers to health care and create significant health related worker risks (Casseta, 1994; Mountain & Hill, 1992; Watkins et al., 1990). Therefore, these special circumstances and unique needs of the migrant population must be considered in the development of a prenatal teaching record. For example the average sixth grade educational level of this population combined with the additional concern of illiteracy needs to be taken into consideration (Decker & Knight, 1990). Other areas for consideration include the stress associated with both the physiologic and psychologic aspects of their type of work and lifestyle, the effects of stress on pregnancy, and the sources of stress. The concerns of illegal immigration along with the transitory lifestyle of this population also need to be incorporated. Specifically, it is the experience of this author that often the PMW will use different names due to the fear associated with illegal immigration status. This has caused many difficulties in providing test results back to the client. The frequent moves between harvest seasons interrupts health care and often further delays the transfer of the medical records. A prenatal teaching record needs to address all of these issues so that prenatal care for the PMW may be enhanced.

The Mexican American Family: Health and Cultural Issues

The previously stated statistics suggest that the majority of migrant workers in the United States are Mexican-American. For this reason, the Mexican-American culture and the culture's relationship to health care issues and specifically pregnancy concerns are reviewed as these factors are very important to consider in the development of a prenatal teaching record. The cultural background relates to the dynamic interacting system that was illustrated in Figure 2. Culture is part of both the social and interpersonal systems and therefore can potentially have a significant impact on an individual. Knowing the background of a client's given culture promotes provider(s) personal awareness and sensitivity to the cultural aspects of a given population and facilitates the delivery of culturally sensitive health care. However, it is not a substitute for assessing the individual PMW and determining her unique perceptions and beliefs within the context of her culture.

Hispanics currently comprise 9% (22.3 million) of the United States population and are one of the most rapidly growing minority groups. By the year 2050, it is estimated that Hispanics will comprise 19 to 24% of the United States population (Villarruel and Leininger, 1992). The majority of Hispanics are Mexican-Americans and they are the largest group of mainland Hispanics in the United States (Villarruel and Leininger, 1992).

The Mexican-American community in the United States is rich in cultural beliefs and values. In fact, few other ethnic minority groups have been as persistent in maintaining their language, cultural beliefs, and traditions as the Mexican-Americans (Reinert, 1986). Mexican-American migrant workers are more likely to socialize and work only with persons of their culture, typically have less formal education, and return to Mexico on a

regular basis after the harvest season. These factors all contribute to the extent to which an individual maintains his or her own cultural beliefs and norms (Reinert, 1986).

Providing quality individualized care cannot be achieved without considering the context of the client as a whole person and factors associated with the personal being such as culture, beliefs, and tradition (Abdullah, 1995). It is essential therefore, to review the cultural practices and traditions of this population.

Reinhart (1986) states "The woman is the initial primary health care provider for the Mexican-American family. Medical information is passed from mother to daughter and the woman decides when an illness is beyond her ability to treat it and requires outside help." If she determines that outside help is needed, it is common for her to consult both traditional and scientific forms of health care.

The curandero, a folk healer, is frequently utilized by the migrant. Although his or her prescribed treatments may be scientifically questionable, the client seems to benefit psychologically from the focused attention received from the curandero during the healing process. Frequently, the curandero's approach is initially to listen while the family decides on the best course of treatment and offer emotional support (Kuipers, 1991).

From the perspective of the Mexican-American family, this treatment differs radically from that of the health care professionals of the scientific health care system. These providers are perceived as typically asking embarrassing questions, ignoring family viewpoints and concerns, and then dictating the treatment. The actual care and treatment provided by a curandero takes place in the community, is not limited by certain business hours, and payment is usually in the form of a donation (Reinert, 1986). Therefore, this

type of health care is often viewed as being more easily accessible and affordable than scientific health care.

While Mexican-American women often initiate the decision to pursue health care, the male is still regarded as the traditional head of the family. It is important for health care providers to recognize that the husband and/or father expects to be consulted before any major health care decisions are made. "Providers should be sensitive to the fact that Mexican-American males find it difficult to tolerate any loss of authority or self-esteem, even in the presence of their immediate family" (Reinert, 1986).

Many Mexican-Americans believe that health represents a state of equilibrium in the universe wherein the forces of "hot," "cold," "wet," and "dry" must be balanced (Kuipers, 1991). This concept is thought to have originated with the early Hippocratic theory of health and the four humors. According to the Hippocratic theory, the body humors, i.e., blood, phlegm, black bile, and yellow bile vary in both temperature and moisture. Persons who subscribe to this theory believe that health exists only when these four humors are in balance and that health can be maintained by diet and other practices (Kuipers, 1991).

An example of this concept is the belief that a hot and cold imbalance causes disease. Hot conditions include fever, infections, and sore throats while cold conditions include cancer, colds, and headaches. These conditions are thought to be caused by prolonged exposure to either hot or cold substances (Kuipers, 1991). The treatment for a given condition would be to "balance" the hot or cold condition with exposure to the opposite type of substance. For example, a sore throat which is a hot condition would need to be treated with exposure to a cold substance, i.e., fresh vegetables, dairy milk, tropical fruits,

and honey. The use of various herbal preparations to achieve this balance is often employed (Kuipers, 1991).

Beliefs about pregnancy may include sleeping flat on the back in order to protect the baby, keeping active to ensure a small baby and an easy delivery, and continuing sexual intercourse to lubricate the birth canal. It may be viewed as inappropriate for the husband to be with his wife during the delivery and he is often not expected to see his wife or child until both have been cleaned and dressed. A lying-in period of six weeks may be practiced after the delivery. During this time, the woman rests, stays warm, avoids bathing and exercise, and eats special foods that promote warmth. During delivery, stoic inhibition of the response to pain is often practiced and pain relief may even be refused as a means for atonement. During labor, the loud verbal repetition of "Aye, yie yie," requires long, slow breaths, thus becoming a culturally and medically appropriate method of pain relief (Geissler, 1992).

Mexican-Americans are more likely to believe in an external locus of control than are persons in the dominant culture. Some Mexican-Americans perceive life as being under the constant influence of a divine will. There is also a fatalistic belief that one is at the mercy of the environment and God and thus the individual has little control over what happens. Persons affected with severe illness may feel that they are being punished by God for their sins (Geissler, 1992, Kerr & Ritchey, 1990). According to Kuipers (1991), locus of control is a very important factor to consider in goal setting with clients. In regards to pregnancy, the PMW may feel that the health of her baby is at the mercy of God and therefore, she has little control over the outcome.

A prenatal teaching record needs to incorporate the unique cultural traditions of the migrant population into the care of the PMW when ever possible. The provider needs to assess the PMW's use of herbs and encourage her to bring in the herb(s) utilized in order to assess their impact on the mother and the developing fetus. The provider also needs to assess which other cultural practices the PMW utilizes such as the use of a curandero and "hot" and "cold" remedies. These cultural practices should be encouraged as long as they are safe. The cultural practices often can be valuable adjunctive therapies. The expectation that the PMW has of the labor and delivery process should also be reviewed so that it can be noted appropriately on the record and accommodated as much as possible. Locus of control needs to be addressed as it often has significant impact on motivational issues related to health related change.

Pregnancy as a Transitional Life Event

It is imperative for the health care provider(s) to understand that pregnancy is a major transitional life event for a woman and that it creates a need for personal restructuring and adaptation. Rubin (1984) identified four major tasks that a pregnant woman undertakes to adapt to her pregnancy and to incorporate her new child into the preexisting family system. These tasks form the foundation for a mutually gratifying relationship with her infant:

1. Ensuring safe passage through pregnancy, labor, and birth The pregnant woman feels concern for both her unborn child and herself. She seeks competent maternity care to provide a sense of control and wishes to establish a relationship with her health care provider so that they "know" her and her needs. During this time the woman seeks

knowledge from literature, observes other pregnant women and new mothers, and engages in discussion with others who have borne children. The pregnant woman also seeks to pursue self-care activities related to diet, exercise, alcohol consumption and so forth (Olds et al., 1992).

2. Seeking of acceptance of this child by others. The birth of a child alters a woman's primary support group, her family, and her secondary affiliate groups. During the first trimester, the woman may feel sorrow at the anticipated changes, but in most cases the transition from existing social groupings to newer groupings occurs smoothly. The family generally makes the transition, and the woman slowly and subtly alters her secondary network to meet the needs of her pregnancy. In this adjustment the woman's partner is generally the most important figure. His support and acceptance influence her completion of her maternal tasks, the formation of her maternal identity, indeed the entire course of her pregnancy (Olds et al., 1992).

3. Seeking of commitment and acceptance of self as mother to the infant (binding in). During the first trimester the child remains a rather abstract concept. However, with quickening, the child begins to become a real person and the mother begins to develop bonds of attachment. The mother experiences the movement of the child within her in an intimate exclusive way, and out of this experience bonds of love form. The mother develops a fantasy image of her ideal child. This possessive love increases her maternal commitment to protect her fetus now and her child after he or she is born (Olds et al., 1992).

4. Learning to give of oneself on behalf of one's child. Childbirth involves many acts of giving. The man "gives" a child to a woman; she in turn "gives" a child to the man. Life

is given to an infant, a sibling is given to older children of the family. The woman begins to develop a capacity for self-denial and learns to delay immediate personal gratification in order to meet the needs of another (Olds et al., 1992).

These developmental tasks of pregnancy proposed by Rubin (1984) demonstrate the significance of pregnancy as a major transitional life event. It is important for health care providers to be sensitive to these tasks as they are interacting with clients and introducing a prenatal teaching record. There is no specific evidence in the literature that suggests that these tasks are either inclusive or exclusive of the Mexican-American population, however, this author's experience in working with this population would suggest that the PMW follows these developmental tasks of pregnancy.

A prenatal teaching record needs to incorporate these developmental tasks into the PMWs prenatal care. The first task suggests the need of the pregnant woman to establish a relationship with her provider and to gain information about her pregnancy. A prenatal teaching record needs to provide the PMW with pregnancy-related teaching and foster the relationship of the provider and PMW by encouraging sharing of concerns and mutual goal setting. The importance of social support discussed in the second task is also an important aspect for incorporation into a prenatal teaching record.

Concepts in Teaching and Learning

Teaching is defined as "activities that allow the teacher to help students learn." While this definition is broad, it is useful because it emphasizes active learning by the student as the primary goal (Redman, 1993). Further, it encompasses a plethora of possible interventions that can be utilized to facilitate learning.

Learning occurs in the cognitive, psychomotor, and affective domains and is influenced by internal factors such as knowledge, life experiences, physiologic and psychologic states, readiness to learn, and motivation (Redman, 1993). Physical and/or emotional stress may affect the degree to which learning occurs. Learning is also influenced by external factors such as physical environment, privacy, timing, the client/provider relationship, and teaching modalities (Redman, 1993).

The following principles are fundamental to learning:

- Learning occurs in response to a need perceived by the learner.
- Active participation in the learning process is fundamental to its' success.
- Reinforcement of desired behavior increases movement towards desired outcome.
- Immediate feedback following each teaching/learning episode reinforces learning.
- Progression from the known to the unknown promotes learning.
- Progression from the simple to the complex promotes learning. (Redman, 1993)

Health care providers need to be aware of these principles of learning and the factors related to effective teaching/learning practices in order to be effective in the educator role. These principles of learning need to be incorporated in the interaction and transaction stages of the "King's Revised Goal Attainment Theoretical Framework" (see Figure 2).

The literature review does not specifically state if the preceding principles of learning are reflected in the Mexican-American culture. However, this author's observational and work related experiences suggest this population and specifically PMW utilize and also benefit from integration of these principles in their learning process.

Although evaluation of teaching is often considered the final step in healthcare education, it also can be considered the initial step in continued education. For instance, if

a PMW lacks sufficient understanding of information presented by one method or explanation, the provider will likely try another method to educate the client. Thus, it is proposed that a prenatal teaching record utilize an objective evaluation system to record the client's response to prenatal teaching. Evaluation of effective learning can occur both subjectively and objectively. Simply asking the PMW how well she understands the information presented to her is one way the provider can evaluate her learning. This assessment of learning might include asking specific questions regarding the information discussed or having her repeat back her understanding. It is also important to note the consistency between the PMW's verbalizations of understanding and objective behaviors (i.e., understanding the risks of smoking but continues to smoke). If inconsistencies exist they are often related to motivational issues which also need to be addressed with the PMW (Redman, 1993).

The aforementioned principles of learning need to be incorporated into a prenatal teaching record. Specifically a prenatal teaching record needs to be viewed as a mechanism for the PMW to identify her own learning needs and select the teaching method(s) that will be most effective for her to learn. Furthermore, client specific teaching needs and goals need to be listed along with a corresponding plan to meet them so that the provider(s) will be able to carry out the stated interventions and/or give positive feedback to the PMW for goals that have been obtained.

Utilization of a Prenatal Flow Record and Health History with the Prenatal Teaching Record

A review of the literature for existing prenatal teaching records was done, but none were found. However, several different forms and records available for documentation of prenatal histories and ongoing prenatal care information were noted. These forms were reviewed by the author; the content of these forms follows and includes components aimed at identifying individual health care educational needs. They included items which might enable providers to identify individual factors that could affect teaching. Therefore, a prenatal teaching record which incorporates the essential aspects of these forms could be an important supplement to these prenatal forms and records.

First, the health history is a review of past pregnancies and outcomes. A woman with a prior recent pregnancy may not have as many routine healthcare educational needs as a woman presenting with her first pregnancy. On the other hand, if she had complications with a prior pregnancy, she may have anxiety and specific concerns about that complication in relation to the current pregnancy. In addition, looking at the number of children a PMW has along with other demographic information, such as her work schedule, can provide additional information regarding her activity patterns.

Additional components of the medical history typically include: information regarding past chronic or serious acute medical conditions, current medications and allergy information, and a family medical history. This information is generally reviewed and the significance noted; educational client needs may also be identified and documented. For instance, a history of hypothyroidism with Synthroid replacement is noted. Although it is

safe for the client to be on Synthroid during pregnancy, she needs to have that explained to her. The significance of genetically related conditions also needs to be discussed.

The health history typically includes information regarding known risk factors such as alcohol, tobacco, and drug use. The client's age and marital status can help to identify some concerns related to age, such as teenage pregnancy, advanced maternal age risks, and/or inadequate social support. It is essential, however, to use this information only as a cue to evaluate the situation further. For example, a 30 year old married woman may be in a strained marital relationship and feel that she is not ready for a baby or a mature teenager with supportive family and friend may adapt very well.

Occupation and educational level also provide valuable insights into a client's knowledge base and assist in the identification of an appropriate teaching style. In addition, the hours and type of occupation are evaluated as a possible risk factor(s) in pregnancy and subsequent areas for education.

Any pregnancy related concern discovered from this information is currently documented on a prenatal flow record so that it can be monitored throughout pregnancy. Generally, prenatal flow records include laboratory findings, ultrasound information, new onset of medical conditions, and the ongoing visit flow record which documents the number and interval of prenatal visits, weight measurement. urine assessment, fundal height, blood pressure measurement, position of baby, fetal heart tones and weeks of gestation. The prenatal flow record typically includes a short narrative section for documenting new concerns and other relevant information. It is proposed that understanding teaching needs and learning factors identified from the health history and

prenatal flow record would be appropriate for a narrative section of a prenatal teaching record so that the appropriate education can be initiated and monitored.

The prenatal flow record and health history provide valuable information that needs to be incorporated into a prenatal teaching record. Thus, a prenatal teaching record can provide a means of synthesizing the key information from these records into an organized format so that continuity of care and client-centered care is enhanced.

Discussion

This literature review and the author's personal experience suggest the need for and development of a prenatal teaching record. This chapter describes the development of the Pagel Prenatal Teaching Record (PPTR). The desired characteristics of this record will be reviewed and the specific components of the PPTR will be systematically described. This chapter will also discuss the process involved in implementing the PPTR and describe the associated outcomes. A sample of the PPTR is introduced as Appendix A.

The PPTR is a printed form to be utilized during routine prenatal visits which provides an outline of prenatal education topics to be discussed. It incorporates topics relevant to the migrant worker population and PMW, enables health care providers to track the teaching they provided and includes a mechanism to reflect the provider's assessment of the patient's response to the teaching throughout the prenatal period. It is anticipated that this approach should facilitate the provision of culturally sensitive client-centered comprehensive patient education.

This author believes that the PPTR needs to be comprehensive yet also "provider-friendly" so that time expenditures for the health care providers are not excessive. It also needs to be population specific in terms of addressing specific cultural and socio-economic issues of the PMW. Further, it needs to serve as a communication tool between health care providers as to what teaching has been done, what issues require reinforcement, and what areas of teaching are still needed. This will hopefully decrease the negative impact that poor continuity of care can have on prenatal teaching outcomes.

The PPTR also needs to address individual client teaching needs as determined by client centered goal setting. This should enhance the health care providers understanding of the PMW's specific concerns more clearly and modify her teaching to address those needs. The format of the PPTR also needs to be organized to reflect the trimesters of pregnancy so that health promotion in pregnancy can be emphasized during time limited prenatal visits.

The specific components of the PPTR and their significance to prenatal education will now be reviewed. The three major sections proposed include the assessment questions, the list of pregnancy related teaching topics, and the narrative section for client-centered teaching and goal setting.

The assessment questions contains twelve questions. These questions resulted from the literature review and target important assessment information related to prenatal education and pregnancy outcomes. The questions as formulated reflect the PMW's educational level, i.e. approximately sixth grade. The author consulted three Mexican-American staff from the clinic where she is employed to assist in the wording of these questions so that each would be culturally appropriate. Some of the questions also include guided questions and/or key terms for the providers so that they may offer further explanation to the client regarding the intent of the question being asked.

Question one: "What are your greatest worries about your pregnancy?", is asked with the intent of gaining insights related to the individual PMW's perception of her pregnancy and specifically her greatest related concerns. It is intentionally written in an open-ended format so that the PMW has "permission" to address any concern she has without having to have it fit into a category. Thus, there may be a plethora of possible

responses to this question. Some responses might suggest a need for an added educational topic individualized to that client. Other responses may enable the provider to be aware of a PMWs unique situation which may impact prenatal education effectiveness and perinatal outcomes. The provider can then modify his or her care and prenatal educational approaches for that individual.

Question two: "Who or what is responsible for you and your baby's health?", addresses the issue of locus of control. This question relates to the fact that an external locus of control is commonly found in the Mexican-American culture. Locus of control has a significant impact on motivational issues related to prenatal care.

Question three: "How do you learn the best?", asks the PMW to explain how she learns best based on past learning experiences. This allows the provider to modify his or her teaching approach to the PMW's preferred learning style. This question is especially important with the migrant population because of the high incidence of illiteracy.

Question four: "Do you have any problems coming to your clinic appointments?", assesses the PMW's perceived barriers to prenatal care. This question was formulated based on the literature review which identified that there is a high incidence of late and inconsistent prenatal care in the migrant population. Overcoming the barriers suggested by the PMW in response to this question will serve as a mutual goal between provider and PMW.

Question five: "Are there any particular cultural traditions or beliefs that you can share with us that may affect your health care during pregnancy?", addresses the cultural implications for a particular client. Specifically, it addresses the extent to which a client adheres to traditional cultural practices and how these are manifested in her life.

Although persons within the migrant population often share similar Hispanic cultural traditions, there is a large variance as to the extent to which these cultures are practiced by the individual.

Question six: "Who do you talk to for advice or to share your worries?" and question seven: "Who could you ask to give you a ride somewhere or borrow money if needed?", address the social support system of the PMW, i.e. the significance of relationships and social support to the dynamic interacting system of the PMW. Social support is also a key factor in the second developmental task of pregnancy. This question gives the provider important insights into the social support system of the individual. The social supports of an individual are often incorporated into the plan of care and are also important in the overall wellness of the PMW. It also alerts the provider for the need for a referral to an agency or group that can support the PMW.

Question eight: "Has anybody ever hurt you?", addresses the increased incidence of domestic violence in this population. It is important to realize that this question may not initially illicit a truthful answer from the PMW who is a victim of domestic violence. However, addressing the issue will help the PMW to realize that it is appropriate to bring up this issue and she may choose to discuss it later. The increased incidence of abuse in pregnancy as well as information regarding what the PMW should do if she is ever a victim of violence will be discussed as a teaching topic in that section.

Question nine: "How many years of education did you complete?" , was asked because the average level of education completed in the migrant population is sixth-grade. It is important for the provider to know the educational level of the individual PMW so he or she can modify the teaching objectives accordingly.

Question ten: "What language do you prefer to communicate in?", is an important question to ask because often the PMW will know at least some English and try to communicate with the provider, yet she might not understand English well enough to communicate and understand specific health concerns.

Question eleven addresses the living conditions of the PMW. It asks the following questions: "Do you have any worries about caring for your baby in your current home?", "Do you have running water?", "Do you have heat?", and "Do you have refrigeration?" The living conditions of the migrant population are often sub-standard as previously discussed. These questions will help to identify additional needs of the PMW and allow for necessary referrals and intervention before the baby is born.

Question twelve addresses the father of the baby's involvement. It specifically asks the following questions: "How involved is the baby's father in your pregnancy now?", "How involved do you feel he will be in the care of the baby after he/she is born?", and "Will he be present for the labor and/or delivery of your baby?" These questions address the support system of the PMW, attitudes of the father towards the pregnancy, as well as the PMW's expectations regarding the father's involvement during the labor and delivery. As previously discussed, often in the Mexican-American culture the father is not present for the birth process. It is therefore important to recognize that this often is not a sign of the father being unsupportive.

Section two of the PPTR is a narrative area where specific teaching needs of the client can be documented. The information from the twelve assessment questions and the prenatal flow record and health history is reviewed so that educational needs can be

identified. The specific PMW needs are listed in this area so that all of the providers involved with her care are aware of them and can address them accordingly.

Section three includes a list of the educational topics which providers need to cover throughout the pregnancy. These include topics that are common to all pregnant women as well as some topics unique to this PMW. A guide for health care providers is provided that explains briefly the significance of the given topic to the PMW. The information provided reflects key research findings from the review of the literature for this scholarly project. A Prenatal Education Program for Hispanic Women "Comenzando Bien" developed by the March of Dimes Birth Defects Foundation and the National Coalition of Hispanic Health and Human Services Organization (1995) provided the educational standards used in the selection of the general list of topics in the PPTR. In addition, prenatal care guidelines from the Association of Women's Health, Obstetric, and Neonatal Nurses (1994), were reviewed and provided additional support for the list of topics in the PPTR.

The PMW specific teaching needs include the following. Pesticide exposure is listed to address the concern of exposure to a potential teratogen(s) due to the migrant's unique work setting. The discussion on the use of herbs in pregnancy is also specific for this population as this is a common Mexican-American practice. Further, the PMW will be encouraged to always use the same name for all medical tests and appointments so that there is no confusion in matching test results to the correct PMW. The client will also be asked to have her records photocopied at the clinic after every appointment by the office staff. She will be encouraged to have these with her if she moves and to let the provider know ahead of time so that follow up care and the formal transfer of records can be

arranged without undue delay. The PMW will also be encouraged to photocopy her prenatal flow record after every visit so that in the event of an emergency she can present it to the emergency room personnel immediately. This is especially important with the PMW because of the language barrier and multiple providers and this would likely delay the transfer of important medical information of the PMW.

Other concerns such as maternal weight gain, use of prenatal vitamins, nutrition during pregnancy, prevention of urinary tract infections, and the risk for domestic violence are especially significant for the PMW.

The process involved in utilizing this form will now be discussed. Items with an asterisk (*) on the PPTR denote topics of specific relevance to the PMW. If a PMW initiates prenatal care after the first trimester, the provider needs to assess which topics from the preceding trimester(s) are still needed. The remainder of the topics can be designated with non-applicable or (N/A) accordingly.

It is proposed that the provider will initial and date the topics that he/she has covered with the PMW. The provider will also document his initials and printed name on the PPTR for legal purposes. In addition, the provider would need to make a notation if the PMW received teaching from another method besides his/her own explanation of a given topic. A key designates the appropriate letter symbol for the various teaching modalities. These include the following: "B" = brochure/handout, "C" = class/group discussion, and "V" = video.

The provider would also be responsible for collaborating with the PMW and developing client-centered goals and teaching needs based on the review of the prenatal flow record and health history, conversation with the PMW, and the review of the

responses to the twelve assessment questions. These goals need to be clearly written in the narrative section of the PPTR and a corresponding plan needs to be stated. Goals that have been previously established also need to be reviewed so that the provider can intervene as directed by the plan of care.

The provider would also be responsible to measure outcomes. The outcome of the client specific goals needs to be evaluated according to the objective measurements established in the goal itself. For this reason, it is imperative that the goals are clearly and objectively defined. Comprehension of the PMW's understanding of the topics on the general list of pregnancy related teaching topics can be evaluated by both objective and subjective measures. Asking the PMW if she understood the explanation is one method of subjectively evaluating her learning. An objective assessment of learning might include asking specific questions regarding the information discussed. Another objective measure could be in evaluating a behavior change in response to teaching. It is most accurate to evaluate using both subjective and objective measures in evaluating comprehension.

By utilizing these methods of evaluation the provider could make a judgment regarding the PMW's comprehension level. The PPTR requires the provider to quantify the level of understanding on a scale of 0-2. A rating of "0" reflects no or very limited understanding; a "1" reflects some understanding but the PMW could benefit from reinforcement; and "2" reflects an acceptable level of understanding that does not require reinforcement. This system will allow providers to quickly review the focus of the previous visits and readily ascertain what areas of teaching to address at the current visit.

The development of the PPTR is based on a thorough review of the literature. The review of the literature supported the need for it's development and enabled the

identification of the components of the record. It is believed that the PPTR will reduce the negative impact that a lack of continuity of care has on patient educational outcomes. It is also believed that the PPTR will foster a collaborative relationship between the provider and the PMW and that prenatal education will be enhanced.

Implications

The development of the PPTR has implications for clinical practice, research, and education. The significance of the PPTR in these three areas will be discussed in this chapter.

Research Implications:

As a new and untested record, the PPTR needs to be first carefully evaluated at several levels. First, the PPTR needs to be evaluated by other health professionals. An initial evaluation of the overall content of the PPTR and the wording of the questions for cultural-sensitivity has already been completed by five Hispanic health professionals. Their feedback has been incorporated in the PPTR as it is presented in this scholarly project. Further evaluation, however, will be needed once the PPTR is implemented into clinical practice. Colleagues of the author including obstetricians, family practice physicians, physician assistants, and other advanced practice nurses will be invited to participate in its' evaluation during the next few months. They will be asked to examine the record for content, organization, as well as practicality in the utilization with the PMW.

This author is currently employed at Clinica Santa Maria, Grand Rapids, MI, and has volunteered at the Sparta Health Center, Sparta, MI in the past. The experiences encountered at these two clinics have provided the thrust for this scholarly project. It is anticipated that clients from the Sparta Migrant Health Center and clients from Clinica Santa Maria will also review the PPTR. The clients will be asked to review the PPTR for appropriate and culturally-sensitive language used in the assessment questions as well as the need for additional teaching topics. It is estimated that there are approximately 7,500

migrant workers in the referral area for these clinics. The Sparta Migrant Health Center provides care for approximately 2,500 of these migrants (Personal communication, August 6, 1997. Anne Mawby R.N.). It is not known what percentage of the Mexican-American population at Clinica Santa Maria are migrant workers.

The feedback received from the author's colleagues and the clients from these two clinics will be reviewed and the PPTR will be appropriately modified. After these initial modifications are completed, the PPTR will be ready to be introduced into clinical practice in these two clinics.

Further investigation will be needed to assess the effectiveness of the PPTR once it has been introduced. Providers will again be asked to evaluate the PPTR after utilizing the record for a period of approximately four to six months. Specifically, the desired characteristics of a prenatal teaching record that were reviewed in the discussion section of this project will serve as the evaluation criteria of the PPTR. These include the following: (a) the PPTR needs to include topics relevant to the migrant population; (b) it needs to be comprehensive yet "provider friendly" so time expenditures in documentation and reviewing the record are not extensive; (c) it needs to include a mechanism to evaluate the PMW's response to the teaching and identify further teaching needs so that continuity of care can be maintained; (d) it needs to be organized into trimesters of pregnancy so that health promotion in pregnancy can be emphasized during time limited prenatal visits. A provider satisfaction survey would also provide valuable insight. Testing regarding the validity and reliability of the PPTR according to these criteria would follow.

Client outcome studies could also be considered to test the effectiveness of the PPTR. One method would be to compare outcomes of a control group (persons receiving teaching through traditional means) to a study group (persons receiving teaching with the use of the PPTR). There are many possible research questions that could be postulated and tested. In general, research questions could address issues such as client satisfaction with prenatal care, the effectiveness of teaching through the use of post-tests, and clinical pregnancy outcomes.

The analysis of data across individual PPTRs could also have significant value in research. The researcher could analyze the assessment question responses and client-specific needs for trends. This might provide insight into other concerns of the PMW that would need to be further studied.

It is proposed that the PPTR provides a model which can be modified so that it is adaptable to other special populations. This would require additional research of the given target population so that unique characteristics and concerns can be realized and incorporated into it. The PPTR will likely require modification over time. Pregnancy related research will necessitate alterations in the form allowing for new standards of care and subsequent changes in client recommendations.

The role of the advanced practice nurse as a researcher is to participate in the further development and testing of the PPTR as well as implement the changes into his or her clinical practice. The advanced practice nurse needs to regard the PPTR as well as other tools utilized in the clinical setting as dynamic implying that they should be continually evaluated for validity and reliability as the community of focus and medical research change. The nursing process needs to be directed at both the client as an individual as

well as the client as a community. Advanced practice nurses are in a unique position to utilize their complimentary roles as researcher and clinician to promote the wellness of communities and their respective individual clients.

The advanced practice nurse could make a valuable contribution to migrant health research by identifying other health care needs of this population. A partnership with an epidemiologist to research these needs and issues would be valuable so that further intervention to enhance migrant health care can be initiated. In addition, the advanced practice nurse could gain valuable insights into the needs of the migrant population by collaborating with camp health aides. Camp health aides are migrant workers who are trained in basic health promotion and first aide and are a health care resource for persons living in their camp. They often serve as a liaison between the migrant worker and the formal health care system.

Migrant Clinicians Network (MCN) is a resource agency for providers working with the migrant population and offers providers a means of sharing information regarding migrant health care. Members of MCN receive mailings which review recent migrant related research findings. This author plans to share the PPTR with MCN with the hopes that it might be utilized nationally to enhance migrant prenatal care. This will likely occur after the initial six month period of the introduction of the PPTR in clinical practice and subsequent evaluation and modification. This will be further discussed in the educational implications section of this scholarly project. It is important for providers working with the migrant population to belong to MCN and recognize their responsibility to share information and stay informed of research affecting the migrant population.

Clinical Implications

The PPTR allows for flexibility in client interventions. Various teaching modalities including the use of written materials, videos, and group education can be used in conjunction with the PPTR to provide prenatal education. It is essential, however, that the PMW's comprehension of the material be evaluated by the provider so that additional explanation can be initiated if needed.

It is believed that the intervention of photocopying the prenatal flow record will be in itself a significant improvement in the care of PMWs in the emergency room and between moves during the change in harvest seasons.

The clinical application of the PPTR can best be discussed by using examples of client/provider interactions to demonstrate the use of the PPTR and the related principles set forth in the "King's Revised Goal Attainment Framework (Figure 2)." These examples demonstrate the potential use of the PPTR in clinical practice. Although the ultimate goal of having a positive pregnancy outcome is likely to be the same for the provider and PMW, the means to the goal and the establishment of short-term goals may be quite different depending on cultural norms and other issues. This necessitates continual collaboration between the provider and the PMW.

The following example demonstrates the value of PMW/provider collaboration in the interaction and transaction phases of goal attainment. The provider discusses the benefits of taking prenatal vitamins with the PMW, asks if she has any questions or concerns with taking these daily vitamins. The PMW reports that due to the lack of insurance coverage and her family's current financial struggles she can not afford the vitamins. The PMW and provider then must arrive at a secondary goal or discuss the possibility of reducing or

removing the financial cost of the vitamins in order to attain the original goal. Another alternative would be to change the goal, i.e., to discuss the importance of maintaining daily nutritional intake in order to reduce the risk of not taking prenatal vitamins. Reducing or alleviating the cost of the vitamins might include such interventions as inquiring about the least expensive vitamin from the pharmacist, trying to obtain drug samples of vitamins or referring the PMW to a social worker if she is eligible for Medicaid.

On a larger scale, King (1983) suggests that the role of the nurse is to also promote the health of groups of people. Relating this concept to this example might yield other interventions including seeking grant moneys based on research linking the benefits of prenatal vitamins to positive pregnancy outcomes and presenting the need for financial support in acquiring vitamins for PMWs. Impacting this issue at the legislative level is another more global intervention. For example, one might lobby for the universal health insurance for all pregnant women.

Another example that demonstrates cultural sensitivity is as follows. Typically, the health care provider suggests that the husband of a client be present for the birth process, however, in the Mexican-American culture this traditionally is not done. It is important to note that the provider could offer this to the PMW and ask how the PMW and her partner would feel about this idea recognizing that this may not be acceptable. In other words, it is imperative that assumptions are never made either within or outside of the cultural context. Learning about cultural norms help providers to become sensitive to these issues but it can never replace the assessment of the individual client through the use of collaboration.

The advanced practice nurse roles of both counselor and clinician are stressed in the preceding examples. These roles necessitate that the care given by the advanced practice nurse is holistic so that the PMW receives the best care for her individual needs. The preceding examples also demonstrate that the need for collaboration is essential to meeting the PMW's health care needs. The PPTR is a tool to be used which should facilitate the holistic and collaborative provider/client relationship.

The sharing of the PPTR with the MCN resource agency, as previously discussed, will have important clinical implications as well.

Educational Implications

The health care providers in the clinics where the PPTR will be trial tested will need a brief inservice regarding it's use. This inservice will likely occur in conjunction with a staff meeting so that attendance can be maximized. Lunch will be provided to offer an incentive to attend the meeting and to maximize the time available during the lunch period. Further, minutes will be taken so that absent providers can also be informed. The inservice will take place just prior to the introduction of the PPTR into clinical practice.

The inservice needs to be brief due to the time limitations of the providers, yet it needs to be thorough to ensure that the providers understand the use and benefit of the PPTR and will be consistent in it's utilization. The most important information from the literature review will be presented so that the need for the PPTR is realized and so that the rationale for the selected content of the record is understood.

An example will be presented of an actual PMW that had ruptured her membranes two weeks prior to telling a provider because she thought this was normal. This will

demonstrate the practical application of the PPTR to an actual client that is known to these providers.

It is expected that the providers may initially be concerned regarding the time expenditures needed to utilize the PPTR. Therefore, it is necessary to point out that this tool can also save time by preventing the repetition of teaching done previously by another provider. The teaching topic that discusses the need for the PMW to use the same name for all medical encounters and thus save time by preventing the delay in obtaining test results for the right PMW. Further, it is anticipated that the time required to document teaching reviewed will be minimal in comparison to the current practice of writing it in the visit note. It is believed that the PPTR and related inservice will not only benefit the PMWs as previously discussed but that it will also provide valuable information to the providers regarding the unique needs of the PMW in general.

The author of this scholarly project will provide an example of a PMW and her specific needs and show a sample of an implemented PPTR which documents the needs, interventions and outcome accordingly. This documented PPTR sample will be available after the inservice so that the providers can refer to it to assist them in their initial documentation in the PPTR.

Following the inservice, the author will be available on an informal basis for questions or concerns from the staff regarding the use of the PPTR. In addition, a notebook will be available for staff to write down any concerns they have as they arise in the case that the author is not present and/or the staff wants to state a concern anonymously. During the first four to six weeks of the use of the PPTR these comments will be reviewed by the author. Some of the feedback will be able to be handled immediately, such as in the case

with questions regarding the use of the form or misunderstandings in documentation. Other comments will be carefully considered and may result in the modification of the form after the first six months.

The author will also review the PPTRs by a stratified random sampling technique. This will also take place in the first four to six weeks following the initial use of the PPTR. The author will select approximately 20%, i.e., approximately 40-50, of the PPTRs to review. There will be an equal number of PPTRs from each of the three trimesters to be reviewed. In addition, another 20% of the PPTRs will be sampled of those PMWs who initiated prenatal care in the second or third trimester. These reviews of the PPTR will include evaluating the following criteria: consistency of the documentation, all assessment questions have responses, all teaching topics are documented at the completion of a trimester, the client specific teaching goals are clearly stated and followed on a regular basis, and the outcomes are objectively stated. The results of these chart audits will be summarized and will be presented along with a summary of the concerns and questions of the staff. The summaries will then be presented at another staff meeting approximately two months after the initial staff meeting. Any additional staff questions or concerns will also be encouraged at this time.

The aforementioned process including the PPTR audits and assessment of staff questions and concerns will be repeated over the following two months. This will allow this author to identify problems related to the PPTR itself that require modification as well as problems related to the provider's utilization of the form. If the PPTR requires modification, it will be done at this time. The PPTR would once again need to be

reintroduced to the same staff and the same process for evaluation of the tool would take place to ensure that the modifications made on the PPTR were appropriate.

Following the aforementioned evaluation and modification process of the PPTR, the author plans to submit a proposal to present a poster presentation at the "1998 - National Primary Care Nurse Practitioner Symposium." The poster presentation would display the PPTR itself and some migrant health statistics for PMW. In addition, the author would be able to share the process involved with the development of the PPTR with her colleagues. The author also plans to utilize the PPTR as a teaching tool when working with advanced practice nursing students. The students will be asked to review the scholarly project before providing care to the PMW. This will provide the student with valuable information about the migrant population in general as well as the specific needs of the PMW. Utilizing the PPTR will be of great benefit to the advanced practice nurses because it will not only familiarize them with the specific prenatal educational needs of the migrant population but it will also foster the development of their roles as advanced practice nurses. These include the roles of counselor, researcher, educator, clinician, and advocate. Further, it will familiarize the student with the process involved in responding to a health care challenge by creating an innovative means to provide improved health care. It is imperative that the advanced practice nursing students recognize that although the migrant population has many barriers to health care, they can be modified and/or overcome. It is the responsibility of advanced practice nurses to rise to the challenge and create more innovative means to limit the barriers and improve migrant health care.

APPENDIX A

PAGEL PRENATAL TEACHING RECORD (PPTR)

Directions for use

1). Initial and date topics covered after the topic listed. Provide printed name with initials on the PPTR.
2). Evaluate the client's understanding and insert the selected code (0, 1, or 2) on the designated space.
   (0) = No or very little understanding
   (1) = Fair understanding/Requires reinforcement
   (2) = Evidences good understanding
3). Record the teaching modality by inserting the selected code (B, C, or V) utilized after each listed topic:
   (B) = Brochure/handout
   (C) = Class/group discussion
   (V) = Video
   (No letter assumes provider explanation only)

(*) = Topics of important significance for the **PREGNANT MIGRANT WOMAN**

NOTE: If the client has late initial prenatal care, the provider must review topics from prior trimester(s) and discuss relevant issues. May use N/A is non-applicable.

Guidelines for Providers Regarding Migrant Specific Teaching Topics

(Provider: the numbered items provide background information and correspond with the targeted teaching topics.)

1. Research has found migrant women often receive delayed and inadequate prenatal care. They are more likely to initiate prenatal care in the third trimester than non-migrant women.

2, 8, 9, 12. Migrant women are at greater nutrition risk as evidenced by poor maternal weight gain, dietary recalls showing caloric intakes at less than 90% of their recommended daily allowance, dietary deficiencies of fruits and vegetables, and an increased incidence of anemia in the Migrant population. W.I.C. is generally available to all Migrant women.

3. Migrant pregnant women have an increased incidence of cystitis. This is likely related to their working conditions, i.e. limited access to toilets and drinking water, prolonged travel.

4. Migrant workers often live within the fields they harvest. There are reported violations of pesticide utilization that put them at risk. Pregnant women are especially at risk due to the teratogen effects. Advise migrant workers to avoid working in fields for at least twenty four hours after spraying.

5. Due to the language barriers often encountered and multiple providers on-call, migrant pregnant women need to have a photocopy of the prenatal flow record after every visit so they can present it to the staff immediately at the Emergency room if emergency arises. This will improve continuity of care, decrease time delays in receiving urgent treatment, and avoid unnecessary testing.

6. Use of herbs is a common traditional medical treatment in the Hispanic population. Encourage the pregnant woman to bring in specific herbs to ensure their safe use in pregnancy.

7. Migrants often use different names due to the fear of being reported to immigration if they are illegal. Encourage the pregnant migrant woman to use the same name so that records and test results can be located and comparative ultrasounds can be obtained.

10. Due to the nature of migrant work, migrants often relocate during their pregnancy. Remind clients regarding health concerns of driving through high altitude states. Avoid prolonged travel due to risk of deep vein thrombosis and cystitis.

11. Research indicates there is an increase in the incidence of domestic violence in the migrant population. This is likely related to their stressful living and working conditions. In the general population, domestic violence increases during pregnancy.

13. Promote breastfeeding as it is particularly beneficial to the migrant woman. It is more convenient for travel, more safe if refrigeration is not consistently available, and is cost effective.

14. Migrant work entails long hard labor. Certain work picking fruit from trees has increased risks for the pregnant woman especially in the third trimester when her center of gravity is altered and risk of injury is great. Review activity limitations.

15. Due to financial limitations, migrants may not be able to purchase new car seat. Refer to available community resources.

Client Identifier:_____

THE PAGEL PRENATAL TEACHING RECORD

(A teaching tool for health care providers working with pregnant migrant women)

1. What are your greatest worries about your pregnancy?_____

_____

_____

_____

_____

2. Who or what is responsible for you and your baby's health?_____

_____

3. How do you learn the best? (provider: give examples i.e., listening to provider, classes, videos, written information)_____

4. Do you have any problems coming to your clinic appointments?_____

_____

_____

_____

5. Are there any particular cultural traditions or beliefs that you can share with us that may affect your health care during pregnancy?_____

_____

_____

_____

_____

6. Who do you talk to for advice or to share your worries?_____

_____

_____

_____

7. Who could you ask to give you a ride somewhere or borrow money if needed?

_____

8. Has anybody ever hurt you? (provider: give examples of physical, emotional, & sexual abuse)_____

_____

9. How many years of education did you complete?_____
10. Which language do you prefer to communicate in?_____
11. Do you have any worries about caring for your baby in your current home?

_____

_____

Do you have running water?_____Do you have heat? (type?)_____

Do you have refrigeration?_____

12. How involved is the baby's father in your pregnancy now?_____

_____

How involved do you feel he will be in the care of the baby after he/she is born?

_____

Will he be present for the labor and/or delivery of your baby?

TARGETED TEACHING TOPICS

First Trimester:

1*____Purpose of prenatal visits
2*____Importance of prenatal vitamins
3*____Prevention of cystitis
4*____Preventing pesticide exposure
5*____Purpose of carrying pregnancy records
6*____Use of herbs
7*____Use of same name for all medical concerns
8*____Nutrition/expected weight gain
9*____Available community resources i.e. WIC
10*___Travel recommendations (avoid high altitudes/prolonged travel)
11*___ Where to go for help if victim of domestic violence
_____T.O.R.C.H. prevention
_____Effects of ETOH and Tobacco
_____Safe medications to use in pregnancy
_____Maternal seatbelt use
_____Review/rationale for initial laboratory testing

Second Trimester:

12*___Purpose and results of glucola/ hemoglobin screen
13*___Benefits of breastfeeding
_____Purpose and results of ultrasound
_____Fetal movement expectations; quickening
_____Triple test .....(desires/refuses)
_____Prevention of constipation
_____Offer childbirth education classes

Third Trimester:

14*___Employment risks/avoiding fatigue
15*___Travel concerns
_____Signs of labor/What to do
_____Labor and delivery/What to expect
_____Circumcision
_____Family planning/contraception
_____Expectations in fetal movement/Kick counts
_____Rationale for NST/ BPP

Core Teaching Topics:

	First Trimester	Second Trimester	Third Trimester
Expected changes in body in pregnancy/rationale	_____	_____	_____
Fetal growth and development	_____	_____	_____
Danger symptoms to report	_____	_____	_____
Management of common symptoms of pregnancy	_____	_____	_____
Sexual concerns/guidelines	_____	_____	_____

Developed by: Renee Pagel, R.N. Michigan State University College of Nursing Graduate Student
September, 1997

CLIENT SPECIFIC TEACHING NEEDS AND GOALS:

(Provider document: Identified Need/Collaborative Goal and Interventions/Evaluations)

Need: **Goal:** **Plan:** **Outcome:**

Providers: Print your name next to your initials below after documenting on the PPTR.

APPENDIX B

PAGEL PRENATAL TEACHING RECORD (PPTR)

Directions for use

1). Initial and date topics covered after the topic listed. Provide initials and printed name on PPTR.
2). Evaluate the client's understanding and insert the selected code (0, 1, or 2) on the designated space.
   (0) = No or very little understanding
   (1) = Fair understanding/Requires reinforcement
   (2) = Evidences good understanding
3). Record the teaching modality by inserting the selected code (B, C, or V) utilized after each listed topic:
   (B) = Brochure/handout
   (C) = Class/group discussion
   (V) = Video
   (No letter assumes provider explanation only)

(*) = Topics of important significance for the **PREGNANT MIGRANT WOMAN**

NOTE: If the client has late initial prenatal care, the provider must review topics from prior trimester(s) and discuss relevant issues. May use N/A is non-applicable.

Guidelines for Providers Regarding Migrant Specific Teaching Topics

(Provider: the numbered items provide background information and correspond with the targeted teaching topics.)

1. Research has found migrant women often receive delayed and inadequate prenatal care. They are more likely to initiate prenatal care in the third trimester than non-migrant women.

2, 8, 9, 12. Migrant women are at greater nutrition risk as evidenced by poor maternal weight gain, dietary recalls showing caloric intakes at less than 90% of their recommended daily allowance, dietary deficiencies of fruits and vegetables, and an increased incidence of anemia in the Migrant population. W.I.C. is generally available to all Migrant women.

3. Migrant pregnant women have an increased incidence of cystitis. This is likely related to their working conditions, i.e. limited access to toilets and drinking water, prolonged travel.

4. Migrant workers often live within the fields they harvest. There are reported violations of pesticide utilization that put them at risk. Pregnant women are especially at risk due to the teratogen effects. Advise migrant workers to avoid working in fields for at least twenty four hours after spraying.

5. Due to the language barriers often encountered and multiple providers on-call, migrant pregnant women need to have a photocopy of the prenatal flow record after every visit so they can present it to the staff immediately at the Emergency room if emergency arises. This will improve continuity of care, decrease time delays in receiving urgent treatment, and avoid unnecessary testing.

6. Use of herbs is a common traditional medical treatment in the Hispanic population. Encourage the pregnant woman to bring in specific herbs to ensure their safe use in pregnancy.

7. Migrants often use different names due to the fear of being reported to immigration if they are illegal. Encourage the pregnant migrant woman to use the same name so that records and test results can be located and comparative ultrasounds can be obtained.

10. Due to the nature of migrant work, migrants often relocate during their pregnancy. Remind clients regarding health concerns of driving through high altitude states. Avoid prolonged travel due to risk of deep vein thrombosis and cystitis.

11. Research indicates there is an increase in the incidence of domestic violence in the migrant population. This is likely related to their stressful living and working conditions. In the general population, domestic violence increases during pregnancy.

13. Promote breastfeeding as it is particularly beneficial to the migrant woman. It is more convenient for travel, more safe if refrigeration is not consistently available, and is cost effective.

14. Migrant work entails long hard labor. Certain work picking fruit from trees has increased risks for the pregnant woman especially in the third trimester when her center of gravity is altered and risk of injury is great. Review activity limitations.

15. Due to financial limitations, migrants may not be able to purchase new car seat. Refer to available community resources.

Client Identifier:_____

THE PAGEL PRENATAL TEACHING RECORD

(A teaching tool for health care providers working with pregnant migrant women)

1. What are your greatest worries about your pregnancy?_____

_____

_____

_____

_____

2. Who or what is responsible for you and your baby's health?_____

_____

3. How do you learn the best? (provider: give examples i.e., listening to provider, classes, videos, written information)_____

4. Do you have any problems coming to your clinic appointments?_____

_____

_____

_____

5. Are there any particular cultural traditions or beliefs that you can share with us that may affect your health care during pregnancy?_____

_____

_____

_____

_____

6. Who do you talk to for advice or to share your worries?_____

_____

_____

_____

7. Who could you ask to give you a ride somewhere or borrow money if needed?

_____

8. Has anybody ever hurt you? (provider: give examples of physical, emotional, & sexual abuse)_____

_____

9. How many years of education did you complete?_____
10. Which language do you prefer to communicate in?_____
11. Do you have any worries about caring for your baby in your current home?

_____

_____

Do you have running water?_____Do you have heat? (type?)_____

Do you have refrigeration?_____

12. How involved is the baby's father in your pregnancy now?_____

_____

How involved do you feel he will be in the care of the baby after he/she is born?

_____

Will he be present for the labor and/or delivery of your baby?

_____

TARGETED TEACHING TOPICS

First Trimester:

1*____Purpose of prenatal visits
2*____Importance of prenatal vitamins
3*____Prevention of cystitis
4*____Preventing pesticide exposure
5*____Purpose of carrying pregnancy records
6*____Use of herbs
7*____Use of same name for all medical concerns
8*____Nutrition/expected weight gain
9*____Available community resources i.e. WIC
10*___Travel recommendations (avoid high altitudes/prolonged travel)
11*___ Where to go for help if victim of domestic violence
_____T.O.R.C.H. prevention
_____Effects of ETOH and Tobacco
_____Safe medications to use in pregnancy
_____Maternal seatbelt use
_____Review/rationale for initial laboratory testing

Second Trimester:

12*____Purpose and results of glucola/ hemoglobin screen
13*____Benefits of breastfeeding
_____Purpose and results of ultrasound
_____Fetal movement expectations; quickening
_____Triple test .....(desires/refuses)
_____Prevention of constipation
_____Offer childbirth education classes

Third Trimester:

14*____Employment risks/avoiding fatigue
15*____Travel concerns
_____Signs of labor/What to do
_____Labor and delivery/What to expect
_____Circumcision
_____Family planning/contraception
_____Expectations in fetal movement/Kick counts
_____Rationale for NST/ BPP

Core Teaching Topics:

	First Trimester	Second Trimester	Third Trimester
Expected changes in body in pregnancy/rationale	_____	_____	_____
Fetal growth and development	_____	_____	_____
Danger symptoms to report	_____	_____	_____
Management of common symptoms of pregnancy	_____	_____	_____
Sexual concerns/guidelines	_____	_____	_____

Developed by: Renee Pagel, R.N. Michigan State University College of Nursing Graduate Student
September, 1997

CLIENT SPECIFIC TEACHING NEEDS AND GOALS:

(Provider document: Identified Need/Collaborative Goal and Interventions/Evaluations)

Need: **Goal:** **Plan:** **Outcome:**

Providers: Print your name next to your initials below after documenting on the PPTR.

REFERENCES

REFERENCES

Abdullah, S. (1995). Towards an individualized client's care: Implication for Education: The transcultural approach. Journal of Advanced Nursing, 22, 715-720.

Association of Women's Health, Obstetric, and Neonatal Nurses, (1994). Didactic content and clinical skills verification for professional nurse providers of perinatal home care. (pp. 15-24). Washington D.C.: Author.

Bobak, I., Lowdermilk, D., Jensen, M., & Perry, S. (1995). Maternity nursing. St. Louis: Mosby.

Cassetta, R. (1994). Needs of migrant workers challenge RNs. The American Nurse, 12, 34.

Center for Disease Control (1997). Pregnancy-related behaviors among migrant farm workers-four states, 1989-1993. Morbidity and Mortality Weekly Review, 46(13), 283-286.

Decker, S. & Knight, L. (1990). Functional health pattern assessment: A seasonal migrant farmworker community. Journal of Community Health Nursing, 7(3), 141-151.

Freda, M., Anderson, H., Damus, K., & Merkatz, I. (1993). What pregnant women want to know: A comparison of client and provider perceptions. Journal of Gynecological and Neonatal Nursing, 22(3), 237-244.

Geissler, E. (1993). Mexico. Pocket guide to cultural assessment. St. Louis: Mosby.

George, J. (1990). Imogene King. Nursing theories the base for professional nursing practice. Norwalk, Conneticut: Appleton & Lange.

Goss, G., Lee, K., Koshar, J., Heilemann, M., & Stinson, J. (1997). More does not mean better: Prenatal visits and pregnancy outcome in the Hispanic population. Public Health Nursing, 14(3), 183-188.

Higgins, P., Murray, M., & Williams, E. (1994). Self-esteem, social support, and satisfaction differences in women with adequate and inadequate prenatal care. Birth, 21(1) 26-33.

Kerr, M. & Ritchey, D. (1990). Health promoting lifestyles of English speaking and Spanish-speaking Mexican-American migrant farm workers. Public Health Nursing, 7(2), 80-87.

King, I., (1971). Toward a theory for nursing: General concepts of human behavior. New York: John Wiley & Sons.

Kuipers, J. (1991). Mexicans-Americans. Transcultural Nursing. St. Louis: Mosby.

Magann, E., Evans, S., & Newnham, J., (1996). Employment, exertion, and pregnancy outcome: Assessment by kilocalories expended each day. American Journal of Obstetrics and Gynecology, 175(1), 182-187.

March of Dimes Birth Defects Foundation, (1995). Comenzando Bien: A prenatal education program for Hispanic women. New York: Author.

Martin, S., Gordon, T., & Kupersmidt, J. (1995). Survey of exposure to violence among the children of migrant and seasonal farm workers. Public Health Reports, 110 (3), 268-76.

Meleis, A. (1985). On Interactions. Theoretical nursing: Development and progress. Philadelphia: J.B. Lippincott Company.

Mountain, K. & Hill, R. (1992). MCN outlines strategies for improving migrant health care(letter). Nurse Practitioner, 17(8), 8-9.

Olds, S., London, M., & Lawewig, P., (1992). Maternal-Newborn nursing. Redwood City: Addison-Wesley.

Parker, B., McFarlane, J., Soeken, K., Torres, S. & Campbell, D. (1993). Physical and emotional abuse in pregnancy: A comparison of adult and teenage women. Nursing Research, 42(5), 173-178.

Redman, B. (1993). Principles of learning. The process of patient education. St. Louis: Mosby.

Reinert, B. (1986). The health care beliefs and values of Mexican-Americans. Home Healthcare Nurse, 4 (5), 23 -28.

Rust, G. (1990). Health status of migrant farmworkers: A literature review and commentary. American Journal of Public Health, 80(10), 1213-1217.

Slesinger, D. (1992). Health status and needs of migrant farm workers in the United States: A literature review. The Journal of Rural Health, 8(3), 227-234.

United States Department of Health and Human Services, Public Health Service (1991). Healthy People 2000: National Health Promotion and Disease Prevention. DHHS Publication No. (PHS) 91-50210. U.S. Government Printing Office.

Wadhwa, P., Sandman, C., Porto, M., Dunkel-Schetter, C., & Garite, T. (1993). The association between prenatal stress and infant birth weight and gestational age at birth. American Journal of Obstetrics and Gynecology, 169(4), 858 - 865.

Villarruel A. & Leininger, M. (1995). Cultural Care of Mexican Americans. Transcultural nursing: Concepts, theories, research and practices. United States: McGraw-Hill, Inc.

Wegman, M. (1991). U.S. maternal and child health services: Right or privilege? Neonatal Network. 9(8), 35.

Watkins, E., Larson, K., Harlan, C., & Young, S. (1990). A model program for providing health services for migrant farmworker and children. Public Health Reports, 105(6), 567- 575.