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A cultural model of pregnancy: a comparison between Mexican physicians and working-class women in Tijuana, B.C.[☆]

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Abstract

At the time this research was conducted, it was reported that a significant percentage of women in Tijuana, B.C. (18.6%) who gave birth in a hospital did so having had little or no prenatal care [Núcleo Regional para el Desarrollo de Sistemas de Salud (NUREDESS) 1993]. Why does this underutilization of prenatal care occur? Frequently, explanations for health-seeking behavior among poor and working-class Mexican women tend to focus on cultural beliefs. This research examined the accuracy of such a cultural explanation by discerning the cultural model of prenatal care of a group of working-class Mexican women and comparing it to the biomedical model, as represented by a group of Mexican physicians. The results demonstrate that both groups actually share a similar model of prenatal care, one rooted in biomedicine. Therefore, it is important to consider broader, structural and economic variables as key factors that influence prenatal health care behavior.

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1. Introduction

This paper examines the utilization patterns of prenatal health care services among a group of female *maquiladora* (foreign company) workers residing along the U.S.–Mexico border in Tijuana, B.C. Although adequate prenatal care does not guarantee a problem-free pregnancy or a positive birth outcome, it is recognized by biomedicine as an important preventive measure against poor birth outcomes. However, a significant percentage of Mexican women in Tijuana

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are giving birth with what Mexican health care researchers and providers consider inadequate prenatal health care (which is defined by Mexican health care providers as no prenatal care or less than six prenatal care visits). At the time this research was taking place, previous studies (NUREDESS, 1992) found that 34% of all insured pregnant women in Mexico went to term with less than four prenatal care visits (cited from NUREDESS, 1993). At one point it was estimated that approximately 19% of those women who gave birth in a hospital in Tijuana did so having received inadequate or no prenatal care (NUREDESS, 1993). How can this underutilization be explained? Frequently, explanations for health-seeking behavior among poor and working-class Mexican women tend to focus on cultural beliefs. Poor and working-class women, particularly those from rural areas, are characterized as adhering to some traditional “folk” model of pregnancy, which prevents them from seeking adequate biomedical prenatal health care. Applying the theory of cultural consensus and using a combination of ethnography and systematic data collection techniques, this research examined the accuracy of such a cultural explanation with regards to the prenatal health care behavior of female maquiladora workers. Do these women share and adhere to some common cultural beliefs about pregnancy and prenatal care that prevent them from seeking adequate biomedical prenatal health care? Or are there alternative explanations, for example, explanations related to issues of class and access? The results of this research demonstrate that issues related to access, cost, and quality of care determined this group of women’s prenatal health care choices more than personal perceptions and beliefs about pregnancy in general and biomedical prenatal health care services in particular.

2. Anthropology and health-seeking behavior

Research prior to and during the 1970s emphasized cultural beliefs and adherence to a traditional ethnomedical system as important factors in the health care decision-making process. This view regarded cultural beliefs as “obstacles” to the utilization of biomedical health care services, with little consideration being given to external processes, such as political and economic ones, which can constrain individual choices (Browner & Sargent, 1990; Pelto & Pelto, 1997). This view was based upon the existence of “etiologically incompatibilities between lay and scientific medical theory,” that is, a difference in perception of the origin of disease and illness (Young & Garro, 1982, p. 1454). As Pelto and Pelto (1997) put it, “In earlier formulations about ‘cultural belief systems,’ actors were seen as passive embodiments of traditional cultural wisdom” (Pelto & Pelto, 1997, p. 153).

However, in the last decade, researchers, particularly in the U.S., have postulated that broader political–economic factors play a significant role in the prenatal health care behavior of Latina women (e.g., Chavez, 1986; Chavez, Cornelius, & Jones, 1985, 1986; Chavez & Torres, 1994; Rumbaut, Chavez, Moser, Pickwell, & Wishik, 1988; Zambrana, Scrimshaw, & Dunkel-Schetter, 1991). These studies examine the use of prenatal care within a political economy of health care perspective and argue that accessibility to health care services, rather than strict adherence to a traditional ethnomedical system, better explains the utilization pattern of prenatal care services among Mexican immigrant women in the U.S. (Chavez, Flores, & Lopez-Garza, 1992).

According to Chavez (1986), the political economy of health care model posits that health services are allocated within a political economy framework under the following conditions (Chavez, 1986, p. 345):

- (a) the provision of health care is *independent* of health factors per se, e.g., the well being of the general population and its constituent ethnic and racial subgroups;
- (b) access to health care is *dependent* upon the factors which are economically and politically determined;
- (c) access to health care is *not* necessarily equally distributed within a population; ethnic/racial subgroups within a society may find access to health services *limited* as a result of their *socioeconomic* characteristics, many of which are beyond their individual control.

Chavez (1986) summarizes this view in the following manner:

When policy-makers view the fiscal resources to pay for health services as limited, they must make determinations which limit access to health services. How these determinations limiting access are made depends upon the historical, political and economic relationships between the actors (socially, culturally or economically defined subgroups) in a given society. (Chavez, 1986, p. 345)

To accomplish the goals of this research, the prenatal health care behavior of female maquiladora workers was framed within a framework that incorporates both the cultural construction of pregnancy as well as socio-political and economic factors. The prenatal health care behavior of this group of women living in Tijuana was framed within a formal decision modeling perspective. This perspective seeks to build cultural models of health that consider the social and cultural context of health and illness beliefs and attempts to link them with actual health care behavior (Garro, 1987). This approach has been much more successful than earlier cognitive anthropology approaches in constructing models of treatment choice that are both dynamic and explanatory because it takes into account the “generative capacity of culture” (Quinn & Holland, 1987, p. 4), while incorporating issues of accessibility.

According to Young (1980), when constructing cultural models of decision-making, the options that group members view as available to them for a particular illness/health situation must be identified. Another key point in decision modeling is identifying “the principles whereby this information [criteria] is considered” (Young, 1980, p. 106). This research attempted to accomplish these two points in order to understand the prenatal health care decision-making of this group of maquiladora workers.

3. Health care in Mexico: a brief overview¹

Mexico’s health care system can be divided into several managed care subsystems designed to meet the health care needs of different population groups. The major public subsystems are the Secretaria de Salubridad y Asistencia (SSA), Instituto Mexicano de Seguro Social (IMSS), Instituto de Seguridad y Servicios Sociales para Trabajadores del Estado (ISSTE). ISSTE is financed by the federal and state governments and covers federal and state employees. In

addition, there is the private sector as well. Among the public health care systems, IMSS is the largest and most comprehensive system in Mexico (Fairbanks, 1997). With the rapid industrialization of urban centers, IMSS was found in 1943 to meet the health care needs of workers. IMSS is supported by the combined contributions of the federal government, the employers, and employee wage deductions. It has been estimated that IMSS covers approximately 55% of the population (Fairbanks, 1997). The SSA is designed to cover those not covered by IMSS or ISSTE, essentially the informally employed or unemployed, uninsured population. SSA is estimated to cover approximately 35% of the population (Fairbanks, 1997). Thus, between IMSS and SSA, over 85% of the population *should* have access to a source of medical care. The rest utilize private health care services and/or ISSTE.

4. Methods

4.1. *Sample selection*

The target population was limited to women who: (1) had given birth within the last two years from the time they were interviewed; and (2) have had worked in a maquiladora at some point during their most recent pregnancy. A snowball sampling strategy was employed to locate both the women and the group of maquiladora physicians (company physicians). This type of sampling has proved useful when dealing with hard to find populations (Bernard, 1988), particularly in the case of female maquiladora workers, who have shown a pattern of high mobility and migration. Although employing snowball sampling yields low external validity, Bernard (1988) points out that when “backed up by ethnographic data, studies based on these sampling techniques are often highly credible” (Bernard, 1988, p. 95). As compensation for their participation, a gift in the form of a bag of groceries was given to the women (this bag of groceries consisted of a kilo of beans, a kilo of rice, 1/2 kilo of flour, 500 ml of cooking oil, 4 packs of toilet paper, 250 g of washing detergent, and a small packet of *maizena* salt).

4.2. *Ethnographic component*

Ethnographic interviews were conducted in order to gain an understanding of how these women make health care choices related to their pregnancy. The interviews were conducted in the homes of the women and tape-recorded with their permission. The interviews focused on eliciting beliefs about pregnancy and prenatal care. Included in the ethnographic interview were systematic data collection techniques that have proven effective in eliciting cultural beliefs and knowledge (Weller & Romney, 1988). This technique, namely item ranking, and its analyses provided insight into women’s perception of pregnancy and prenatal care. Cultural consensus analyses were used to analyze these rank order data. Cultural consensus theory, according to Weller and Romney (1988), allows for the estimation of “how much each informant knows and how to put the answers of the various informants together in order to arrive at some composite picture of what they know” (Weller & Romney, 1988, p. 74). Cultural consensus assesses the ‘cultural knowledge’ of individual informants. A high degree of agreement among informants

on a particular set of questions, according to cultural consensus, points to the existence of a shared cultural model on a particular domain (see Romney, Weller, & Batchelder, 1986 and Weller & Romney, 1988 for detailed explanation of agreement calculations). Cultural consensus, then, is a useful tool since “shared knowledge,” which is the point of interest here, can be inferred from consensus (Romney et al., 1986). This analytic method is most useful when conducting ethnographic work since a large sample size is not needed when assessing cultural knowledge. Weller and Romney (1988) state that when “interviewing on the content of cultural patterns or items with high agreement, reliable and valid answers can be obtained with small numbers of informants” (Weller & Romney, 1988, p. 77). For example, with an average level of cultural knowledge (i.e., agreement) calculated at .6 (greater than chance), one would need only 20 subjects to classify 99% of the responses as “correct” at the .99 confidence interval (Weller & Romney, 1988). For this research, 37 women were interviewed. This group of women had an average level of cultural knowledge of .72. Thus, only 13 women were required to classify 99% of the questions “correct” at the .99 confidence interval. With regards to physicians, 13 were selected using a convenient sampling strategy. Because of their specialized knowledge, a large sample size was not required. With an estimated average level of cultural knowledge (i.e., agreement) of .80, only eight were needed to classify their responses as “correct” at the .99 confidence interval (see Weller & Romney, 1988 for detailed explanation of statistical calculations).

5. Results

5.1. Socio-economic characteristics

The overall demographic characteristics of the 37 women interviewed in this study are similar to those previously reported in the literature. As Table 1 indicates, the median age for my study population was 26 years old. The great majority of the women in my sample were no more than 30 years old (78%), with only 11.0% falling in the 35 or older range.

Thus, the age characteristic of this female working population continues to remain consistent with what has been reported in the literature—between 16 and 25 years old (e.g., Bustamante, 1983; Fernandez-Kelly, 1983; NUREDESS, 1993). In terms of education, 49% reported having completed *primaria* (elementary school). Another 43% reported having gone beyond elementary school, although the median total number of years of schooling was 7 years. Thus, the educational level of this group of women has also remained consistent since the early 1980s when some of the initial studies were published (e.g., Bustamante, 1983; Fernandez-Kelly, 1983). My sample also paralleled previous studies with regards to migrant status. Eighty-four percent of the women were migrants from other parts of Mexico (16% were Tijuana-born). The average length of residence in Tijuana among the migrants was 6 years, with 45% reporting living in Tijuana for 5 years or less. Sixty percent of the sample reported coming from a rural background. In sum, the female maquiladora sample examined for this research was demographically similar to samples previously studied.

Table 1
Demographic profile of sample

	Percent	<i>N</i> = 37	Median (years)
Age groups			
18–21	16	6	26
22–25	32	12	
26–30	30	11	
>30	22	8	
Education Level			
Elementary	49	18	
Junior high	43	16	
High school	3	1	
Vocational	5	2	
Years of schooling			
1–6	49	18	7
7–9	32	12	
10–12	16	6	
>12 years	3	1	
Marital status			
Single	8	3	
Married	38	14	
Separated	3	1	
Unión Libre (common union)	51	19	
Migrant status			
Migrant	84	31	
Tijuana-born	16	6	
Length of residence in Tijuana (migrants)		<i>N</i> = 31	
5 or less years	45	14	6
6–10	29	9	
>10 years	26	8	
Rural/urban origin			
Urban	41	15 ^a	
Rural	60	22	

^a Includes Tijuana-born women.

5.2. *Pregnancy history*

The median number of pregnancies reported by this sample of women is two, with the majority reporting only one pregnancy (38%). A significant number of women (35%) reported having experienced some type of complication during their pregnancy, while 89% reported that their last pregnancy resulted in a normal delivery. Twenty-two percent underwent a C-section. In terms of prenatal care, 11.4% reported giving birth having had less than six prenatal care visits during their last pregnancy. Equally important is the finding that 19.4% of the women reported having initiated prenatal care after the first trimester. Of those who gave birth, all of them reported having delivered in a hospital [Table 2](#).

Table 2
Pregnancy history

	Percent	<i>N</i>	Median	Mean	Range
Total number of pregnancies					
One	38	14	2	2.89	9
Two	14	5			
Three	23	8			
Four to six	19	7			
Less than six	8	3 ^a			
Total number of kids					
One	41	15	2	2.38	10
Two	22	8			
Three	14	5			
Four to six	19	7			
Less than six	3	1 ^b			
Adequate versus inadequate use of prenatal care					
Less than six visits	11.4	4			
Six or more visits	88.0	32			
Month initiated prenatal care					
First trimester	80.6	29	2.5		
After first trimester	19.4	7			
Type of delivery (last pregnancy)					
Vaginal	70	25			
C-section	22	8			
Miscarriage	8	3			
Complications during last pregnancy					
Yes	35	12			
No	59	20			

^a Two subjects reported 10 pregnancies.

^b This subject had 10 kids.

5.3. *Cultural consensus*

The primary method of collecting data for the cultural consensus analysis was ranking of items. The purpose of this systematic data collection technique was to discover the features, both personal and external, that are key to defining the cognitive health care understanding of this group of women. Such a cognitive map will lead to an understanding of the prenatal health care decision-making process.

5.4. *Health care alternatives perceived to be available*

When attempting to understand the treatment choice of individuals it is important to first uncover that set of health care alternatives that they perceive to be available to them. Careful definition of the domain to be studied is central when assessing cultural knowledge or cultural beliefs. As [Weller and Romney \(1988\)](#) state, “The overall success of any study depends in part on giving careful attention to the definition of the domain as the first step of the research” (p. 10). The free-listing task is considered one of the most useful techniques in eliciting a domain

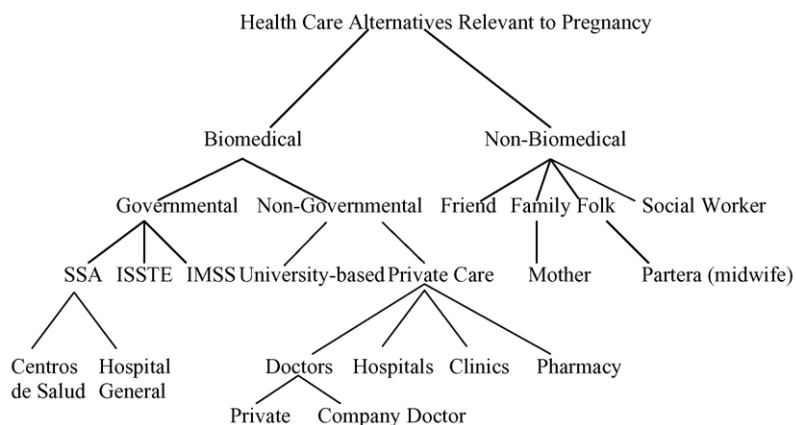


Fig. 1.

as it allows for the subjects themselves, instead of the researcher(s), to define the domain, thus, ensuring that the items in the domain are culturally relevant (Weller & Romney, 1988). Therefore, the women in the sample were asked to free-list all possible health care sources that they perceived to be available to women in general during pregnancy. It was explained to them that there was no restriction on the number or type of sources they could mention. That is, any person(s) or places that a woman may seek out for assistance of any type for her pregnancy could be mentioned. The sources of health care listed can be categorized as either biomedical or non-biomedical (Fig. 1).

Although the free-list generated 14 different sources of care (Table 3), the average number of sources mentioned by each woman was four. When trying to decide which items generated by a free-list task should be included as part of a domain, a useful indicator is the saliency of the item (Weller and Romney, 1988). The most salient items are the following: *Seguro Social*

Table 3
Sources of care mentioned by women

Source	<i>N</i>	Percentage
IMSS (Seguro Social)	37	100.0
Private care ^a	36	97.0
Centros de Salud (SSA)	25	68.0
Hospital General (SSA)	21	57.0
ISSSTE	8	22.0
DIF	3	8.0
Cruz Roja	2	5.0
Centro Comunitario ^b	2	5.0
Farmacia	1	3.0
Doctor de la maquiladora	1	3.0
Amigas	1	3.0
Mama	1	3.0
Partera	1	3.0
Trabajadora Social	1	3.0

^a Includes private clinics (21), private physicians (11), and private hospitals (5).

^b University-based (Universidad Autonoma de Baja California).

Table 4
Individuals considered possible sources of advice regarding pregnancy, by consensus rank order

Individual
Médico del Seguro (IMSS doctor)
Mama (mother)
Enfermeda (nurse)
Trabajadora Social (social worker)
Mujer mayor (older woman)
Suegra (mother-in-law)
Esposo (husband)
Hermana (sister)
Partera (midwife)
Amiga (friend)
Tía (aunt)
Vecina (neighbor)

(IMSS), *Hospital General* and *Centros de Salud* (both part of SSA), and private sources of health care. As can be seen, the most salient health care sources are all biomedical. Missing from this list of potential sources are alternative sources of care, such as the use of a traditional midwife and other “traditional healers.”

5.4.1. Person most likely to seek advice from

To draw out any sources that perhaps were not captured by the previous question, which focused on “sources,” I also had the women free-list all possible *persons* whom a pregnant woman could seek for any type of *advice* or *information* for her pregnancy [“whom can a pregnant women seek for advice regarding her pregnancy?”]. The idea here was to pose the question in such a way that the women’s choices would not be restricted to the biomedical model. From the free-list task, the most frequently (i.e., salient) mentioned individuals were identified and a final list of 12 individuals was generated (Table 4). Using a set of index cards, the women were asked to rank these individuals according to whom they would be more likely to seek for advice or information about their pregnancy.

Cultural consensus analysis (i.e., the estimates of individual agreement as well as overall estimated group agreement) indicates the existence of a single, shared model of whom to seek out for advice or information regarding the management of a pregnancy. The mean knowledge score of the group, or degree of agreement among the respondents, was .67. The ratio between the first and second factor (eigenvalues) is 3.6, indicating that the analysis has a single factor structure, implying that the first factor accounts for three times as much variance as the next factor; therefore, indicating that the ranking strategy was “tapping into a coherent cultural domain” and that the subjects (women and physicians) were drawing from a single cultural model (Romney et al., 1986, p. 323). In short, this agreement among the women indicates that “IMSS doctor” is the consensually correct answer to the question “when a female maquiladora worker is pregnant, whom is she likely to seek for advice or assistance?”

5.4.2. IMSS doctor

Because doctors were perceived to be more capable of providing accurate information or care, the IMSS doctor was ranked as the most likely person to seek advice or assistance for the

care of a pregnancy. In this case, doctors from IMSS are specified because maquiladora women are *derechohabientes* (i.e., have “privileges”) to IMSS. This leads to the idea that doctors are chosen over other alternatives not because they are preferred, but because it is mandated by the health care system. In order for a female maquiladora worker to begin her prenatal care in IMSS, her pregnancy must first be confirmed by a physician (private or public). However, the responses of the women indicate that they actually prefer IMSS doctors, specifically, but also doctors in general. This preference for doctors is based on the notion that the perceived knowledge and expertise of doctors on matters of health and pregnancy maximizes the likelihood that a positive birth outcome will result. This is illustrated by Sra. Ortiz,² a 31-year-old mother of one from Sinaloa:

I believe he is the most appropriate person to give you . . . guidance about what you have to do [like] nutritional habits . . . he can explain how to take care of yourself, what you should eat, what exercises you should be doing during your pregnancy . . .

5.4.3. *Mother as a source of information*

It was expected that mothers would be first to be sought out for advice by daughters on matters dealing with reproduction. However, the reason mothers were ranked behind medical doctors is because most of these women were migrants and their mothers were not available to provide advice and insight on matters of reproduction. If their mothers were available, most indicated that they would seek out their advice, as indicated by the following statement from one of the migrant women: “Because she [mother] is not with me. If I lived in Durango, I’d go to her for advice . . .” It is clear from the women’s responses that had their mothers been available, they would have been an important source of support. Mothers were perceived as an important source of advice or assistance because of their own experience with pregnancy, as the following statements illustrate: “Because she is the one with the most experience. She’s already had children. She has lived more than I . . .” and “Well, because she has already gone through the same thing and perhaps she can orient us . . .”

5.4.4. *When to seek prenatal care*

In trying to understand when a woman should seek some type of assistance for her pregnancy, the women were asked to free-list all possible symptoms or conditions for which a pregnant woman should seek prenatal care. From this free-list task, the most frequently mentioned “conditions” or “symptoms” were identified and a final list of 20 items was generated (Table 5). The women were asked to rank the 20 items, from the most serious (i.e., requiring immediate attention) to the least serious (not requiring immediate attention or no attention). The selected physicians were asked to rank the items as well for comparative purposes. The physicians selected all worked in one of the maquiladoras. Again cultural consensus analyses were applied.

According to Weller and Romney (1988), a minimum knowledge score above .5 is required to assert that a shared cultural model exists among the respondents. The score is determined by the level of agreement among the respondents; thus, the higher the score, the higher the agreement among the respondents. The mean knowledge score for the women, or *degree of agreement* among them, was .72. For the physicians, the mean knowledge score, as should be expected, was .80. The key question, however, is how much does each group agree with each other? The lack of agreement would indicate that women have a different understanding

Table 5
Most salient conditions requiring attention

A	Sentirse Mal	Feeling “bad”
B	Bajo/Alta Presion	Low/high blood pressure
C	Vomitos/Ascosp	Vomiting/nausea
D	El hecho de estar embarazada	Simply being pregnant
E	Mareos	Dizziness
F	Molestias	Discomfort
G	Anemia	Anemia
H	Sangrado Vaginal	Vaginal bleeding
I	Ardor/Dolor al Orinar	Burning/pain during urination
J	Flujo Amarillo/Mal	Yellow/bad discharge
K	Dolor Frecuente de Cabeza	Frequent headaches
L	Hinchazon de Manos/Cara	Swelling of hands/face
M	Dolor de Parto Antes del Tiempo	Premature labor pains
N	Fiebre	Fever
O	Aumento de Peso	Weight gain
P	Palidez/Falta de Aire	Paleness/lack of air
Q	Depresion	Depression
R	Agruras	Heartburn
S	Falta de Apetito	Lack of appetite
T	Diabetes	Diabetes

about when prenatal care should be sought. The findings would correspond with the cultural explanation that emphasizes a conceptual incompatibility between patient and doctor, which could potentially serve to hinder the use of prenatal care by this group of women. For this comparison, we combine all respondents into one data set. What kind of agreement can be expected? Quite surprisingly, there was a high degree of agreement between the two groups. The mean knowledge score of the combined data was .74. Essentially, both the women and the physicians ranked the condition items similarly. Thus, the high agreement between the women and the physicians indicates that both groups actually share a similar model related to the management of pregnancy, i.e., whom and for which condition should prenatal care be sought. This agreement is illustrated by the following scatter plot (Fig. 2).

On the scatter plot, each number without a letter represents a respondent from the female maquiladora worker group and each number following an “M” indicates a physician (“medico”). The closer the respondents appear to each other, the higher the agreement among them as to the ranking of the items. As the scatter plot indicates, the group of women and the group of Mexican physicians do not form two distinct groups representing two distinct models of knowledge regarding when a women should seek prenatal care. In fact, they appear to be sharing a similar model. In short, there is little indication that this group of women, on this particular domain, is adhering to some “folk” ethnomedical model of pregnancy and prenatal care that conflicts with biomedicine. In fact, this group of women was more concerned with issues of access and quality of care.

5.4.5. *Considerations for choosing prenatal health care options*

In keeping with the key goals of decision modeling, the data identified two primary factors that this group of women considered when making prenatal health care choices. These are cost and quality of care.

Table 6
Advantages of health care options

Characteristic	Percent
IMSS	
Cost-related	74
No cost	57
Free medicines	17
Overall quality of care	72
Quality of care	37
Types of services	35
Centros de Salud	
Cost-related	
Little cost	42
Overall quality of care	33
Quality of care in general	8
Fast service	17
Types of services	8
Hospital General	
Cost-related	
Little cost	33
Overall quality of care	33
Good quality of care in general	19
Types of services	14
Private care	
Overall quality of care	81
Quality of care	55
Fast service	26

good quality care (72%) (Table 6). By “quality of care,” the women not only meant the manner in which the services were rendered, but also how effective the services were by way of the types of services available at IMSS. This sentiment is characterized by the following statement made by Sra. Bañuelos, a 26-year old married mother of two originally from Oaxaca:

Well it has all the advantages because, well, it is where one mostly goes to. They treat you well, they have all the equipment. In my case, in general, I have been treated wonderfully by IMSS.

With regards to private care, the primary advantage is its perceived quality of care. Eighty-one percent of the women identified overall quality of care as the primary advantage of private care. The responses of the women illustrate the different dimensions of what they mean by “quality of care.” Generally speaking, quality of care refers to *mejor atención* (better attention). The following statements are representative of the perception that private care was much better in quality in comparison to the other alternatives: “The advantage is that they do a thorough check-up. You could say better. In other words, a private doctor, well, he will attend to you more quickly,” or “If we go to a private clinic, we are treated better, we are given better attention, they dote over you more.” Related to this notion of *mejor atención* is also the greater sense of security, or *seguridad*, that the women feel from the attention provided by private physicians.

Quality, however, was clearly associated with cost. The expectation, then, is that if you are paying for services, those services should be of higher caliber than services obtained without cost. Cost, thus, becomes a metaphor for quality, as the following statement illustrates, “The advantage . . . is that you’ll get better attention [with private care] . . . that there are fewer delays than at IMSS or the General Hospital . . .”

The preference for IMSS over the rest of the alternatives is also supported by the women’s ranking of IMSS as the *más efectivo* (most effective), in terms of their perception of the positive outcome resulting from the services provided, in comparison to the rest of the alternatives. It is important to note, however, that IMSS as the preferred source of health care is confounded by the fact that maquiladora women are assigned to this health care system. They could choose to go elsewhere, but at their own cost.

In general, it is clear that the prenatal health care behavior of the women in this sample tilted away from the cultural dominance side. The younger age of this group may have something to do with this trend. However, the data indicate that it is more than simply age. Social context also appears to be a key factor. In Tijuana, the women find themselves in a highly urban and medically pluralistic setting. This fact, coupled with their young age (when beliefs and perceptions are still flexible), has led to increased contact with the health care system, and as a result, in an increase in their health knowledge. This increased health knowledge illustrates that knowledge, indeed culture, rather than being static, is generative and dynamic (Quinn & Holland, 1987). This increase in health knowledge among this group of working women is consistent with the general trend of the increase in the health knowledge of the general public.

6. Discussion and conclusion

How, then, do the women in this group go about selecting among the most salient health care alternatives perceived to be available to them for prenatal care? From the data, it is clear that the two key principles guiding and informing this group of women’s decisions regarding prenatal care are cost and quality of care. These two key principles correspond to the key principles identified by Young (1980) and Young and Garro (1982) in their research on treatment choice in Michoacan, Mexico. Furthermore, other researchers have also identified non-cultural factors as key determinants of treatment choice as well (see Sargent & Rawlins, 1991).

In summary, the data derived from a combination of ethnographic and systematic data collection techniques demonstrate that the women in this sample are not, as Pelto and Pelto (1997) put it, passive actors who embody “traditional cultural wisdom,” which prevents them from seeking biomedical prenatal health care. These women are clearly not rigidly adhering to a common “folk” belief system regarding pregnancy and its management. In fact, with regards to whom to seek for assistance and under which conditions prenatal care should be sought, these women share a similar model with a group of Mexican physicians. These women are choosing among a set of alternatives along the principles of cost and quality, not along traditional cultural beliefs. These findings have implications for understanding the underutilization of prenatal health care among Mexican and Latin American immigrant women here in the United States. Are these immigrant women underutilizing prenatal health care in the U.S. because they rigidly adhere to a traditional ethnomedical belief system? Or can this underutilization be explained

by a lack of access to medical insurance, a regular source of medical care, and adequate access to medical services (Hubbell, Waitzkin, Mishra, Dombrink, & Chavez, 1991)?

Thus, this research posits that researchers and health care providers must examine broader, structural and economic variables as important factors that prevent Latino women from seeking adequate prenatal care, whether in Latin America or in the U.S. While cultural factors are important and cannot be discarded, we must be well informed when deciding whether to attribute cultural beliefs or broader political and economic factors to the utilization of health care services. This is especially true when dealing with immigrant populations in the U.S. This population faces obstacles not faced by native-born subgroups (e.g., Latinos, African American, etc.) as a result of their residency status. This is especially true for undocumented immigrants. Latin American immigrant population groups in the U.S. face language and cultural barriers, which can and do hinder the utilization and effectiveness of health care services and programs (Huff & Kline, 1999). In addition, the lack of knowledge about the availability of health care services, the lack of understanding of the complexity of the U.S health care system, and the perceived cold and impersonal nature of patient care all have been identified as key factors that discourage the use of health care services by immigrant population groups (e.g., see Chavez et al., 1992; Chavez & Torres, 1994; Huff & Kline, 1999; Scrimshaw & Souza, 1982). Thus, to adequately address the health needs of cultural subgroups requires that health care providers achieve a degree of *cultural competence*, i.e., the capacity of health care providers to “understand and plan for the health needs of a specific cultural subgroup” (Huff & Kline, 1999, p. 141). To this end, cultural consensus theory is a useful tool in achieving cultural competence by assessing and identifying health-related cultural knowledge and understanding of particular subpopulations.

Notes

1. “Programa De Reforma Del Sector Salud.” In: *Propuestas Para El Avance Del Sistema De Salud En Mexico*. Fundación Mexicana Para La Salud, 1994.
2. Pseudonyms are used throughout the paper to protect the identity of the respondents.

References

- Bernard, R. (1988). *Research methods in cultural anthropology*. Newbury Park: Sage Publications, Inc.
- Browner, C. H., & Sargent, C. (1990). Anthropology and studies of human reproduction. In T. Sargent & C. Sargent (Eds.), *Medical anthropology: Contemporary theory and method* (pp. 215–229). New York and London: Praeger Publishers.
- Bustamante, J. A. (1983). Maquiladoras: A new face of international capitalism on Mexico’s northern frontier. In J. Nash & M. P. Fernandez-Kelly (Eds.), *Women, men, and the international division of labor* (pp. 224–256). Albany: State University of New York Press.
- Chavez, L. R. (1986). Mexican immigration and health care: A political economy perspective. *Human Organization*, 45, 344–352.
- Chavez, L. R., Cornelius, W. A., & Jones, O. W. (1985). Mexican immigrants and the utilization of health services: the case of San Diego. *Social Science and Medicine*, 20, 93–102.

- Chavez, L. R., Cornelius, W. A., & Jones, O. W. (1986). Utilization of health services by Mexican immigrant women in San Diego. *Women and Health*, 11, 3–20.
- Chavez, L. R., Flores, E., & Lopez-Garza, Marta. (1992). Undocumented Latin American immigrants and U.S. health services: An approach to a political economy of utilization. *Medical Anthropology Quarterly*, 6(1), 6–26.
- Chavez, L. R., & Torres, V. M. (1994). The political economy of Latino Health. In T. Weaver (Ed.), *The anthropology of Hispanic groups in the United States* (pp. 226–243). Houston: Arte Publico Press.
- Fairbanks, J. (1997). Health care access and utilization on the U.S.–Mexico Border. In J. Bruhn & J. Brandon (Eds.), *Border health: Challenges for the United States and Mexico* (pp. 73–86). New York and London: Garland Publishing, Inc.
- Fernandez-Kelly, M. P. (1983). *For we are sold: Women and industry in Mexico's frontier*. Albany: State University of New York Press.
- Garro, L. (1987). Decision-making models of treatment choice. In S. McHugh & M. Vallis (Eds.), *Illness behavior* (pp. 173–188). New York: Plenum Publishing Corporation.
- Hubbell, F. A., Waitzkin, H., Mishra, S. I., Dombink, J., & Chavez, L. R. (1991). Access to medical care for documented and undocumented Latinos in a Southern California County. *Western Journal of Medicine*, 154(4), 575–583.
- Huff, R. M., & Kline, M. V. (1999). *Promoting health in multicultural populations: A handbook for practitioners*. Thousand Oaks: Sage Publications.
- Núcleo Regional para el Desarrollo de Sistemas de Salud (NUREDESS). (1992). *Utilización deservicios de salud por parte de las mujeres en edad fértil*. Tijuana, Baja California: González Block, M.A., & Zapata, O.
- Núcleo Regional para el Desarrollo de Sistemas de Salud (NUREDESS). (1993). *Maquiladora workers' reproductive health in the Northern Border of Mexico: Research and development to improve health promotion and service access through modern participatory strategies. A proposal submitted to Pew Charitable Trusts' Neighbors' Program*. Tijuana, Baja California: González Block, M.A.
- Pelto, P. J., & Pelto, G. H. (1997). Studying knowledge, culture, and behavior in applied medical anthropology. *Medical Anthropology Quarterly*, 11(2), 147–163.
- Quinn, N., & Holland, D. (1987). Culture and cognition. In D. Holland & N. Quinn (Eds.), *Cultural models in language and thought* (pp. 3–40). Cambridge, NY: Cambridge University Press.
- Romney, A. K., Weller, S., & Batchelder, W. H. (1986). Culture as consensus: A theory of culture and informant accuracy. *American Anthropologist*, 88(2), 313–337.
- Rumbaut, R., Chavez, L. R., Moser, R. J., Pickwell, S. M., & Wishik, S. M. (1988). The politics of migrant health care: A comparative study of Mexican immigrants and Indochinese refugees in San Diego. *Research in the sociology of medicine* (Vol. 7, pp. 143–202). Greenwich, Connecticut: JAI Press, Inc.
- Sargent, C., & Rawlins, J. (1991). Factors influencing prenatal care among low-income Jamaican women. *Human Organization*, 50(2), 179–187.
- Scrimshaw, S., & Souza, R. (1982). Recognizing active labor: A test of a decision-making guide for pregnant women. *Social Science and Medicine*, 16, 1473–1482.
- Weller, S., & Romney, K. (1988). *Systematic data collection*. Newbury Park: Sage Publications.
- Young, J. (1980). A model of illness treatment decisions in Tarascan town. *American Ethnologist*, 7, 106–131.
- Young, J., & Garro, L. (1982). Variation in the choice of treatment in two Mexican communities. *Social Science and Medicine*, 16, 1453–1465.
- Zambrana, R., Scrimshaw, S. C., & Dunkel-Schetter, C. (1991). Issues in Latino Women's health: Myths and challenges. In S. Ruzek, V. Oleson, & A. Clarke (Eds.), *Women's health: The dynamics of diversity*. Philadelphia: Temple University.