Access and Attitudes:
A Qualitative Approach to Understanding Mexican Immigrants’
Health-seeking Behaviors and Interest in Health Insurance

By

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Why do Mexican Immigrants Return to Mexico for Health Care?  
A Systematic Review of Qualitative Evidence

Abstract

**Background:** Mexican immigrants to the United States (U.S.) have poorer access to and utilization of health care than native citizens. Lack of insurance, low education, low socioeconomic status, limited English-proficiency and lack of legal documentation are among the barriers to receiving health care for this population. One unique strategy used by Mexican immigrants to circumvent these barriers is to seek health care in Mexico.

**Objectives:** To identify and summarize the available qualitative studies describing immigrants’ reasons for returning to Mexico for care.

**Search strategy:** We searched the PubMed and Web of Science databases from inception through February, 2012 to identify relevant publications. Reference lists from articles meeting inclusion criteria were hand-searched to identify additional relevant publications missed by the database searches.

**Selection criteria:** Our inclusion criteria required that the studies: 1) target Mexican immigrants living in the United States 2) address reasons for medical returns to Mexico and 3) employ in-depth, qualitative methods to answer the study question. Only publications with English-language full-text were considered for review.

**Data Abstraction and Quality Assessment:** One reviewer abstracted data and assessed the quality of each study. Data collected included study aims, design, sample, findings, and strengths and
weaknesses. Quality was assigned using criteria established by the National Critical Appraisal Skills Programme (CASP) for Qualitative Methodologies.

Main results: The initial search identified 563 articles, 19 of which underwent full-text readings. Three articles met inclusion criteria for review. Two were given fair quality ratings and one was rated as good quality. All three of the studies reviewed employed in-depth, semi-structured interviews to explore the reasons that immigrants return to Mexico for care. Two themes emerged consistently across the reviewed studies: Mexican immigrants often preferred the quality of care in Mexico and favored the lower cost of care across the border.

Authors' conclusions: There is a paucity of qualitative research describing immigrant motives for seeking health care in Mexico. In addition, the studies reviewed only sampled immigrants living in California. Despite these limitations, consistencies in the findings of the three articles highlight reasons for border-crossing that are less-emphasized in the quantitative studies. Qualitative data points to cultural competence, perceived quality of care and accessibility of physicians as important motivators of border-crossing behavior.
INTRODUCTION

Mexican immigrants to the United States (U.S.) have poorer access to and utilization of health care than native citizens. Approximately 34.4% of Mexicans in the U.S. are uninsured, slightly higher than the 32.4% rate for all Hispanics, and much higher than the 13.6% rate for non-Hispanic individuals (1,2). The disparities are more pronounced for foreign-born Mexicans, a group shown to have 55% lower odds of having a regular doctor as native-born non-Hispanic whites after adjusting for socioeconomic and health-related factors (3).

The barriers to health utilization for Mexican immigrants are manifold. While lack of health insurance is perhaps the foremost of these barriers, there are several other obstacles that prevent this vulnerable population from accessing care. Mexican immigrants living in the U.S. have low education and high poverty rates compared to national averages (4). Undocumented immigration status prohibits many from receiving public assistance from Medicaid or Medicare. Fear of deportation also deters health-seeking behavior. In addition to these socioeconomic and legal factors, individuals are also hindered by cultural and linguistic barriers (5). Latinos report less trust in physicians and more discrimination by the health care system than other ethnic groups (6).

One unique strategy used by Mexican immigrants to circumvent such barriers is to seek health care in Mexico. Lack of insurance, high cost of care in U.S., delay seeking care, proximity to Mexico, and limited English proficiency have been identified as predictors of border-crossing behavior (7-10). Discharge data indicate that elective procedures and treatment of diabetes complications are common reasons that migrants present to Mexican hospitals (11).
While a large body of demographic, socioeconomic, and migration data have been used to suggest predictors of medical returns, research investigating personal motives for border-crossing is less prominent in the literature. The purpose of this review is to identify and summarize the available qualitative studies describing immigrants’ reasons for returning to Mexico for care.

METHODS

Search strategy

One author (CZ) searched Pub Med and Web of Science databases from inception through February, 2012 to identify relevant publications. The following MeSH terms and search strategy was used in Pub Med: (mexico OR mexican americans OR latino OR Hispanic) AND (accessibility of health services OR health services/utilization OR delivery of health care OR health services) AND (travel OR medical tourism OR emigrants and immigrants OR migrants). Web of Science was searched for key terms “immigrant,” “health,” and “Mexico.” The search was limited to English-language articles only. Reference lists from articles meeting inclusion criteria were hand-searched to identify additional relevant publications missed by the database searches.

Article selection

The titles of studies were reviewed to determine relevance to the study question. Only original research articles published in peer-reviewed journals were considered. To be included, studies had to: 1) target Mexican immigrants living in the United States 2) address reasons for medical returns to Mexico and 3) employ in-depth, qualitative methods to answer the study
question. There is some debate about whether survey and questionnaire designs should be considered qualitative methods. While these designs may include open-ended items, participant responses are often limited by time and structure constraints. As such, studies using only survey or questionnaire data were excluded from this analysis. Studies examining medical returns to countries other than Mexico were excluded. Only publications with English-language full text were considered for review.

Data extraction

Each included study was analyzed by one author (CZ). Relevant study characteristics were abstracted into an evidence table to aid in study comparison and quality assessment. Characteristics incorporated in the table included study aims, design, sample, findings, and strengths/weaknesses.

Quality assessment

Quality was assigned using criteria established by the National Critical Appraisal Skills Programme (CASP) for Qualitative Methodologies (12). The CASP assessment tool considers ten aspects of qualitative methodology: study aims, appropriateness of qualitative methodology, appropriate research design, sampling, data collection, reflexivity, ethical issues, data analysis, findings and value of the research. For reviewed publications, scores of 0 (poor), 0.5(fair), or 1(good) were assigned for each of the aforementioned quality variables. Scores were summed and a quality rating was reported out of ten possible points.

RESULTS
**Search Results**

After reviewing titles, 563 articles were excluded, and 64 abstracts were studied for relevance. A total of 19 articles underwent full text review. Of this number, 16 were excluded for the following reasons: use of survey design (n=8), did not address returns for medical purposes (n=4), not original research (n=3) and no English full-text available (n=1). A hand search of the reference lists of the three remaining studies identified no other additional articles meeting inclusion criteria (Figure 1).

**Study design and quality**

Of the three studies reviewed (13-15), two were given fair quality ratings and one was rated as good quality. All three of the studies reviewed employed in-depth, semi-structured interviews to explore the reasons that immigrants return to Mexico for care (Table I).

Bergmark et al.(13) used convenience sampling to solicit interviews with Mexican immigrants living in San Francisco Bay area (N=10), Mexicans in Michoacán, MX, who had formerly lived in the U.S. (N=25), and Mexican physicians in Michoacán (N=10). The biggest strength of this study is that it sampled a population of immigrants who lived far from the border, setting it apart from much literature on the topic which focuses on residents of border towns. Limits to this study were its small sample size and geographic isolation. In addition, participants queried were not actively seeking cross-border care. As such, the primary motive for crossing to Mexico was not always for health-related reasons. Some participants engaged in opportunistic use of the medical system while staying in Mexico for family or work-related reasons. For these weaknesses and several others (Table II), the Bergmark et al study was given a quality rating of fair (6.5).
Horton and Cole (14) used convenience sampling to obtain interviews with 24 California residents (25 Mexican immigrants, 9 Mexican Americans) seeking care at Tijuana border hospital. Unlike the Bergmark et al., this study sought individuals actively seeking cross-border care; all participants were recruited in the waiting room of a border hospital. However, a small sample size, obscure description of data analysis, and failure to disclose limitations (Table III) contributed to the assignment of a fair quality rating (7.0).

The most methodologically sound of the three studies, Ransford et al. (15) consulted a random household sampling of 96 Latinos in a Los Angeles neighborhood. One of the strengths of this study was the use of method triangulation; interviews with key informants (12 hometown association leaders in Latin America and 5 pastors of Latino churches in LA) were used to shape the topic guide given to participants. The large sample size and random selection methods were perhaps the greatest strengths of the study; however, only 43% of interviewees were of Mexican origin. In addition, the examination of reasons for returning to Mexico for care was only part of several key questions addressed in the interviews. As such, the topic may not have been discussed to the extent or detail to which it was addressed in the other studies. While the paper received a quality rating of good (8.0), the discussion of medical returns was not as thorough as in the other publications (Table IV).

Weakness common to all studies were failure to discuss whether sample size was sufficient to achieve theoretical saturation of the data. Additionally, no studies reported on reflexivity during the development and execution of the research. Reflexivity requires that the relationship between the researcher and the participants be explicitly considered, particularly as a source of potential bias and influence during formulation of research questions and data collection (12).
Common themes

While the sample characteristics of each study varied considerably, there was significant overlap in reasons for returning to Mexico for care. Two themes emerged consistently across the reviewed studies: Mexican immigrants often preferred the quality of care in Mexico and favored the lower cost of care across the border.

Quality of care

The perception of superior quality of care was emphasized as a prominent reason for medical returns in all three studies. Indeed, two of the studies (13, 14) reported that quality of care was as important as cost in influencing medical returns, while one study (15) proposed that quality was more important than cost in motivating border-crossing for care. Higher quality was attributed to several characteristics, the most redundant of which were superior effectiveness of treatments, a holistic culture of medicine in Mexico, and more accessible care. Perhaps the most consistent finding across the studies was the perception that medical treatments were more effective in Mexico. In each study, participants commented on the higher strengths of medications available in Mexico. Participants in the Bergmark et al. study noted that Mexican treatments provided superior symptom relief compared to those available in the U.S. (13) These sentiments were echoed by interviewees in the Horton and Cole study, who associated the low-potency therapies prescribed in the U.S. with physician apathy (14).

A robust theme that emerged in Ransford et al.’s work was the perception that Mexican physicians practiced more holistic medicine. Participants commented on the time invested by physicians to get to know the entire person, not merely treat disease (15). This time and attention inspired patient confidence in the treatment process. Similarly, a recurring theme in Horton and Cole’s interviews was “the skill of the clinical hand;” that is, the perception that doctors in
Mexico spend more time examining patients, making them more effective diagnosticians. In contrast, interviewees reported American physicians relied on quick consultations, imaging tests, and referrals, which immigrants perceive as impersonal and sometimes inferior (14).

Finally, accessibility was an important part of perceived quality of care. Accessibility was defined variably by the studies. Accessibility was perceived as easier appointment scheduling and physician access (15), rapidity of diagnostic and therapeutic services (14), and lack of communication barriers (13). A recurring value across studies was the desire for rapid attention, which was often hindered in the U.S. by lengthy waiting times for appointment, difficulty obtaining referrals, and insurance plan protocols (14). These services were appreciated more by immigrants with legal documentation permitting cross-border travel.

Cost

Cost was also a prominent reason that immigrants to the U.S. sought treatment back in Mexico. Bergmark et al. reported that dental care was the most commonly cited reason to return. Surgery was another frequent reason for crossing; with procedures at highly-rated Mexican hospitals costing a fraction of the cost in U.S. hospitals (13). The theme of prohibitive care costs in the U.S. and the cost-savings found across the border was reiterated in the other studies. Of note, Horton and Cole observed that a significant fraction of immigrants with U.S. health insurance preferred border hospitals in Mexico (14).

DISCUSSION

There is a paucity of qualitative research describing immigrant motives for seeking health care in Mexico. The quality of the available studies is fair to good; however, rating qualitative studies poses challenges in itself. Guba and Lincoln propose that indicators of quantitative validity have analogues in qualitative research. A quantitative study may be judged on internal
validity and external validity; whereas corresponding qualitative criteria are credibility and transferability, respectively (16). The aim of qualitative research is to describe a particular phenomenon from the perspective of the participant. As such, the participant is best-suited to judge the credibility of the findings, not a third-party reader. The “transferability” criterion is also difficult to rate. The goal of qualitative research is not to be generalizable; however, the degree to which results may be “transferred,” or applied to another context, could be considered on a case by case basis, taking into account the assumptions that guided the research.

All of the studies reviewed sampled immigrants living in California. While distances from the border differed, there are likely characteristics of the Mexican population in California that are distinct from other states. In particular, it would be useful to examine attitudes in Texas, which shares the longest border with Mexico and has more border health care resources than California. In contrast, interviewing individuals living in high-migration states that do not share a border with Mexico could provide a unique and valuable perspective on medical returns. The risk of crossing the border may be much greater in a state further away; as such, the motives for journeying may be distinct from those proposed by the studies reviewed.

Notwithstanding such limitations, consistencies in the findings of the three articles highlight reasons for border-crossing that are less-emphasized in the quantitative studies. Medical returns are frequently characterized as a “pushing” of immigrants to Mexico due barriers to care in the U.S. However, qualitative data points to an equally compelling “pulling” force drawing immigrants back to Mexico for care. Whereas cost, insurance status and language barriers push migrants out of the U.S., cultural competence, perceived quality of care and accessibility of physicians pull individuals toward Mexico.
While immigrants perceive benefits to returning to Mexico, crossing the border for care is burdensome. Travel expenses, missed work and potential danger in border-crossing make the option hazardous. While the most effective strategies for improving access to care in the U.S. must involve immigration and insurance reform, barriers to care will persist if immigrants distrust the culture of medicine in the U.S. The findings of this review suggest that efforts to increase the accessibility and affordability of health care and promote a bilingual, culturally competent medical workforce may improve immigrant health utilization in the U.S.
REFERENCES


Figure 1. Flow Chart

Initial MeSH/keyword search:
443 PUBMED titles
184 Web of Science titles

563 titles excluded
- Not relevant

64 abstracts reviewed

45 abstracts excluded
- 31 did not address question of interest
- 14 opinion/editorial

19 full-text readings

16 texts excluded
- 8 survey design
- 4 did not address question of interest
- 3 not original research
- 1 full text Spanish only

3 articles identified

Hand search of reference lists:
0 articles meeting inclusion criteria

3 articles selected for review
<table>
<thead>
<tr>
<th>Reference and Quality Rating</th>
<th>Study aims</th>
<th>Design</th>
<th>Sample</th>
<th>Findings</th>
<th>(+)Strengths / (-) Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bergmark et al., 2010</td>
<td>Study aims</td>
<td>Design</td>
<td>Sample</td>
<td>Findings</td>
<td>(+)Examined returns in immigrants living far from border (-) Small sample, geographical isolation (-) Motive for crossing border not always primarily medical (opportunistic visits to doctors during returns)</td>
</tr>
<tr>
<td>QR = 6.5 Fair</td>
<td></td>
<td>Cross-sectional convenience samples of Mexican immigrants living in San Francisco Bay area (N=10) Mexicans in Michoacán, MX, who had formerly lived in the U.S. (N=25) and Mexican physicians in Michoacán (N=10)</td>
<td>Identified 3 medically-related reasons for returning to Mexico: (1) unsuccessful treatment in U.S. (2) cost of care in U.S. and (3) preference for care in Mexico</td>
<td>(+) Small sample, geographical isolation (-) Motive for crossing border not always primarily medical (opportunistic visits to doctors during returns)</td>
<td></td>
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<tr>
<td>Horton and Cole 2011</td>
<td>To draw upon narratives of Mexican immigrants to present an emic account of Latinos’ motivations for medical returns.</td>
<td>Convenience sample of 24 Latino California residents (25 Mexican immigrants, 9 Mexican Americans) seeking care at Tijuana border hospital</td>
<td>Culture of medicine practiced in MX border clinics (rapidity of service, personal attention, effective medications, clinical discretion) equally as important factor as convenience, cost and insurance in influencing medical returns</td>
<td>(+) Motive for crossing border primarily medical (+) Identifies contrasting “cultures of care” as motivating returns (-) Small sample, sampled only individuals living close to border</td>
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<tr>
<td>QR = 7 Fair</td>
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<tr>
<td>Ransford et al., 2010</td>
<td>Three central ?s: (1) What are perceived barriers to health care in U.S.? (2) To what extent are Latinos using cultural alternatives (including seeking care in Mexico) (3) How does religiosity influence health seeking?</td>
<td>Purposeful sampling of 12 hometown assoc leaders from Latin America and 5 pastors from Latino churches in CA. Random household/block selection of 96 Latinos in LA neighborhood (43% Mexican)</td>
<td>Value quality of care in MX – more holistic approach than U.S. Other reasons for seeking care in Mexico were easier access to physicians, cost savings and higher doses of medications available.</td>
<td>(+) Large sample size (+) Attempted methods of random selection (-) Medical returns not the focus of the paper (-) 43% of interviewees of Mexican origin</td>
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<tr>
<td>QR: 8.0 Good</td>
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<td>Table II. Quality Assessment: Bergmark et al.</td>
<td>Notes (+/-)</td>
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<td><strong>Bergmark et al. 2008</strong></td>
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<tr>
<td>Clear statement of the aims of research?</td>
<td>Yes.</td>
<td>1/1</td>
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<tr>
<td>Is a qualitative methodology appropriate?</td>
<td>Yes.</td>
<td>1/1</td>
<td></td>
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<tr>
<td><strong>Research design</strong></td>
<td>(+) Semi-structured, Spanish language qualitative interviews. (-) No research design justification by authors, no discussion of how authors decided which methods to use.</td>
<td>0.5/1</td>
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<tr>
<td>Was the research design appropriate to address the aims of the research?</td>
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<td><strong>Sampling</strong></td>
<td>(+) Cross-sectional convenience sample. Purposeful sampling, attempted diversification within sample. Explanation of how participants were selected, why this sample was appropriate and geographically relevant. Attempted to justify shortcomings with recruitment (yield&lt;30%). (-) Sampling until theoretical saturation reached not discussed. Geographically limited.</td>
<td>0.5/1</td>
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<td>Was the recruitment strategy appropriate to the aims of the research?</td>
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<tr>
<td><strong>Data Collection</strong></td>
<td>(+) Setting for data collection justified. Clear how data were collected. Data audio-recorded and transcribed. Interview guide used. (-) No justification of methods chosen. Structure of interview guide not explicit. No discussion of saturation of data.</td>
<td>0.5/1</td>
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<td>Were the data collected in a way that addressed the research issue?</td>
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<td><strong>Reflexivity</strong></td>
<td>(+) Interview questions developed by PI, reviewed by 2 professors. Pilot-tested. (-) No mention of whether researcher critically examined potential bias/influence during formulation of research question, data collection, sample recruitment.</td>
<td>0/1</td>
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<tr>
<td>Has the relationship between the researcher and participants been adequately considered?</td>
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<tr>
<td><strong>Ethical Issues</strong></td>
<td>(+) Oral consent obtained. Approval granted by IRB. Monetary incentives for participation. (-) No details of how the research was explained to participants. Unclear if interviews conducted in private settings. No mention of how confidentiality of data maintained during study.</td>
<td>0.5/1</td>
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<td>Have ethical issues been taken into consideration?</td>
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<tr>
<td><strong>Data Analysis</strong></td>
<td>(+) NVivo software used. First and second pass coding. Discussion of how themes emerged. Codes developed and reviewed with 2 research experts. (-) Unclear who, how many coded data. No mention of how inconsistencies resolved.</td>
<td>1/1</td>
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<tr>
<td>Was the data analysis sufficiently rigorous?</td>
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<td><strong>Findings</strong></td>
<td>(+) Three main medically-related reasons for returning to Mexico identified. Triangulation of findings. Representative quotations. Discussed contradictory evidence (-) Distinction between receiving care while in Mexico (opportunism) and actively seeking care in Mexico not clear.</td>
<td>1/1</td>
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<td>Is there a clear statement of findings?</td>
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<tr>
<td><strong>Value of Research</strong></td>
<td>(+) Discuss relevance and context of findings. Identify several areas for future research. Acknowledge limitations (-) Transferability of findings</td>
<td>0.5/1</td>
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<td>How valuable is the research?</td>
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Quality Rating Total: **6.5/10**
<table>
<thead>
<tr>
<th>Horton and Cole 2011</th>
<th>Notes (+/-)</th>
<th>Rating</th>
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<tbody>
<tr>
<td>Clear statement of the aims of research?</td>
<td>Yes.</td>
<td>1/1</td>
</tr>
<tr>
<td>Is a qualitative methodology appropriate?</td>
<td>Yes.</td>
<td>1/1</td>
</tr>
<tr>
<td><strong>Research design</strong></td>
<td>(+)Semi-structured, Spanish and English language qualitative interviews. Authors justify research design.</td>
<td>1/1</td>
</tr>
<tr>
<td><strong>Sampling</strong></td>
<td>(+)Convenience sample from hospital waiting room. Purposeful sampling. Explanation of how participants were selected, why this sample was appropriate. Discussed recruitment and yield (75%), accounted for those who did not participate. (-) No mention of sampling until theoretical saturation reached. All individuals sampled from same location. Smaller sample size (N=24).</td>
<td>0.5/1</td>
</tr>
<tr>
<td><strong>Data Collection</strong></td>
<td>(+) Setting for data collection justified. Clear how data were collected. Data audio-recorded and transcribed. Interview guide used, basic structure described. Methods justified. (-) No discussion of saturation of data.</td>
<td>1/1</td>
</tr>
<tr>
<td><strong>Reflexivity</strong></td>
<td>(+) Discloses use of deductive coding but also included inductive coding. (-) No description of who developed interview questions or if guide was pilot tested. No mention of whether researcher critically examined potential bias/influence during formulation of research question, data collection, sample recruitment.</td>
<td>0/1</td>
</tr>
<tr>
<td><strong>Ethical Issues</strong></td>
<td>(+) Consent obtained. Approval granted by IRB. Purpose of study made explicit to participants. No penalty for not participating. Privacy sought for interviews. (-) No mention of how confidentiality of data maintained during study.</td>
<td>1/1</td>
</tr>
<tr>
<td><strong>Data Analysis</strong></td>
<td>(+)First pass deductive codes and second pass inductive coding. 2 coders (authors). Present sufficient data to support analysis. (-) No mention of how inconsistencies resolved. Unclear how themes emerged from codes/data. No mention of how contradictory data taken into account.</td>
<td>0.50/1</td>
</tr>
<tr>
<td><strong>Findings</strong></td>
<td>(+) Adequate discussion of evidence for themes. Findings explicitly stated in introduction and again in the discussion. (-) Not much discussion of credibility of findings (triangulation, respondent validation, etc) No discussion of contradictory evidence.</td>
<td>0.5/1</td>
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<td><strong>Value of Research</strong></td>
<td>(+) Discussion of contribution study makes to existing knowledge, identify areas for future research. Discussed transferability of findings. (-) No mention of study limitations.</td>
<td>0.5/1</td>
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**Quality Rating Total:** 7/10
<table>
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<th>Table IV. Quality Assessment: Ransford et al.</th>
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<tr>
<td><strong>Ransford et al. 2010</strong></td>
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<td>Clear statement of the aims of research?</td>
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<td><strong>Data Collection</strong></td>
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<td>addressed the research issue?</td>
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<td><strong>Reflexivity</strong></td>
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<td>Has the relationship between the researcher</td>
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<td>and participants been adequately considered?</td>
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<td><strong>Ethical Issues</strong></td>
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<td>Have ethical issues been taken into</td>
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<td><strong>Data Analysis</strong></td>
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<td><strong>Value of Research</strong></td>
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<td>How valuable is the research?</td>
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| Quality Rating Total: 8.0 |
Mexican Immigrants’ Attitudes and Interest in Health Insurance: A Qualitative Descriptive Study

Abstract

*Background:* Mexican immigrants to the U.S. are nearly three times more likely to be without health insurance than non-Hispanic native citizens. To inform strategies to increase the number of insured within this population, we elicited immigrants’ understanding of health insurance and preferences for coverage.

*Methods:* Nine focus groups with Mexican immigrants were conducted across the State of North Carolina. Qualitative, descriptive methods were used to assess people’s understanding of health insurance, identify their perceived need for health insurance, describe perceived barriers to obtaining coverage, and prioritize the components of insurance that immigrants value most.

*Results:* Individuals have a basic understanding of health insurance and perceive it as necessary. Participants most valued insurance that would cover emergencies, make care affordable, and protect family members. Barriers to obtaining insurance included cost, concerns about immigration status discovery, and communication issues.

*Discussion:* Strategies that address immigrants’ preferences for and barriers to insurance should be considered.
INTRODUCTION

The number of Hispanics living in the United States (U.S.) surpassed 50 million in 2010, a 43% increase since 2000 (1). North Carolina has consistently ranked in the top ten U.S. states for Hispanic population growth, with a growth rate of nearly 400% from 1990-2000 and 111% from 2000-2010 (1, 2). About 60% of Hispanics living in North Carolina, as in the U.S. as a whole, are of Mexican origin (3).

Mexican immigrants to the U.S. have poorer access to and lower utilization of health care than native citizens. Approximately 34% of individuals of Mexican origin in the U.S. are uninsured, similar to the 32% rate for all Hispanics, and much higher than the 14% rate for non-Hispanics (4, 5).

There are several well-described barriers to insurance for this vulnerable population. Mexican immigrants living in the U.S. have less education and higher poverty rates than national averages (6). Undocumented immigrants are prohibited by federal law from receiving public assistance through Medicaid and Medicare. Fear of deportation also deters some parents from seeking publicly supported insurance and care for eligible children (7). Obtaining insurance is also hindered by cultural and linguistic barriers (8).

While these numbers describe the characteristics and epidemiology of the uninsured population, less is known about Mexican immigrants’ attitudes towards health insurance. To develop strategies for increasing the number of insured within this population, it is important to evaluate immigrants’ understanding of health insurance and preferences for coverage.

The purpose of this study was to assess interest in and preferences for health insurance coverage among Mexican immigrants in North Carolina. We conducted focus groups with Mexican immigrants across the State. This research uses qualitative, descriptive methods to
assess Mexican immigrants' understanding of health insurance, determine their perceived need for health insurance, describe perceived barriers to obtaining coverage, and prioritize their desired components of insurance plan coverage.

METHODS

Subjects and Recruitment

Nine focus groups of Mexican immigrants to North Carolina were conducted between December, 2007 and July, 2009. Inclusion criteria required participants to be 18 years or older and Mexican immigrants to the U.S. Individuals who had emigrated from Mexico to the U.S. at any point in time were recruited. There were no exclusions based on duration of stay in the U.S. or citizenship status.

The focus groups were chosen to represent the spectrum of Mexican immigrants in the State. Participants were sampled from the eastern (2 groups), central (4 groups), and western (3 groups) regions of the state (Figure 1). At each site, a community contact approached individuals to solicit participation. These contacts included a lay health advisor, community health center outreach coordinators, the coordinator of a farmworker health program, and staff from several Latino advocacy groups across the State. The settings of recruitment varied and included meetings of Latino advocacy and community groups, a Head Start Program, a farmworker outreach program, a community health center and a Latino health fair. This purposeful sampling included individuals employed in agriculture, poultry, housekeeping, restaurant and hotel industries, and homemakers. Five of the nine groups were divided by gender in an effort to increase the participants’ comfort with sharing their opinions, which could have been hindered in mixed gender groups. Finally, groups were chosen in areas with varying access to federally funded community health centers, where comprehensive primary care is provided at a sliding
scale fee which might affect perceptions of the necessity of health insurance. All meetings were conducted in Spanish with a bilingual facilitator previously unknown to the participants. The facilitator introduced herself to participants as they attended sessions and explained the purpose of the study. Group sessions were also attended by the bilingual principal investigator (SBD), who helped to clarify any questions during meetings.

Institutional Review Board approval was obtained from the University of North Carolina at Chapel Hill. Before each session, individuals were informed that no identifiable information would be shared, and participants were asked not to share information about the group’s discussion outside the group. Participants were also informed that discussions would be audio-recorded. The purpose and format of the focus group discussions were described and the facilitator obtained verbal informed consent from all participants. Dinner and babysitting service were provided free of charge.

Data Collection and Measures

Focus group facilitators used a 15 item topic guide to steer and promote discussion (Table I). This guide aimed at understanding: 1) the participants’ experiences with health care in the U.S.; 2) their understanding of and interest in health insurance; 3) perceived barriers to health insurance coverage; and 4) which components of health insurance were most important to them, such as coverage of primary care or emergency room care. For this final aim, the facilitator read aloud a list of potential components of health insurance coverage and participants wrote down the component(s) that were most important to them. These responses were collected and tabulated. The facilitator obtained verbal responses from low-literacy participants.

Each focus group session lasted approximately 90 minutes. Audiotapes were transcribed verbatim into Spanish and then translated into English by the bilingual focus group facilitators.
Analysis

English transcripts were entered as text into Microsoft Word and uploaded into Atlas.ti qualitative analysis software (version 6.2, Atlas.ti, Berlin). Transcripts were analyzed by one investigator (CZ) who identified common response issues and assigned descriptive codes to these issues using an editing analysis method (9). Select sections of transcripts were reread by a second investigator (SBD) who assigned the same codes while blinded to the original coding. There were negligible coding differences between the two coders.

RESULTS

Participants

The nine focus groups included between 6 and 15 adult Mexican immigrants each, with a total of 81 participants. Four of the groups were all female, two groups were all male, and the remaining three groups were mixed-gender. To protect privacy and encourage openness, participants were not required to share demographic information other than Mexican state of origin. Many participants did volunteer personal information, such as age, occupation and immigration status. In the six groups that provided age, participants spanned from 17 to 74 years. From voluntary disclosures, we know that all participants in at least two groups had full legal documentation or were in the process of obtaining permanent resident status. Individuals originated from Mexico City (Distrito Federal) and 17 different Mexican states from all regions of the country. Unique characteristics of each group are shown in Table II. Important issues and representative quotations are presented.

Experiences with the U.S. Health Care System
Most participants had accessed medical care at community health centers (CHCs), with generally positive experiences. Overall, participants were satisfied with availability of providers at CHCs, including those who could speak Spanish, and with affordability of care. Furthermore, two groups explicitly credited health outreach workers from CHCs with facilitating medical access. These “health navigators” sought workers out at places of employment, provided transportation to clinics, and helped to ensure continuity of care.

In contrast, participants who received care in the emergency department or urgent care settings largely viewed these interactions as negative. Complaints of high costs, long waiting times, and discriminatory treatment recurred in many discussions.

“… I had to take my husband [to the ER] for an allergy and we had to wait a long time, from 8 am to 3 pm. While I was taking a nap, they took an X-ray and just for that we were charged $ 2,300!...For that price, I should have taken my nap in a luxury hotel! And the truth is, you can’t afford the luxury of emergency services because they are too expensive.”

“I’ve also heard this from my friends: You go to the hospital with pain and they don’t give you the usual kind of treatment if you don’t have ‘papers,’ – they only give you something to calm the pain momentarily. That’s happening a lot now.”

**Understanding of Health Insurance**

Overall, participants understood fundamental concepts of health insurance coverage. In all but one of the groups, participants were able to describe several basic elements of insurance policies, such as co-pays, coverage of only certain medical services, and employer-sponsored insurance. Participants frequently noted that some health insurance plans were more comprehensive than others.

“It’s like car insurance – it only covers certain things!”
Most groups commented the comparatively lower cost of obtaining health insurance through an employer. However, even participants offered insurance through an employer sometimes found the policies unaffordable.

“If you are working in a company, insurance costs you less, but if you stop working and want to pay on your own, then it is more expensive.”

“Where I work I could get insurance, but one needs to pay, and I, as head of the family, prefer to save this little bit for other needs.”

In a few groups, participants with higher education levels demonstrated more nuanced comprehension of health insurance. In these discussions, participants navigated well the complexities of deductibles, premiums, catastrophic coverage.

“You have to recognize that we are in a country where, unfortunately, medicine is quite expensive. It is very important as a citizen or resident of the U.S. to have insurance. Without health insurance, you could pay up to $10,000 or more for one day in the hospital. But if you have insurance…even though you have to pay your monthly premiums and your deductible, it is much less than paying $40,000 for the four days that you were hospitalized.”

In contrast, none of the members of one group (Asheville) were able to answer the facilitator’s broad question, “What is health insurance?” A few participants in other groups confused health insurance with life insurance or worker’s compensation. Furthermore, a few participants in several groups assumed that most health insurance plans always included dental or eye care.

**Necessity of Health Insurance**
When participants were asked why someone might need health insurance, five main issues emerged. Participants described the importance of insurance to cover emergencies, to make medical care affordable, to improve access to physicians, to provide for family members and to promote emotional well-being.

*Emergency care*

There was general agreement within all groups that insurance was most needed to cover serious unanticipated illnesses. Participants mentioned the severity of illness and the high cost of acute care when justifying the need for this coverage.

“You have to go to the emergency room when you are seriously ill, that’s when you really need to see a doctor.”

The provision of insurance to cover preventive medical services rarely came up in the discussion. In response to the facilitator asking why an individual would *not* need health insurance, one respondent said, “only if they never get sick!” When participants mentioned seeking attention from a primary care provider, it was for the purpose of treating chronic or acute illness, not for disease prevention.

*Cost*

Health insurance was perceived as necessary to shield families from the high cost of care in the U.S. Participants were aware of how quickly health costs could escalate for families and many had witnessed or experienced financial devastation wrought by medical bills.
“I have seen people here who have saved money for years, but when their children became ill, they lost all of their savings…If someone does not have health insurance and gets sick here in the U.S., well, there go all of their savings.”

Many described instances of deferring seeking medical attention due to prohibitive fees. This postponement of care had disastrous financial consequences for some participants, who described the high costs of receiving hospital care for preventable exacerbations of chronic illnesses.

Access

The perception that the insured had much better access to physicians than the uninsured was noted across all groups. Shorter waiting time for scheduling appointments was a principal mentioned component of improved access. As one recently insured participant observed, “health insurance is very necessary because when you have insurance, you are seen more quickly in most places.” Others remarked that health insurance was essential because many providers did not accept uninsured patients.

For those without Social Security numbers, health insurance cards granted access to care that they had previously avoided. Several participants noted that if they provided proof of health insurance when seeking care, they would not be asked for a Social Security number, which would reveal their documentation status.

“In the case of a medical emergency, they also start asking you a bunch of questions about your social security number, and that is when you really have problems. If you have insurance, it’s better.”

Family
In general, participants prioritized health insurance for family members above personal coverage. The need of health insurance for children was particularly emphasized, with several participants noting that the fear of disclosing immigration status and the lack of financial resources prevented them from seeking care for their children.

“[Health insurance] is very necessary because there are people who have sick children… and sometimes they do not take them to the doctor because they will have to pay.”

The need for insurance to cover family members was especially salient in the all-male groups. In one group of men, there was general consensus that health insurance was not as important for adult men, because they perceived themselves as healthier than women or children.

“I think about my wife and daughter…about what could happen to them if they get sick and I don’t have the money needed to help them. This is a situation where insurance is necessary…When you’re a young man, you almost never get sick…but having a family insurance plan is good for the family.”

**Emotional well-being**

Several participants remarked that health insurance was important for promoting emotional well-being. Fear of illness and the inability to pay for care was a source of considerable anxiety among those without insurance. The few participants who did have insurance commented on the immense relief that accompanied the coverage.

“When I think about insurance, the word ‘payment’ comes to mind, but ‘peace of mind’ also comes to mind. I know that when I have a health problem I am financially covered if I have health insurance…When I don’t have health insurance, I feel bad because I’m afraid of getting sick.”
Barriers to Insurance Coverage

Commonly expressed barriers to seeking health insurance were cost, immigration status, and communication issues. Just as readily as participants acknowledged the necessity of health insurance to reduce medical expenses, they also remarked that the cost of insurance plans was prohibitively high. For many, other competing financial needs put health insurance out of reach.

“I know that it’s not much, but in order to pay $60 for every member of the family, you have to choose between paying for insurance or eating and paying the rent.”

Many individuals remarked that without legal documentation, they were ineligible to receive affordable health insurance coverage.

“Health insurance is very beneficial, because it covers a percentage of the doctor’s visit and medications. We can’t enjoy these benefits because we don’t have documentation, and we don’t earn enough to pay for insurance; insurance is very expensive.”

Finally, several participants cited frustrations in communicating with health insurance companies as obstacles to obtaining coverage. For some, the poor availability of Spanish-speaking staff made the process too difficult. Others complained that the Spanish-speaking personnel answering phones were poorly equipped to answer specific questions about policies:

“The majority of insurance companies do not have this service [Spanish-speaking staff]. Also, often when they have the service, it’s very limited. Only on certain days or at certain times.”

Most Desirable Components of Health Insurance
Participants in each group selected what they perceived as the most desirable components of health insurance coverage (Table III). In general, emergency, primary and dental care were prioritized over hospital care and medication coverage. The male groups tended to prefer emergency, primary, and specialty care, whereas the female and mixed groups tended to have a broader range of desired components of health insurance. Overall, primary care was less desired by the groups who already had access to affordable care at community health centers.

DISCUSSION

The results of this study indicate that Mexican immigrants in North Carolina have a basic understanding of health insurance and perceive a need for coverage. Our findings suggest that insurance plans that offset the cost of emergency care services would be most desirable to this population. Other valued insurance characteristics include affordability and family coverage. Despite the desire for health insurance, the cost of purchasing plans was an insurmountable barrier for many. Participants in this study did not prioritize preventive care, consistent with a national trend of underutilization of primary and preventive care for Mexican immigrants (10-13).

Of note, this study population was unique in that most individuals had access to primary care at Community Health Centers, and expressed satisfaction with this care. Despite this access, participants commonly described delaying seeking care until the severity of the condition warranted emergency attention. In general, participants expressed dissatisfaction with the high cost and quality of care provided by emergency departments.
We acknowledge several limitations of this study. Our findings are limited to Mexican immigrants living in North Carolina, and as such may not directly apply to other immigrant populations or Mexican immigrants in other states. Additionally, in the selection of our groups, we only considered gender and no other demographic variables in order to protect participant confidentiality. As such, we cannot compare differences in group responses by occupation, age, income or other descriptive characteristics. While our findings summarize perceptions of health insurance and barriers to coverage, future research is needed to more fully address behaviors discussed by participants, such as deferring seeking medical attention and putting family needs above self.

Our findings suggest that providing high deductible plans with emergency care coverage and low premiums may be one way to meet the top health insurance priorities of Mexican immigrants. Unfortunately, these plans would not fulfill this population’s desire for coverage of primary or dental care. Making routine care geographically accessible and affordable through federally-supported community health centers also may help to meet this population’s need for primary care. While increasing access to these centers could reduce preventable emergency room visits (14-15), this option would not meet the need for emergency care. One way to respond to the need for affordable acute care would be to expand the hours of operation and spectrum of care offered by community health centers.

Local strategies may be useful for overcoming access barriers. Hispanic lay health workers, or promotoras de salud, could seek out individuals with health needs and aid them in navigating available health resources. To date, community promotora programs have been particularly successful at increasing appropriate screening practices in adults and promoting immunizations in children (16-18). Programs designed to educate communities about affordable
primary care and avoidance of inappropriate use of the emergency department have the potential to improve access and decrease costs for undocumented immigrants. More research is needed to determine the effectiveness of such programs.

Another strategy used by Mexican immigrants to circumvent access barriers in the U.S. is to seek lower-cost health care in Mexico (19-22). Binational insurance options are emerging as another possible solution, with several private insurance companies currently offering such coverage in California (23). Though these binational plans may be attractive to immigrants living near Mexico, cross-border travel is not feasible for immigrants who live in states far from the Mexican border and those without legal documentation. Large advances in access to health care for undocumented individuals will be difficult to achieve without immigration reform.

In the Patient Protection and Affordable Care Act, low-income citizens will gain access to health insurance through public and private sector programs, but undocumented immigrants will be excluded from the provisions (24). By 2019, when the Act is to be fully in effect, this vulnerable population will comprise 25% of the 19 million non-elderly uninsured (25). As this generally young and healthy population ages, their health care needs will increase. Until an affordable insurance option emerges, much of their needs will likely go unmet.
REFERENCES


Figure 1. Locations of Focus Groups in North Carolina (26)

1: Asheville, Buncombe County
2: Hendersonville, Henderson County
3: Boone, Watauga County
4: Siler City, Chatham County
5: Carrboro, Orange County
6: Angier, Harnett County
7: Raleigh, Wake County
8: Kinston, Lenoir County
9: Greenville, Pitt County
| Experiences in U.S. Health Care System | Where do you receive your healthcare?  
| | Why do you attend that clinic or hospital?  
| | How do you communicate with your doctor/medical staff?  
| | Does the medical staff understand and respect Mexicans/Hispanics?  
| Understanding and Interest in Health Insurance | What does health insurance mean to you?  
| | Is health insurance necessary?  
| | Do you think it is important for you to have health insurance?  
| Desired Components of Health Insurance Coverage | If you were to buy a health insurance plan which option(s) would be attractive to you? Choose any of the following you would want if you had health insurance. Remember that the more you choose, the more expensive the plan will be:  
| | 1) Primary Care  
| | 2) Specialty Care  
| | 3) Emergency Room  
| | 4) Hospitalization  
| | 5) Medications  
<p>| | 6) Dental |</p>
<table>
<thead>
<tr>
<th>Site</th>
<th>Number of Participants</th>
<th>Participant Gender</th>
<th>Unique characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asheville</td>
<td>12</td>
<td>Mixed gender</td>
<td>Ages 18-54. Employed in farm work, housekeeping, restaurant and hotel industries.</td>
</tr>
<tr>
<td>Hendersonville</td>
<td>10</td>
<td>All male</td>
<td>Mostly young males (9 participants under 28 years, 1 participant 74 years). Farm workers without H2A visas. Low literacy group</td>
</tr>
<tr>
<td>Boone</td>
<td>7</td>
<td>All male</td>
<td>Ages 19-58, all with H2A visas for farm work. Had spent between 3 and 8 years returning to same farms under H2A visa program.</td>
</tr>
<tr>
<td>Siler City</td>
<td>9</td>
<td>All female</td>
<td>Ages 32-56, originating from wide array of Mexican states. Employed in local poultry industry and housekeeping.</td>
</tr>
<tr>
<td>Carrboro</td>
<td>7</td>
<td>All female</td>
<td>Ages 31-43, originating from wide array of Mexican states. Most were mothers of young children. Three participants with legal documentation, four in process of receiving legal documentation.</td>
</tr>
<tr>
<td>Angier</td>
<td>6</td>
<td>All female</td>
<td>Ages 24-45, most were mothers of young children.</td>
</tr>
<tr>
<td>Raleigh</td>
<td>8</td>
<td>All female</td>
<td>All participants had full legal documentation, originating from wide variety of Mexican states. Only group to include several participants with health insurance. Most of participants had lived in U.S. for 10-40 years.</td>
</tr>
<tr>
<td>Kinston</td>
<td>11</td>
<td>Mixed gender</td>
<td>All participants originated from Mexican state of Veracruz. Majority employed in poultry industry.</td>
</tr>
<tr>
<td>Greenville</td>
<td>11</td>
<td>Mixed gender</td>
<td>Participants originated from wide variety of Mexican states.</td>
</tr>
</tbody>
</table>
Table III. Desired Components of Health Insurance; percentages of participants, by site *

<table>
<thead>
<tr>
<th>Site (N)</th>
<th>Percentage of Respondents in Group Desiring Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>ER</td>
<td>17</td>
</tr>
<tr>
<td>Primary Care</td>
<td>50</td>
</tr>
<tr>
<td>Specialty Care</td>
<td>25</td>
</tr>
<tr>
<td>Hospitalization</td>
<td>35</td>
</tr>
<tr>
<td>Dental</td>
<td>50</td>
</tr>
<tr>
<td>Medications</td>
<td>8</td>
</tr>
</tbody>
</table>

*These questions were not asked in the Siler City group.
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