

Barriers to Adherence to the Maternal Healthcare in Immigrant Moroccan Women in Spain. A Qualitative Study

Ugarte Gurrutxaga MI^{1*} and Ulla Díez SM²

¹Castilla La Mancha University, Spain (<https://orcid.org/0000-0003-2413-3628>)

²Ministry of Health, Consumer Affairs and Social Welfare, Spain
(<https://orcid.org/0000-0001-7342-3846>)

***Corresponding author:** María Idoia Ugarte Gurrutxaga, Castilla La Mancha University, Calle Cerro Miraflores 1, Spain, Tel: 610454676; Email: maria.ugarte@uclm.es

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Abstract

Aims: to explore the barriers to adherence to maternal healthcare services in Spain, as reported by immigrant Moroccan women, healthcare professionals and cultural mediators, in the context of the pregnancy care program

Design: A qualitative design under a phenomenological approach was undertaken in this study using interviews and discussion groups.

Methods: Qualitative interviews and discussion groups were conducted with 30 Moroccan immigrant women, 35 health care professionals and 2 intercultural mediators. Interviews and groups were transcribed and analyzed following an ad hoc structure of categories. (2014-2015).

Results: The study shows that women and professionals agree on some barriers to adherence, such as language competence or accessibility. There are some additional barriers described by professionals or by women which are clearly different. In the professionals' view, women lack any interest in the maternal healthcare; they consider that pregnancy is a natural process, so they do not need to attend the meetings. Women explain that they do not understand the medical words (even those language-competent), they feel invaded in their privacy, and they consider that professionals do not know or understand their culture. Intercultural mediators, which were bilingual Moroccan women working in the National Health System, work as a connection between the two realities and are perceived as very valuable by women and professionals.

Conclusion: Adherence to maternal health care is low in Moroccan immigrant women. Professional's intents to improve should be designed with a more comprehensive view targeting the factors that are important for women under their own perceptions.

Impact

➤ What Problem did the Study Address?

- Immigrant women have delayed and irregular attendance at prenatal care.

- Resources to increase adherence and minimize identified barriers are not perceived as really useful.
- Studies to describe adherence have mainly described and quantified the effect, but the underlying factors of this appearance remain unclear.

➤ **What were the Main Findings?**

- Barriers to adherence to prenatal care are not shared between women and professionals
- Language and lack of interest are the main obstacles to professionals' vision.
- The lack of cultural knowledge of the healthcare professionals and the quality of the interaction are the main barriers for women.
- Cultural competence should be the basis for improving adherence to prenatal care in immigrant women.

➤ **Where and on Whom will the Research have Impact?**

- Healthcare professionals should receive training to effectively address cultural conflicts and culturally competent communication in the care of perinatal health of immigrant women.
- Some actions can be implemented to inform the immigrant population about the structure, organization of the National Health System and its care offer
- Intercultural mediation in health environments is an important asset to solve the conflicts that may arise during the health interaction, due to the linguistic and cultural differences.

Keywords: Reproductive health; Maternal health services; Immigrants; Communication barriers; Adherence; Qualitative research

Introduction

Women's health during pregnancy, childbirth and postpartum is a global priority [1]. Prenatal care is a preventive strategy aimed to reduce maternal and neonatal morbidity and mortality [2,3]. Regular checkups allow assessing risks, detecting, and treating conditions that can affect both women and their children. Care during pregnancy achieves a reduction of maternal and perinatal mortality and better birth outcomes [4-7]. In spite of the evidence of its preventive evidenced value on maternal and infant morbidity and mortality, and despite international recognition, sexual and reproductive rights are still severely limited in many countries. There are serious barriers that impede people -and particularly women- to fully develop their sexuality and their reproductive rights, as well as to access to related services and resources [8,9]. The agreement and signature by the states of International Declarations have been important steps to enforce sexual and reproductive rights, such as the those deriving from the Conference of Alma Ata

(1978), the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW-1979), the United Nations International Conference on Population and Development (1994), or more recently the International Conferences of Beijing +15 (2010), Cairo +20 (2014), and the latest Beijing +20 (2015). These have had as a result international agreements and covenants, but they do not always trigger the needed actions, because they do not entail mandatory legal commitments for the countries. Some international treaties as the International Declaration of Human Rights (1948), the International Covenant on Economic, Social and Cultural Rights (1966), the Millennium Declaration (2000) of the Optional Protocol to the Covenant on Economic, Social and Cultural Rights (2013) have a legal binding for the signing countries, but ratification processes are often slow and countries may raise their reservations to specific contents. A more decisive step is the inclusion of the international commitments in domestic law is the essential step towards the effective implementation of these rights [10].

Background

Reproductive health in immigrant women is one of the topics of interest at the international level and its analysis has generated numerous investigations. However, the results do not allow establishing solid conclusions. According to some studies, reproductive health is worse in immigrant than in national women, and it has an impact on the perinatal health of their babies [11]. However, in other studies, comparable or even better obstetric results are observed in immigrant women compared to national women [12-14]. Research shows that obstetric differences are primarily associated with a lower or later prenatal care and a lower adherence to monitoring controls in care programs (consultations, analysis, ultrasounds and educational workshops) in immigrant women [15,16].

Linguistic and cultural factors and the type of interaction between health care professionals and their immigrant patients have been repeatedly described as modifiers of women's adherence to scheduled appointments and prenatal education sessions [17-21]. More specifically, differences in language and a poor interaction between professionals and pregnant women can hinder effective communication, leading to misunderstandings related to cultural diversity that result in worse care for this group of immigrant population [22]. Immigrant women, newly arrived in their host country, generally with little social support, language difficulties and limited knowledge of the National Health System have a higher risk of receiving a non-optimal perinatal care due to a low adherence or to communication or interaction problems [23-26]. Regarding the influence of cultural factors, we have also learned that reproductive behaviors in immigrant women, including the use and demand of the National Health System, are conditioned by both cultural and health characteristics of their countries of origin and by the country of destination [27-29].

Official data on the reproductive health of immigrant women in Spain are scarce, and all the studies have addressed this topic analyzing the hospital health care applying a quantitative approach. Regardless of their nationality, immigrant women access later to the program of prenatal care and attend fewer controls than Spanish women. Therefore they have a significantly worse control of their pregnancy and childbirth, being particularly frequent in Moroccan women [15,30-32]. The factors identified as hindering adherence to prenatal care are coherent with international studies. Insufficient language proficiency -but only in the presence of social risk factors,

has been associated with poorer prenatal care in comparison with Spanish women [21]. Cultural and religious factors [33] and the lack of reproductive health policies or actions specific for his population group and their cultural specificities also affect the adherence to prenatal control care [34].

Research has described barriers to access perinatal care programs, but there is less information describing the causes of these barriers. However there is still some controversy regarding the obstetric results when comparing immigrant and non-immigrant women. There is also a need to complement the existing information with a qualitative approach and considering not only health care professionals but also immigrant women [35-37]. Some studies show that migration process is a risk factor and leads to worse pregnancy outcomes, justified mainly to the difficulty experienced by pregnant women to access prenatal care [38-42]. But other studies show that obstetrical outcomes of immigrant women are equal to or better than the non-immigrant women [43-47].

Some factors could be underlying this controversy. There is a lack of standard indicators to describe the pregnancy control and its outcomes [33]. There are indicators to determine and measure the relations between prenatal care and pregnancy outcomes (primarily perinatal mortality, low birth weight and prematurity), mostly used in the United States [48-50]. But in Europe the use of standardized indices is not extended, and it is still difficult to draw solid conclusions from the existing evidence [33]. We also have to consider the different patterns of migrants, having found some protection factors in immigrant women with higher personal resources and a healthy lifestyle [7,51-53]. The so-called *healthy immigrant effect*, described as the selective migration of stronger and healthier people could be an explaining factor for this difference [54-56].

Also, migrant women are quite often considered as an undifferentiated group. More research is needed to analyze specific dimensions about their personal or group characteristics [57]. There is also a need of specific migrant definition in each case, and the inclusion of other women's characteristics and experience seem to be also needed to provide higher accuracy. It seems that the fact of migration does not have an effect on obstetric care, but the nature of the relationship nor the factors that could modify it are still sufficiently described.

The Study

Aims

The aim of this study is to explore the barriers to adherence to pregnancy care in immigrant Moroccan women living in Spain, analyzing their perception and contrasting it with the perception of health professionals and intercultural mediators.

Design

A qualitative design under a phenomenological approach was used for this study. Our research was oriented towards attitudes and beliefs of people with very different profiles and personal characteristics. Subtleties and complexities are often missed by positivistic approaches. Therefore, we needed a methodology and design with a certain degree of openness and flexibility to enable the emergence and capturing of speech meaning.

Sample/Participants

Participants in the study were 30 Moroccan immigrant women living in Spain (Table 1); 35 health professionals involved at some point of the pregnancy or childbirth process (Table 2); and two female cultural mediators.

The research took place in the region of Castilla-La Mancha, in the provinces of Toledo and Ciudad Real. Cultural mediators were approached purposively. They helped to approach women that had been beneficiaries of the cultural mediation service, and also a snowball technique was used to reach other women that have had no relation with the service.

Professionals were approached consecutively with the help of the directors of the health centers, and a snowball technique was used to increase and diversify the participants.

Variables		Women age (in years)			Total
		21 to 30	31 to 40	41 to 50	
Time residing in Spain (in years)	<2	2	1		3
	03-May	3	2		5
	>6	7	7	8	22
Experience using the cultural mediation service	Yes	7	8	1	16
	No	5	2	7	14
Residing area	Rural	7	8	5	20
	Urban	5	2	3	10
Education level	Primary	4	7	4	15
	Secondary	7	4	3	14
	College			1	1
Total		12	10	8	30

Table 1: Characteristics of the Moroccan immigrant women (n=30).

	Primary care	Hospital care	Total
Primary care nurse	2	-	2
Maternity nurse	-	7	7
Paediatric nurse	3	-	3
Midwife	4	10	14
Gynaecologist/obstetrician	-	5	5
Pediatrician	4	-	4
TOTAL	13	22	35

Table 2: Characteristics of healthcare professionals (n=35).

Data Collection

Open interviews with health care professionals, immigrant women and mediators were chosen to allow participants to express their experiences in a flexible and

detailed way. Additionally, two discussion groups with immigrant women were also conducted to explore possible tensions, consensus or any additional content in their natural conversations around the topic of health care during pregnancy. Spanish language proficiency was

initially established as inclusion criteria. However, once initiated the phase of contacts with Moroccan women, we found that this would be a big obstacle to get a large and representative sample, so we choose to eliminate it. To help with the translation, we benefited from the help of two women who were Moroccan and bilingual in Arabic and Spanish. One of them participated in two interviews and the other in the two discussion groups, so we could get the details of the speeches of those women who were not proficient in Spanish language. The interviews of health care professionals and mediators were made in an appropriate office or room of their working centers. The interviews and discussion groups of Moroccan women were made at their homes. Interviews and groups were recorded with the permission of the participants and transcribed afterwards, and field notes were taken to provide details to the analysis.

Ethical Considerations

All participants in our study took part on a voluntary basis and after they had given consent. Names and other characteristics of the participants were deleted. The hospital and health centers involved were informed about the project and their direction boards approved the participation of their staff.

Data Analysis

To achieve the objectives, we conducted an analysis of both content and speech. After hearing the recording and reading the transcriptions, coding was performed in two stages. In stage 1, we conducted an initial coding according to the established dimensions, as mentioned above. In stage 2, we analyzed the speeches attending to the main topics that would articulate the different speeches of professionals and women. To guarantee similar approach and type of interaction all the interviews and groups were facilitated by the same researcher (M.U.). All the recordings and transcriptions were heard and read, respectively, by both researchers. Coding, analysis and interpretation were discussed by both researches to ensure reliability and trustworthiness. The program for qualitative data analysis MAXQDA 10.0 was used for coding and analysis.

Rigour

To ensure quality and validity of the results we gathered information through an iterative process of data collection and analysis until data saturation was reached under the criteria of both researchers.

Findings

Factors Affecting Initial Access to the Monitoring Protocol

In our study, we found a common statement in interviewed health professionals. They referred that most Moroccan women had a late start in their pregnancy monitoring and they presented an irregular attendance to the appointments protocolized in the monitoring program of pregnancy. Since a low adherence to treatment and control may have important consequences for women and newborns health as stated in the Introduction, we tried to characterize in detail the factors that could be underlying this behavior, from the point of view of both professionals and cultural mediators. Complementarily, we contrasted whether women had the same perception about their own adherence and if so, which could be the elements that, in their opinion, would hinder attending to control appointments.

Barriers for Pregnancy Monitoring

There were a number of factors that professionals and women identified as barriers or obstacles to attend the Health Center monitoring program: a) language-related difficulties; b) geographical distance from home to the health center; c) the lack of knowledge about the structure and functioning of Spanish National Health System; and d) family responsibilities. On the other hand, the time they had been living in Spain operated as a facilitator to access to the health center for gestational monitoring. It should be noted the strong distinction made by health professionals among women who have just arrived and those who had been in Spain for some time. The latter were more "*integrated*", spoke some Spanish, and were more autonomous, which facilitated attendance at appointments. The language difficulty is the element in which we found a greater consensus. Both women and professionals believe that the language is essential in the therapeutic interaction and the lack of language proficiency deeply conditions their attendance. Women with idiomatic difficulty rarely come alone. They almost always go accompanied by their husbands, their sisters, mother, mother-in-law, friends, or even children of young age that would help with translation.

Women report feelings of discomfort and helplessness during the medical visit, there are many "*medical*" words (jargon) that makes it even more difficult to understand, even if they are repeated by the health professionals over and over again. They also refer that if no one can

accompany them to the health center, they seldom decide not to go. Resources existing in the health centers to facilitate translation, as a telephone translation service or a computer application, are not perceived by professionals as a great help. On the other side, the help of the cultural mediators seems to play a key role of facilitating communication and understanding during the visit, since mediators make sure that both women and physicians understand the messages correctly. The second great barrier reported by women and professionals is the distance between their homes and the health center. Most women depend on their husbands to drive them to the health center. Another obstacle for attendance identified by the three profiles in our sample (health professionals, Moroccan women and intercultural mediators) was the lack of knowledge about the structure and functioning of the Spanish National Health System, being this particularly important in women who had recently arrived. Family responsibilities, particularly related to their children care, were also described as important obstacles to go to the center. They have a very limited, and sometimes none, family or social support to leave their children. In these occasions, they chose not to attend appointments to avoid bothering others in the health center with their children. This is particularly applicable to workshops, where they consider that their children would bother other participants. It is interesting that about this same fact, health professionals believe that immigrant women use this argument as an *excuse* for not attending appointments or workshops.

Factors Affecting Attendance to Pregnancy Workshops

We also found that there is a particularly low attendance to the workshops offered within the pregnancy control program to address topics such as nutrition, childbirth and labor preparation, and breastfeeding. However, the reasons underlying that specific behavior are quite different for women than for professionals. Health professionals consider that women, do not attend because they have language difficulties and do not feel integrated with the rest of participants. They also say that women do not go because they are just not interested, referring to women's lack of interest, fatigue and boredom. Other factor mentioned by professionals was the perception of the invasion of women's privacy during breastfeeding as an element that could hinder attendance to breastfeeding workshops. Additionally, health professionals believe that women have enough social support from other women in the family and friends. This solves all the doubts that arise in relation to

pregnancy, childbirth and baby care, so they perceive no need to attend the workshops. In the women's speeches we found some contradictions. Some of them recognize that the midwives call every woman and invite them to participate in the workshops. But other women expressed that they had no knowledge at all of the existence of these workshops, or at least they had not been invited.

Midwives report that they inform every woman. This is part of the program and their protocol, but some women do not understand the information and they depend on the translation done by the person who accompanies them. Some women knew when and where the workshops were held, but they expressed their shame when they had to uncover their breasts during breastfeeding workshops, especially if there were any men. Preserving their body from man's eyes has a paramount importance for Moroccan. Arab women in general and Muslim women in particular, prefer to breastfeed their babies in private. Nonetheless, there were different opinions about the influence of this over adherence. Other Moroccan women in our study said that breastfeeding would not be a problem because they know how to cover themselves during breastfeeding, to avoid any breast exposure. Cultural mediators talked about their own role in the workshops. They considered their work complementary to the midwives' work. When they are present in the workshops, Moroccan women feel safer, calmer and more engaged. In addition, they stressed the importance of their own participation in workshops to facilitate the knowledge of the women's cultural practices by health professionals and vice versa.

We were able to detect an important concern in health professionals about this low attendance. Besides the specific reasons mentioned above, professionals attribute the low adherence to appointments and scheduled tests and workshops to the culture of Moroccan women and to the differences in the perinatal health care model between Spain and Morocco, where they are not under a continuous monitoring attention throughout pregnancy.

Health professionals also believe that for Moroccan women pregnancy is a natural process that does not need to be medicalized. For them, attending to the monitoring program, as well as visits with physicians, nurses or midwives is not really important.

Professionals state that women have a traditional conception of pregnancy as a state of health, not of illness, and therefore their attitudes and behaviors are consistent with this concept. Complementarily, cultural mediators

stressed the strong role of women's mother and mother in law as a factor that contributes to this idea of the natural process of pregnancy, because they would assume a "caretaker and trainer" role that would substitute some functions of the health system in a normal and healthy pregnancy. Interviewed women consider pregnancy as a stage in which the monitoring is necessary. In fact, some women say that they feel guilty for not attending, and they understand and justify the concern of professionals. Other women even reproach their behavior to those women who do not attend.

Health Behavior During Pregnancy

Maternal nutrition

Health professionals in our research reported that Moroccan women found it hard to follow the nutrition-related instructions during pregnancy. Despite the dietary advices and their insistence to "eat healthy", women maintained a diet rich in fat. They attributed this behavior to insufficient information related to the importance of nutrition during pregnancy. They also saw a clear difference between women who have had other children in Spain, who would adhere better to nutrition advice, from those who were primipara or have had other pregnancies in Morocco.

Interestingly, we found different opinions among women when we asked them about nutrition. Some of them reported to follow the dietary recommendations, which were no different from those made in Morocco. They consider them good for them and easy to follow. Other women, on the contrary, recognize that they are not really aware of the importance of the diet during pregnancy and they do not follow the directions. Other women affirm that they do not follow the suggested diet either, but they attribute it to the difficulty to prepare a special meal for them and another for the rest of the family. They would prioritize preparing a good meal for their husbands instead of cooking a healthier diet for themselves.

Food and Religion: Ramadan

One of the nutrition-related issues that arise repeatedly in interviews with health professionals is the Ramadan. In the Coran, certain persons are excluded from the religious obligation of fasting during the Ramadan period. Pregnant women can break the fast if they consider that fasting may harm their own or the baby's health. Most interviewed women fast during the Ramadan period despite being pregnant. They know about the permissiveness of their religion in this period, and they

are informed by health professionals about the consequences for their health and their babies'. But they say that they trust that Allah will protect them. Just a few women would break the fast in the case of any relevant complication (iron deficiency, gestational diabetes) and they would follow the advice of not fasting. It is also striking that women who fulfill the precept of fasting during pregnancy, avoid informing the health professionals. They are afraid that they "would be scolded for not obeying" the instructions. Health professionals on their side live this situation with an important frustration. They see the risk for women and babies' health but they see very difficult to change women's behavior due to their strong religious beliefs. Cultural mediators stated that most women know the risks of fasting but they persist on their decision to fast. They also affirmed to know other women who were not really aware of the possible consequences of fasting on the babies' development, and in these cases they informed each woman's nurse, midwife or physician. So we found some women with no knowledge about the level of severity or probability of the consequences of fasting. But even in the cases of good awareness, it did not have enough weight to counteract the strong religious and cultural value of fasting, and to promote the behavioral change.

Discussion

Our main aim in this study was to explore and contrast the perceptions of Moroccan immigrant women in Spain, health care professionals and cultural mediators interacting in the context of the pregnancy care program. In particular, we wanted to explore their experiences and the potential barriers to adhere to the pregnancy control protocol of the National Health System. We observed that health care professionals in our study considered that Moroccan women had a worse control and care of their pregnancies than Spanish women, due to a later start and more irregular attendance to the program. This applied both to individual appointments and pregnancy care workshops, related to health behavior, labor and childbirth and breastfeeding. The late beginning of the pregnancy control care of immigrant women and the irregular attendance have also been found in other studies, both in Spain [39,41] and in other countries [19,58-60].

Barriers to Adherence

In our study, the main barrier for attendance, according to health care professionals and to Moroccan women, was the lack of language competence. Other

barriers would be accessibility issues such as distance from their homes to the health center; or low information about the Spanish National Health System, its functioning, structure and services covered. These findings are coherent with previous studies, which also identified these effects when the access to the National Health System was analyzed comparing immigrant women to Spanish women [20,21]. The obstetric health of immigrant women in Europe was also addressed in other research where the newly arrived women presented the worst obstetric values. These women shared a number of difficulties, such as linguistic, economical, lack of social support and lack of information about the health system that was conditioning their attendance to the pregnancy control programmed appointments [24]. Other study analyzing health during pregnancy in Sub-Saharan refugee women identified the same obstacles and barriers to access the pregnancy care programs than those observed in our study [61]. Besides those barriers shared by professionals and women, the health professionals in our study identified also other aspects underlying the low adherence. In their opinion, women do not have any interest on health care advices and recommendations, because they have their social support networks composed by female friends and relatives that facilitate all the information they may need.

Additionally, professionals stated that women have a different approach. For these women, pregnancy is a natural process, which does not need to be medicalized, and therefore control appointments are neither important nor needed. This concept found in professionals about women beliefs has also been described in previous studies [62-65] and in systematic reviews about factors affecting prenatal care in Muslim women [23]. Particularly, midwives in a study held in Norway [59] reported that foreign women are not as worried as Norwegian women about their pregnancy and childbirth, considering it a natural event in women's life, clearly coherent with our findings. In another study, held in Australia [61], this same effect was described, but in this case it was also found in women speeches. Recently arrived women considered that pregnancy did not require any special attention, and therefore they would not attend the health care program. Interestingly, sometime after their settling in Australia, and with a culture-sensitive intervention put in place, these women modified their perceptions and considered adequate the pregnancy care program.

In women speeches this statement was not so clear. Some would affirm that they were not used to so many

controls, but these were mostly welcome. For them the barrier was quite different. Women in our study considered the health care during their pregnancies really worthy, but they attributed their low attendance to the family responsibilities, lack of information about the system, and an invasion of their privacy in certain moments of the pregnancy care process. They adduce not having a person to sit their children during appointments and workshops time. Other studies have also described some effects over pregnancy care related to the lack of a social support network [66,67]. Women in our study reported additional difficulties in communication during health care meetings. The language barrier has already been mentioned but there are other factors related to the interaction, which go far beyond the language competence. Women did not understand all the information provided by professionals, even those fully competent in Spanish. During medical-patient interaction only part of the information was understood, and even less is remembered, which has been also observed in non-immigrant patients [68].

A Paradigmatic Behavior: Fasting During Ramadan

We found a special topic of interest around nutrition. Women and professionals do not share a common understanding about the severity of the consequences for mothers and babies of an inadequate diet during pregnancy. There are some women who follow the instructions, but many others do not adhere to them. These ones explain their behavior with different reasons, such as not having enough time to prepare different meals for the family or just for considering it unnecessary. Since every immigrant woman in our study was Muslim we found a topic related to nutrition of particular relevance: the Ramadan. During the Ramadan period, Muslims must fast from the dawn to sunset including the intake of any food and drinks, with some exceptions as pregnant and breastfeeding women. Some Moroccan women in our study did not have this information and thought that fasting was also required during pregnancy, and this has also been reported previously. Other women were aware that fasting was not required during this time, but still they admitted fasting during their pregnancy. Most of them followed the fasting prescription during the Ramadan month, unless they had a problem that they would consider serious for them or for their babies, such as diabetes. This causes a high frustration and worry among professionals, who know the possible consequences of being many hours without food or liquid

intake for women and babies. They feel impotent and unable to promote a change in women's behaviors.

Conclusion

Traditional behavior related to pregnancy and newborn care in immigrant Moroccan women is different from the instructions and recommendations provided by the health professionals. Even though women acknowledge the suitability of the majority of advices, there is a resistance to follow them. Women tend to preserve their traditional customs, even when they are informed about the potential risk for them and their babies' health. Explanations for this low adherence behavior are different in women than in health professionals. And therefore each side of the interaction (professionals-women) understands and behaves according to each own explanation. Professionals consider that women do not have interest in learning the language or to adapt to the host culture and systems. Therefore, many of them simply do not feel a great drive to try to modify women's behaviors, and those who try many times have a low success, because they intend to persuade women according to their own explanations and not to women's reasons. On the other side, women consider that they will not be able to understand doctors or nurses, and these will use a lot of jargon that they will not be able to understand. They feel that some professionals try to understand their culture and behaviors -predominantly midwives-, but in general health professionals do not know much about their culture and believes, and they do not know what is really important for them. Therefore, on women's side, there is not much motivation to attend visits or workshops. Additionally, their cultural and religious beliefs are really strong, so any intervention to try to increase adherence behavior would need a deep understanding of the reasons underlying behaviors.

So probably, the factors that explain women's behavior include some of the ones that professionals manage, some of the factors described by women, and some others related to the interaction itself. Probably, professionals are partially right, and so are women, but unless the adherence behavior is analyzed including all the elements that determine and trigger the behavior, it probably will remain unaltered. Consequently, this study, besides offering very interesting information about underlying concepts in women and in health professionals about their experience in the interaction, offered as well a pretty clear image of a non-obvious misunderstanding that in

our opinion should be carefully addressed to increase adherence to the pregnancy control program.

Utilization of the Study and Implications

Programs aimed to change health-related behavior should be based on an analysis of the factors that modulate those behaviors. This applies not only to pregnant women, but also to health professionals.

On the one hand, some actions could be implemented to encourage women to learn the language of the country, Spanish in this case. It would also be positive put in place interventions to improve their knowledge of the health system, the available social resources, as well as their rights and obligations as users of the public health system.

Health professionals, on the other hand, could improve their cultural competence through specific training. It would also be advisable to incorporate specific content related to inequality in undergraduate, postgraduate and continuing education curricula; particularly aimed at improving skills related to social and behavioral determinants of health, cultural diversity and specifically gender-related behavior.

Finally, there would also be recommended changes in the health system, such as the establishment of protocols sensitive to culture and thus prevent changes from being dependent upon persons that could be lost with rotation.

Limitations

A series of limitations have been detected related to the characteristics of the sample (language difficulty and availability due to family burdens). In addition, the interaction itself has not been analyzed, if not the discourses associated with the interaction. Finally, taking into account that immigration is a controversial issue in today's society, it is possible that there has been some effect of social desirability, which may have mediated in his speeches. However, to mitigate its possible effects, it has been tried in all cases to saturate the information to get solid blocks of content that we could verify in the different speeches.

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