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ORIGINAL PAPER

Cultural Perceptions and Negotiations Surrounding Sexual and Reproductive Health Among Migrant and Non-migrant Indigenous Mexican Women from Yucatán, Mexico

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Abstract Information regarding sexual and reproductive health of indigenous women from Mexican sending and US receiving communities is limited. This research aims to explore the perceptions of indigenous women from US migrant receiving and Mexican migrant sending communities regarding their sexual health experiences and reproductive health practices. From January to March 2012, two key informant interviews and 31 in-depth, semi-structured interviews were conducted among women ages 18–55 in Tunkás, Yucatán and Anaheim and Inglewood, California. Women reported challenges to obtaining routine reproductive clinical care, including access to care barriers and lack of perceived power over their own sexual health. This was further compounded by migration processes and deficiencies in health care delivery systems. Socio-cultural beliefs and gendered power dynamics influence sexual and reproductive health decisions and behaviors of migrant and non-migrant women. Findings underscore existing gender-based reproductive health norms and serve to inform future transnational research and public health education to improve the health of indigenous migrant and non-migrant women in the US and Mexico.

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Background

In the United States (US), Mexican-born migrants experience substantial health disparities, and are less likely to access and benefit from public health programs compared with other ethnic/racial groups [1, 2]. In Mexico and internationally, evidence indicates that migrant women and female spouses of migrants often experience elevated risk of negative sexual and reproductive health outcomes such as sexually transmitted infections (STIs) [3–5], as well as poor access to reproductive health information and care [6–8].

Compared to any other region of Mexico, the southern states, including Yucatán, exhibit some of the most pronounced and ongoing health disparities among vulnerable groups such as indigenous women and children [9, 10]. Inequities surrounding women's sexual health are particularly pronounced in resource limited and rural regions within Mexico, where negative reproductive health outcomes such as cervical cancer remain the second leading cause of mortality among women in the country [10].

To address poor health outcomes related to poverty and marginalization, especially in Mexico's rural regions, the Mexican government implemented the health program *Programa de Desarrollo Humano Oportunidades* (Program for Human Development Opportunities) in 1998, popularly known as *Oportunidades* [11, 12]. This program aims to increase levels of education, health status, and nutrition of low-income families. Eligible families participating in *Oportunidades* receive monthly payments, free or low cost health services and educational incentives in exchange for family member participation in government-sponsored

development programs, that includes routine sexual health care and family planning [13]. Early evaluation of the program indicates initial efficacy in improved educational attainment and reducing poverty [14], however, indigenous women living in rural regions continue to face multiple barriers to care. There are significant language and cultural differences between indigenous communities and existing federally sponsored health institutions. This limited capacity to provide culturally-appropriate care to indigenous populations often influences this population's health care utilization, beliefs and behaviors [15]. Indigenous populations in Mexico have higher rates of poverty, lower levels of education and poorer health status than non-indigenous Mexicans [16]. These inequities persist in the US, as indigenous migrants of Mexican origin are also marginalized by social status and employment conditions [17]. Health disparities among indigenous communities have been shaped by a complex history of political, social and health marginalization [18, 19]. These inequalities continue to influence health behaviors and access to health services in Yucatán today, while adding to the complexity of other health care barriers such as trust in governmental health care systems [19, 20]. The introductory paper in this series provides greater detail on key socio-cultural characteristics of this population that distinguish it from non-indigenous populations.

Ethnic, cultural and linguistic differences are often overlooked when describing health practices and understandings among Mexican women in context of international migration. Consequently, there is a tendency to generalize understandings and approaches to address health care issues among culturally distinct Mexican migrant groups [21]. Sexual and reproductive health beliefs and practices held by indigenous women from high migrant sending and receiving communities are poorly understood and represents a significant research gap. The current study aims to address this gap in research through qualitative inquiry with indigenous women from a migrant sending community in Mexico and migrants in their receiving communities in the US surrounding their sexual health care practices and experiences obtaining sexual and reproductive health care in Mexico and the US.

Theoretical/Conceptual Framework

Challenges to achieving sexual and reproductive health among women often stem from gender inequality and a lack of power and authority over their own health [22, 23]. We applied a modified framework of The Theory of Gender and Power [23, 24] to guide and contextualize findings related to the socio-cultural dimensions that shape perceptions and decision-making surrounding sexual health among migrant and non-migrant Mexican indigenous women.

This theoretical framework has been applied in previous studies to better understand sexual health through the sexually divided structures of power, labor and cathexis (socio-cultural norms) [24]. It has helped explain the broader issues that shape women's decisions and power over their own health at the individual and societal level. For the purposes of this study, we employed the three constructs of the Theory of Gender and Power (the structures of labor, power, and cathexis), as used by Wingood and DiClemente [24], to help guide and frame study findings with regard to women's health. These components were extended to include structural factors related to access to reproductive health care, gendered power dynamics that influence women's health and existing socio-cultural norms regarding women's sexual health.

Methods

Study Setting

Tunkás is small town located 70 miles east of Mérida, the capital of Yucatán. In Tunkás, 51.2 % of the 3,464 population is male [25]. Yucatán is a relatively new migrant sending state and migration from Tunkás usually takes place to the nearby tourist cities of Cancún and Playa del Carmen, or internationally to Inglewood and Anaheim in Southern California. Increasingly, more women are taking part as economic migrants themselves or to reunite with family who has moved to the US [26]. In Tunkás, there is one small community clinic staffed by two doctors and three nurses. The clinic has an operating room for performing simple procedures and delivering babies. All Tunkaseños are eligible to receive care regardless of ability to pay. Most patients qualify for a federally-sponsored medical insurance program such as *Seguro Popular* [27]. In the US, migrants and their families can seek care at local community clinics that provide free or sliding scale fee for service and as of this writing, regardless of documentation status.

As part of efforts to validate study findings and promote continued community engagement in research, in February 2013, members of our study team returned to Tunkás to provide a summary of study findings in the form of small town hall meetings to the Tunkaseño community and elicit their feedback on findings. Community feedback obtained during this visit proved invaluable to contextualize in-depth interviews presented in this study. Relevant community-member feedback is presented with our results to better contextualize study findings.

Data Collection

Between January and March 2012, we conducted 31 in-depth, semi-structured interviews with indigenous women in the migrant-sending community of Tunkás, Yucatán, México and two migrant-receiving communities in Orange County and Los Angeles County (Anaheim and Inglewood), California. In addition, we conducted key informant interviews with two nurses in the Tunkás clinic who work primarily on reproductive health. This study was nested within a larger mixed methods parent study among 650 participants in Tunkás and Southern California (n = 583 in Mexico; n = 67 in Orange County and Los Angeles County). In the US, participants were recruited for the current study using a modified snowball sampling methodology to reach potential interviewees based on referrals provided by persons interviewed in Tunkás or the US Participants were purposively selected to represent a diverse range in age, marital status and migration experiences (e.g., migrants vs. spouses of migrants; single vs. married). In-depth interviews were conducted in Spanish by four trained, female bilingual (Spanish/English) and bicultural student researchers of Mexican-origin. Researchers ensured that interview scheduling and locations were conducive to privacy and confidentiality of the participant. Interviews were re-scheduled for a future date or at a different location specified by the participant in occasions when this criterion could not be met. Each de-identified qualitative interview lasted approximately 30 min to 2 h and was audio-recorded and transcribed verbatim. Interview topics for this study were developed from previous research and literature review that highlighted disparities and gaps related to women's reproductive and sexual health in this population and region [6, 28–30]. These topics were then refined as respondent's narratives produced common themes in the initial part of this study, which then helped guide the development of interview questions. Interviews consisted of open-ended questions covering topics such as contraceptive use, spousal relationships and sexual health, access to sexual and reproductive health care services, and self-care (see Table 1). This study was reviewed and approved by the University of California, San Diego Human Research Protection Program and the State of Yucatán, México's *Sistema para el Desarrollo Integral de la Familia (DIF) del Estado de Yucatán* (System for the Integrated Development of the Family of the State of Yucatán).

Data Analysis

Interviews were transcribed verbatim and analyzed in Spanish by the bilingual and bicultural study authors. Data analyses employed an iterative process of 'open' coding to deductively analyze key themes in the women's narratives and explore how factors related to gender, power, and migration shape women's health and related sexual behaviors [31, 32]. We then inductively analyzed the emergent data through the lens of the Theory of Gender and Power to guide and further understand the influence of

Table 1 Selected in-depth interview questions

Selected interview questions	
Spanish	English
¿Cómo recibe su información sobre la salud? ¿Cómo recibe su información sobre los recursos relacionados con la salud reproductiva y sexual en su comunidad?	How do you receive health information? How do you receive information and resources related to reproductive and sexual health in your community?
¿Dónde acude para recibir atención para su salud sexual y reproductiva cuando lo necesita?	Where do you usually go to receive care for your sexual and reproductive health?
¿Qué tan fácil es acceder a los servicios de salud en su comunidad? ¿Con qué frecuencia recibe atención médica?	How easy is it to access health services in your community? How often do you receive routine care?
¿Nos puede platicar sobre su experiencia durante su última visita al centro de salud o proveedor de salud?	Can you describe you experience during your last visit to the health center or medical provider?
¿Cuáles son algunos de los obstáculos que usted ha pasado en cuanto el acceso a servicios de salud sexual y reproductiva en su comunidad?	What are some of the barriers you have encountered in accessing sexual and reproductive health in your community?
¿Cuáles son algunos de los facilitadores que pueda haber tenido en el acceso a la salud sexual y reproductiva en su comunidad?	What are some of the facilitators you have encountered in accessing sexual and reproductive health in your community?
¿Qué papel tiene la migración, ya sea por parte de usted o de su pareja, en su propia salud sexual y reproductiva?	Does migration, either of yourself or your spouse, play a role in your sexual and reproductive health? How?
¿Cómo se puede reducir el riesgo [si es que existe alguno] relacionado con la salud reproductiva (por ejemplo, la transmisión de enfermedades de transmisión sexual)?	How does one reduce risk (if any) associated with issues related to reproductive health (i.e., STI and STD transmission)?
¿Qué factores influyen en sus decisiones relacionadas con su cuidado personal?	What factors influence your personal decisions related to your own self-care?

gender and power on participants' sexual behaviors and access to sexual and reproductive health care.

Results

The average age of women interviewed in this study was 34 years and ages ranged from 18 to 55 years. Most women (85 %) were married and had at least one child by the age of 24 years. Almost one third of the sample had husbands who had migrated either domestically or internationally. We did not observe differences by age group surrounding sexual and reproductive health among women in this study, which may be attributed to the small sample size. We did, however, observe similarities in the narratives related to stages of life when a woman should access reproductive or sexual health care. Overall, women perceived that pregnant women and new mothers in particular should begin to access reproductive and sexual health services. Furthermore, women who had one or two children were viewed as more knowledgeable and "experienced" and therefore in less need to seek routine health services compared to women expecting their first child. These views tended to be held by women of all age groups in Yucatan and in US study samples and are described in the subsequent two sections.

Institutionalization of Gendered Norms Regarding Women's Sexual Health

The construction and reproduction of gendered and social cultural norms shape the expectations and the interactions between women and their health care delivery system both in the US and in Tunkás. These processes become normative and must therefore be evaluated within this framework. The perceived lack of power women have over their own health, under normative and cultural expectations, was reported in various instances by women in this study. In addition to spouses, male family members may also hold institutionally condoned power over women's own sexual and reproductive health, regardless of their consent. These gender structures thus perpetuate unbalanced gendered norms that affect women's ability to choose and make decisions within the context of institutions.

One example of this was described by a woman whose brother was given the power to authorize an invasive procedure on her while she was under the hospitals' care. As a result, she underwent hysteroscopic sterilization without her prior knowledge or consent.

> I didn't know that they were going to cut off my [fallopian] tubes….since I had had a lot of problems with my ovaries, my brother went to the hospital and told them it was better for them to do it [the procedure].

Structural institutions such as health care systems were reported by women to follow existing cultural norms, reinforcing the unequal gender power dynamics of women's sexual and reproductive health. As a result, some women described feeling a lack of control and decision making over their own health both at their home and in health care settings.

In addition to imbalances of power over sexual and reproductive health, cultural beliefs and expectations among women often shaped their perceptions regarding when women should seek reproductive health services. Cultural norms and expectations about related activities such as marriage and sexual activity were frequently imbedded within the narratives of the women in this study. For example, the beginning of an active sexual life was not typically regarded as a catalyst or motivator for Tunkaseña women to seek sexual or reproductive care services. Many participants reported never discussing sexual health until their first pregnancy. Only at this time did some women learn about pap smears and contraceptive options. Negotiations of these traditional social norms regarding family, sexuality and womanhood often determined when women felt it was acceptable to initiate health care seeking behavior. Most participants reported having their first woman's health check-up only after having their first child, which was when many recognized themselves as "women".

> Before you have children they can't do it [pap smear] to you. After you have kids they start doing it.

Some women also reported that their care seeking behavior was closely tied to pregnancy:

> When I went [to the doctor] it was because I was pregnant… I would go every month for whatever I needed. Everything was fine and since then [baby's birth] I haven't returned.

Understandings and conceptions of womanhood often determine women's related practices and health care seeking behaviors. While these notions may be understood within the larger socio-cultural framework in which women live, these beliefs may not always follow the recommended guidelines for women's health put forth by biomedical and health systems.

Barriers and Facilitators to Sexual and Reproductive Health Care and Information

Participants who lived in Tunkás (n = 22) frequently described barriers to accessing care at the local public

health clinic, including shortages in prescribed medications and medical staff, long wait times, limited numbers of available appointments, and privacy and confidentiality concerns. While not explicitly tied to migration status and gender roles, for women whose partners are migrants, these structural issues may play a role in women's decisions to seek preventive and timely sexual health care before a potential infection becomes problematic. For more complex health issues as well as medical technology not available in the local clinic, patients were often referred for health services in nearby cities, such as Izamal or Mérida, located 35 min and 2 h away, respectively. As women frequently explained:

> Sometimes they just have nothing there [local clinic], and you are prescribed medicines that are not available…
> They did my check-ups here [Tunkás], then they sent me to the maternity center in Mérida and there I had my boy.

Tunkaseña migrants living in the US (n = 9) explained that immigrant women lacking health insurance often rely on community-based clinics to address their health needs. Information regarding health insurance and women's health clinics is often shared and distributed by word of mouth within the migrant community. Most US participants reported membership with large healthcare maintenance organization (HMO) networks through their husbands' employment. For these women, healthcare access becomes gendered and dependent upon their male spouse's employment and migration status.

> You need to have insurance in order not to pay so much… here [US] it is a bit harder to go to the doctor and more expensive… he [husband] gets it [insurance premium] taken out from his paycheck and that is how I can go to the doctor.

For Tunkaseña women in Southern California who did not report having access to health insurance or belonging to an HMO, the nearby free or low cost community health center was frequently mentioned as their main source of care. While socioeconomic and immigration status may have played a role in health care utilization in Southern California, interviewers did not probe this issue, and women did not mention these topics when discussing potential barriers or facilitators to care. Southern California interviewees tended to focus on socio-cultural aspects and differences between countries when discussing access to health care.

Respondents in Tunkás identified the *Oportunidades* program as a valuable source of knowledge regarding sexual health, health promotion and services overall. However, information regarding culturally sensitive issues, such as women's sexual and reproductive health was less readily available or publicly promoted outside of the context of *Oportunidades*:

> They don't have health campaigns for those types of issues [sexual health] for women … mostly new and expecting mothers get check-ups at the clinic…
> Those women who are in the *Oportunidades* program go to a meeting each month and there they tell you everything [about sexual health].

Although the *Oportunidades* program has facilitated access for many under-resourced Mexican women, disparities in access remain prevalent. Some women mentioned interest in attending the health sessions, but voiced their disappointment in their inability due to perceived ineligibility. The exclusion of some women while empowering others who participated in the *Oportunidades* program may contribute to inequities in access to health information and services. This may be particularly the case among women with multiple competing priorities such as taking care of family members, traditionally part of women's duties, and who live in rural settings with limited health resources such as Tunkás.

> I don't go to the talks because they are only for the people who are eligible to enroll in *Oportunidades*.

While women in Tunkás frequently reported that *Oportunidades* is a valuable source of information, the clinic nurse participant believed that gendered norms still represent barriers for some women's access and utilization of reproductive care provided at the clinic. This is particularly important among women whose partners are migrants and who may return with sexually-transmitted infections. When asked about contraceptive use, pap smears, facilitators and barriers of care for women in her community, the clinic nurse mentioned husbands as being a barrier to care.

> Currently what most affects it [reproductive care access] are women's husbands, there's women who come asking for information behind their [husband's] back… many women don't come because of their husbands, they think that they're going to put themselves at risk if they start [family] planning.

In Tunkás, women who go to the clinic for services can expect to see neighbors, friends and community members in the waiting area. In the US, however, women described their clinic experiences visits as more individualized, solitary and less enjoyable. Tunkaseña women in the US described vastly different experiences accessing sexual and reproductive health care, in comparison to women living in Tunkás. As illustrated by a US participant:

> It's just…different here compared to there…In Tunkás you go [to the health center] and it's friendly, you see people you know and you chat with them while you wait, you dress up because you will see a lot of people…here [United States] well, it's cold…you go alone and wait…you come back alone…it's just a different experience, I like it more in Tunkás.

Although clinic experiences in Tunkás were sometimes described as "friendlier", lack of patient confidentiality was frequently reported as a prominent barrier to health care utilization among women. In many instances, Tunkaseñas reported being less likely to utilize services or disclose personal health information to health providers due to lack of trust in the clinic's ability to keep information private and confidential.

> That was the only person. It was [my husband], me and the doctor, the only three that knew…so I ask her [mother-in-law] 'how did you find out?' Well, I imagine the doctor mentioned it to someone and that someone mentioned it to someone else and they found out. That is why now I am more discreet.

Lack of perceived privacy at the town's clinic may compromise willingness of some women to disclose information about sexual and reproductive health with their health care providers and could affect whether women seek future reproductive health care services. Perceived trust and confidentiality of health care systems may consequently negatively affect related health care and information seeking behaviors among women from this community.

Gender Roles Within the Context of International Migration

In small migrant-sending communities such as Tunkás, traditional and conservative gender roles are deeply embedded, and have key implications for women's sexual and reproductive health. Typically, men seek work locally; due to limited work opportunities within or nearby their communities, many migrate to domestic locations such as Cancún and Playa del Carmen, or internationally to the US Women are expected to remain in Tunkás and generally rely on their migrant husbands for economic support; although, as our study also revealed, there are some female Tunkaseña migrants living in the US, who may have migrated for family reunification or independently for economic reasons.

Extramarital relations are common among both international and domestic male migrants while away from home. This practice, while not openly condoned, is to some degree normalized in Tunkaseño society. Acceptability of partner infidelity as a normative behavior, combined with low condom use among migrants, poses increased risks to the health of women who reside in the sending community.

> In the city, well, you know how men are…he was with other girls and when I got there [city] I got that [sexually transmitted] infection.

This acceptability does not necessarily imply ignorance of the sexual risks involved, as many women were quite aware of the need to protect themselves within the context of sexual relationships with return migrants. A woman described the need for self-care when engaging in sexual relations with a man who has been away:

> You have to take care of yourself because how am I to know if he has an infection [STI]? They are never going to say it.
> If the man as well as the woman does not take care of himself/herself, and if the man is also not faithful, there is a risk, and if they are faithful, that is good.
> If I take care of myself and he does not, he can give me an infection. If I am not clean, he also can get infected. I tell him, when one has an infection one has to put something on and for 7 days not have sexual relations.

However, while women were aware of the risk, they frequently reported a lack of power over their sexual relationships and described the authority and control that male partners exhibited in relationships and the home. A lack of communication and/or perceived lack of control in relationships, especially sexual practices, may result in adverse health impacts among Tunkaseña women with migrant partners:

> Men are *machistas*, sometimes they won't allow their wives or daughters [to go to the doctor]… The husband won't let you go get a pap smear because they are jealous because it's male doctors at the health center.
> By the time she could go to the doctor, when her husband let her go, it was too late…she died because of it [cervical cancer].

Although women were frequently aware of the risks posed by unprotected sex with migrant spouses, gaps remained in knowledge and behaviors regarding prevention of STIs and contraceptive methods (e.g., condoms). Decision-making power regarding the use of contraception methods is shaped by traditional gender roles and attitudes such as *machismo*, which are further complicated by spousal migration and the paucity of economic opportunities for women. Economic dependence on the male partner frequently leads to acceptance of his role as a caretaker of the woman's physical well-being. Consequently, women in

Tunkás may have limited agency regarding contraception, self-care, and ability to seek sexual health care or perceived lack of control over their health by placing trust in their husband's fidelity, as the following woman stated:

> I don't take any precautions because I think my husband is faithful.

Discussion

In this study of Tunkaseña women's cultural perceptions and negotiations regarding sexual health, and the overarching influence of gender and power within the context of migration directly and indirectly shape women's sexual and reproductive health and access to care. We looked at two dimensions of sexual and reproductive health (gender & power) [33], and our data revealed the importance of a binational perspective as well as a migration perspective. Migration remains a critical part of our study population's health risk in that migrating partners may expose non-migrant and presumably migrant women, to sexually transmitted infections that impact their sexual and reproductive health. Our study revealed multiple factors that shape women's beliefs and behaviors toward their own self-care and access to reproductive health services both in their communities in Mexico and the US These included gendered power imbalances, socio-cultural expectations for when it is appropriate for women to access sexual and reproductive health care, and perceived trust and confidentiality of health systems. Prior research studies have utilized the Theory of Gender and Power to describe gendered power imbalances, related to the socio-cultural environment and behavioral risk factors [33, 34]. Few studies, however, have addressed other health determinants such as migration, marginalization and perspectives of sexual health in a binational context using a gendered analytic lens to frame findings. Moreover, even fewer studies have previously analyzed these issues among indigenous migrant women and spouses of migrants, who may be at disproportionately higher risk of negative sexual and reproductive health outcomes due to the additional marginalization indigenous populations often face in Mexico and globally [34, 35].

Earlier studies on migration [36, 37] have found that migration of women's spouses had a negative impact on women's sexual and reproductive health. Migrant men were often described to have other sexual partners when living or working away from their spouses and places of origin. In some cases, migrating men acquired diseases and infections in host locations, which were later transmitted to their spouses upon their return home. Women's expectations of their migrant partner's infidelity were understood within the larger socio-cultural environment and normative beliefs regarding gender roles. Breeches in fidelity were often identified as part of masculinity ("men will be men"), and, in some instances, a necessary biological behavior specific to the male gender. This ideology regarding fidelity may be viewed as a protective factor to promote continuity and family unity without discord, particularly for those communities with a large migrant population who depend on remittances sent from abroad. Reinforcement of these beliefs, however, in the context of transnational and national migration, did not implicate a lower perception of health risks among women. Women understood the sexual health risks, but may have perceived lack of authority and power to negotiate protection measures (i.e., condom use) to protect themselves. Decisions around the use of contraceptives, and in one case, the ability to access treatment for STI's, are largely influenced and determined by male spouses. Therefore, the degree to which women can protect themselves may be predicted by the husband's approval or, at times, their ability to take measures for their own protection such as pap screenings without their husbands' knowledge. Thus, the lack of power for women to negotiate safer sex may result in a limited ability to communicate sexual health needs and an increased likelihood for risky sexual practices.

As noted by Comas-Diaz [37] cultural construction of sexuality in Mexico often perpetuates the expectation of women to sacrifice their own need for those of their families. Our study found that caring for children, family and extended family, often took precedence over women's health, particularly routine checkups or for preventative measures. For women living in rural and resource limited areas such as Tunkás, these culturally constructed identities and power imbalances contribute to sexual health disparities and pose barriers to accessing care. For Tunkaseñas living in the US, cultural beliefs and gendered notions of power over sexual health may also be endorsed by migrant women and men, who often times bring these values and behaviors to new settings. Other studies [38, 39] among migrant Mexican women found that discrepancies in patient expectations of US health service delivery and differences between the US and Mexico in clinic staff communication may reduce utilization of health services.

Strengths and Limitations

While there is a growing body of research regarding migration and Mexican women's health, few studies have encompassed migrant and non-migrant perspectives among women from a binational community. A major strength of the current study is its contribution to a limited body of health research conducted among migrant, indigenous women from southern Mexico. In order to better address

the sexual health needs of migrant women in Mexico and the US, it is important to consider their cultural beliefs and how these women negotiate health care access. While barriers to reproductive health reported by women in our study may not be unique to this population, it was imperative to explore barriers in order to discern potential differences in comparison to non-indigenous Mexican migrants about whom more is known. Furthermore, barriers to reproductive health care that are common to both indigenous and non-indigenous Mexican migrants may require culturally relevant interventions for women in both countries. A significant limitation to this study was the small sample collected of Tunkaseña women living in the US While the aim and scope of the study was to explore experiences among women in binational settings, future studies that include larger samples of US residents are needed to gather more representative data regarding binational experiences among women in these closely linked US and Mexican communities. Our snowball sample was insufficient in the amount of time we had to complete the study to achieve the same number of interviews as in Tunkás. While a diverse sample of Tunkaseña women were interviewed in both countries, findings from this study may not be representative for all women from the region and therefore cannot be generalized for this population. Recruiter efforts to conduct recruitment in a variety of settings, days of week and hours, however, afford confidence in reaching a variety of women who may have different perspectives, which enrich study findings. In addition, there was limited information collected on legal status among women in the United States. This information was difficult to determine or confirm, but may have been useful to consider in the context of access to health services for sexual health and related information. However, a major strength of this study is its capacity to carry out in-depth interviews on sensitive topics among vulnerable and "hard to reach" populations in binational settings.

Conclusion

This study contributes to improved understanding of sexual and reproductive health within the context of migration, both for women who remain in their rural community and those who migrate transnationally. We found that gendered power imbalances, socio-cultural expectations, and perceived lack of trust of health systems shape these indigenous women's sexual and reproductive health perceptions and behaviors. We also observe that although the *Oportunidades* program has made inroads to improve access to health care among women in rural regions of Mexico, there remain perceived barriers among women to participation in the program. As our study indicates, migration may further complicate access to care as female migrants navigate new health care environments. While women residing in the US often relied on their partner's employment to access health benefits and care, many women reported access and utilization of free or low cost health services in their community. Socio-cultural factors, normative gender roles and power imbalances often influence health-seeking behaviors among women. In addition, transnational migration of women or their spouses adds to the complexity of health risks and negotiations regarding sexual health practices. Our study findings can inform future research and interventions to reduce barriers to routine reproductive health care among indigenous migrant and non-migrant women.

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