ORIGINAL RESEARCH ARTICLE

Identifying barriers to accessing skilled maternal health care in rural Morocco

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Abstract

Over the past 30 years, the Moroccan government has made enormous strides towards improving maternal health care for Moroccan women, but outcomes for rural women remain much worse than those of their urban counterparts. This study aimed to understand the experiences of women giving birth in rural Morocco, and to identify the barriers they face when accessing facility-based maternity care. Fifty-five participants were recruited from villages in Morocco’s rural south to participate in focus group discussions (FGDs), using appreciative inquiry as the guiding framework. Several themes emerged from the analysis of the focus group data. Women felt well-cared for and safe giving birth both at home and in the large, tertiary care hospitals, but not in the small, primary care hospitals. Women who gave birth at the primary care hospitals reported a shortage of some equipment and supplies and poor treatment at the hands of hospital staff. Locating and paying for transportation was identified as the biggest hurdle in accessing maternity care at any hospital. The findings of this study indicate the need for change within primary care health facilities. (Afr J Reprod Health 2021; 25[1]: 20-28).

Keywords: Skilled birth attendance, maternal health, healthcare disparities, Morocco, respectful maternity care

Résumé

Au cours des 30 dernières années, le gouvernement marocain a fait d’énormes progrès vers l’amélioration de soins de santé maternelle pour les femmes marocaines, mais les résultats pour les femmes rurales restent bien pires que ceux de leurs homologues urbains. Cette étude visait à comprendre les expériences des femmes qui accouchent dans les zones rurales du Maroc et à identifier les obstacles auxquels elles sont confrontées lorsqu’elles accèdent aux soins de maternité en établissement. Cinquante-cinq participants ont été recrutés dans des villages du sud rural du Maroc pour participer à des discussions de groupes de discussion (FGD), en utilisant l’enquête reconnaissante comme cadre directeur. Plusieurs thèmes sont ressortis de l’analyse des données des groupes de discussion. Les femmes se sentaient bien soignées et en sécurité en accouchant à la maison et dans les grands hôpitaux de soins tertiaires, mais pas dans les petits hôpitaux de soins primaires. Les femmes qui ont accouché dans les hôpitaux de soins primaires ont signalé une pénurie d’équipement et de fournitures et un mauvais traitement de la part du personnel hospitalier. La localisation et le paiement du transport ont été identifiés comme le plus grand obstacle à l’accès aux soins de maternité dans n’importe quel hôpital. Les résultats de cette étude indiquent la nécessité d’un changement au sein des établissements de soins primaires. (Afr J Reprod Health 2021; 25[1]: 20-28).

Mots-clés: Présence qualifiée à la naissance, santé maternelle, disparités en matière de soins de santé, Maroc, respect soins de maternité

Introduction

Morocco has made enormous strides in improving maternal health over the past 30 years. According to the World Health Organization, Morocco’s maternal mortality rate decreased by over 60% from 1990 to 20151. The government’s efforts to decrease maternal mortality included a mandate, implemented as part of the 2008-2012 national plan, that childbirth services be offered free of charge at all public hospitals, and that transportation to referral hospitals be complementary2. Despite the success of Morocco’s maternal health initiatives, large gaps remain in outcomes for rural versus urban women. A woman in a rural area is half as likely to have her birth attended by a skilled birth attendant (55% of births) than a woman in an
urban area (92% of births)\(^3\). Rural Moroccan women are also twice as likely to experience severe complications\(^4\) or die\(^5\) during childbirth than urban women.

Although considerable data are available to support the extent of these rural/urban disparities, there is no consensus on the reasons for underutilization of skilled birth attendance among rural women. One study found that some Moroccan women avoid hospitals because of the substandard care received by themselves or their friends during childbirth\(^6\). A more recent study found that women were hesitant to seek care for a wealth of reasons including a “lack of a family authority figure who could make a decision, lack of sufficient financial resources, lack of a vehicle, and fear of health facilities”\(^7\). Another study suggests that although childbirth is now free at public hospitals, some women are unaware of the availability of free care, or are deterred by the incidental costs\(^7\).

To effectively address the disparities in health care access and outcomes for Moroccan women in rural areas, it is necessary to have a deeper understanding of the childbirth experiences for these women. This study sought to understand the childbirth experiences of women in select rural villages, and to identify the barriers they face in accessing maternal health care.

**Methods**

**Recruitment sites**

This study recruited participants from two rural villages in the Anti-Atlas Mountains of the Souss Massa region, the second poorest region in Morocco\(^8\). To protect the confidentiality of participants, the village names are not reported. The two villages are located approximately 20 kilometers apart and both villages feed into the same primary maternal health center (PMHC) located in Village One. The primary industry in both villages is agriculture.

Village One has a population of approximately 3,000 people. It was selected for the study because it houses the PMHC for the ten surrounding areas, and because of the connections the research team has in the village. Village Two was selected because it is one of the villages that feeds into the Village One PMHC, and it had the highest number of annual births in the region. Additionally, Village Two is one of the most remote villages in the PMHC catchment areas, so these women have unique perspectives on transportation concerns.

**Hospital and homebirth systems in souss massa**

The Village One PMHC in this study is the local-level branch of a larger maternal hospital network. The network works in this way: patients must first go to the PMHC (in this case, located in Village One) where they will deliver if it is an uncomplicated delivery. If the PMHC staff determine a woman’s delivery is complicated, they will send her to the provincial hospital (for women leaving the Village One PMHC, the provincial hospital is 30 km away). The staff at the PMHC and provincial-level hospitals cannot perform Cesarean sections, so patients who need them are referred to the large regional hospital (in this region it is the Tata Hospital, located 200 km away from Village One PMHC).

In addition to the official maternal health care system, each of the villages have at least one, often several, traditional birth attendants. These birth attendants, referred to in Moroccan Arabic as *kablas*, do not receive any formal training. The *kablas* are often older women in the village, who have learned to attend births by observing other *kablas*. The *kablas* attend homebirths and may accompany laboring women to the hospital where they serve a supporting role.

**Study design**

Appreciative inquiry (AI) was selected as the guiding conceptual framework of this study based on its success in a similar maternal health setting\(^9\). AI is grounded in the philosophy that community members are experts on what is best within their own communities. An AI approach involves 1) *discovering* what is working in a social structure by encouraging participants to share not only what is wrong with a system, but also what is right, 2) *understanding* what was shared in the interviews within a larger social context, and 3) *amplifying* the salient findings that emerge from the first two steps\(^10\). The power of AI lies in identifying the strengths of a community and inviting members of the community to envision how the system could be improved\(^11\).
AI is similar to the more widely-used method of Community Conversations\textsuperscript{12}, in that the focus of both methods is on uncovering the knowledge and expertise inherent within the community. Where the two methods differ is that AI has a strong focus on identifying both what is wrong but also what is most right in communities and systems. Community Conversations has historically been used to identify action-oriented solutions to specific problems (focusing more on what is wrong).

In keeping with the principles of AI, our research team selected focus groups as our means of data collection. We chose to use focus group discussions because women’s gatherings are a central part of the local communities. Our research team strove to recreate the feeling of community gatherings, to provide the women a comfortable setting to discuss their experiences in accessing maternal care\textsuperscript{13}.

**Recruitment**

This study received advance approval from the University of Utah’s Institutional Review Board and was approved by the Mayor of Village One. Study staff obtained verbal consent from all focus group participants prior to beginning each group, and participants were informed they were free to leave any time during the study and could refuse to answer any questions. Our in-country research team recruited participants from Village One by visiting women identified from a government-provided birth record list and inviting those women to attend a focus group. Recruiting in Village Two was more difficult because most of the village is inaccessible by car. Participants were recruited in Village Two by contacting a leader from the area and asking him to invite women to attend. The disparity in recruitment numbers between Village One (n=46) compared to Village Two (n=9) is a reflection of the difference in recruitment difficulty between the two villages. Table 1 displays the demographic information collected on participants.

Women were invited to participate in the study if they had given birth in the last five years, spoke Arabic or Berber (called Shilhah in Arabic, or Tashelheit by those who speak it), and lived in either the villages.

**Conducting focus groups**

Our on-site research team consisted of the primary researcher, a co-facilitator/translator, and a note-taker. Both the facilitator and translator are from Village One and are fluent in Berber, English, and Moroccan Arabic. Additionally, four community leaders from Village One assisted our team in the recruitment process and in hosting the focus groups. Prior to the first focus group, we held a mock focus group with three of the community leaders to test the discussion guide for cultural appropriateness and refine the translation process and adjusted the guide to reflect their feedback.

Our research team held four focus groups in Village One and two in Village Two. Groups were conducted using a semi-structured discussion guide. Questions were modified following each focus group, adapting to information learned from each previous group\textsuperscript{14}. Groups proceeded until every woman who wished to had the opportunity to share her birth experiences and answer any follow-up questions, with each group lasting about two hours.

Focus groups were audio recorded, and all participants were asked to keep private any details shared within the group. The research team verbally consented women prior to participation and collected demographic information through a brief questionnaire (administered verbally to accommodate illiterate women).

Focus groups were lead with the primary researcher asking questions in Moroccan Arabic, and the co-facilitator translating all questions into Berber. Women were encouraged to respond in their preferred language. Incentives for participation included tea and cookies during focus groups, and lip balm when the session was complete.

**Coding methods**

The audio recordings were translated by an independent consultant from Moroccan Arabic and Berber into English, and transcribed verbatim. The English transcripts were uploaded into NVivo 11.3.2 for Macintosh. Two authors independently coded the transcripts.
Coders went through the same process, with the second coder analyzing 40% of the data. Before beginning the process of analyzing the text, transcripts were read several times in order to grasp the discussions and information thoroughly\textsuperscript{15}. Coders inductively coded emerging concepts by first coding for successes within the maternal health system, next for any problems within the system, and finally for suggestions the women had for improving the system. Codes were then compared, and emerging themes discussed. No conceptual discrepancies were found in independent coding, and the process of discussing the transcripts helped identify important topics.

Codes were organized using the Attride-Sterling method of creating “Thematic Networks”\textsuperscript{16}. The Attride-Sterling framework is distinct in its emphasis on showing interactions among the global (high-level) themes\textsuperscript{16}. In vivo coding (labeling the codes directly from the text) was used in an effort to preserve the participants’ own (translated) words whenever possible\textsuperscript{17}.

Results

Demographics

A total of 55 women participated in focus groups with 84% of women residing in Village One (Table 1). The majority of women were between the ages of 25-34 years and had 2-3 children. All participants were Berber (tashelheen is the word women used to describe their ethnicity, or shilhah in Arabic, but the authors use the English word Berber throughout this paper).

Identifying themes

The analysis yielded 34 initial codes. Using the Attride-Sterling method of mapping into progressively overarching themes, we formulated those initial codes into 16 Basic Themes, which we then grouped into eight Organizing Themes. Finally, we consolidated the Organizing Themes into four Global Themes. Figure 1 shows the process of mapping Global Theme One.

Theme One: Women feel well-cared for and safe giving birth at home with the kablas

Women in both locations consistently reported that the village kablas treated patients with respect and care. Of the 22 mentions of kablas, no woman complained about the care received. One woman from Village One said,

“Thank God, she [the kabla] knows her job well. She’s never had any problems. No complications. Since I remember as a kid, she was known as a good midwife”.

Another woman who had given birth both at home and at the hospital compared the two this way,

She [the midwife] will help you give a very natural birth. But then if you go to a doctor, they will always want you to do an operation at the hospital. They don’t have the patience to ask you to keep pushing, and be patient.

When women were asked what materials the midwife brings they told us:

Everything is traditional . . . She has a bowl with oil, and she just rubs your belly. She is better than the doctor, just with oil and a glass of milk. And she brings some soup as well. She is very patient with us. She is much better than the doctor.

Theme Two: Women do not feel well-cared for and safe giving birth in the Primary Maternity Health Center

Women felt the PMHC did not have the necessary staff or equipment. Many women described the PMHC as lacking supplies, often using words such as “empty” or “useless” when speaking about their experience in the hospital.

One woman said “There is nothing in the hospital. It has nothing. Nothing”. Another woman explained that the PMHC is where the women in the village go to get their [free] birth control pills. She remembered a time when there was a shortage of the pills “One time they just stopped giving out birth control pills. They just stopped it. There were quite a few pregnancies during that time.”

Several women, when asked if they would choose to give birth at home or in the hospital if they were to have another baby, answered it was better to stay at home. In the words of one woman

Our hospital might as well be the house, they don’t do anything, no blood pressure measurement, no energy medication. It is best to just be at home. They have nothing at the hospital. That’s why I prefer home.
Women from both villages mentioned the PMHC requires the patients to bring their own cleaning supplies to the birth. The family of the laboring mother is sometimes expected to clean the birthing facility before and after the mother gives birth. In addition to the lack of supplies, many women shared they sought care at the hospital and found it empty or understaffed.

“We don’t even have medicine (laughing) it is like no one is even present in the hospital. It is like a ghost town.” Another woman said, “Here you just go to the hospital and the nurse just yells at you. Or she would say, ‘I’m busy right now.’ They don’t pay attention to anyone.

Another woman shared that the nurses were unwilling to do the basics of care; they had equipment to start an IV but they didn’t do it. She said, They didn’t want to bother. I don’t know why. You get there and they keep looking at you, and they don’t know what to do with you. They just tell you to wait. They don’t do the job they are trained to do. If I were to go to a hospital and I sit there until I give birth, next time I should just stay home.

Theme Three: Women feel well-cared for and safe giving birth in the large regional hospital

Participants felt the Regional Hospital had all equipment and staff necessary to care for pregnant women. One participant said, “I gave birth in [the large Regional Hospital]. When I arrived, they got me to the room, they had food, they had everything”. One woman was happy the doctors in the Regional Hospital let her labor at her own pace and respected her wishes when she asked to labor alone. In describing the care she received she said, “They trusted me that I could give birth well”.

Women expressed confidence in the ability of the large Regional Hospital to treat dangerous complications. One woman explained why it is safer to give birth at the hospital than at home, “At the hospital if you were hemorrhaging they would give you a shot, and control the issue. It’s not like in the house. The doctor isn’t the same as a midwife”.

### Table 1: Basic demographics of participants

<table>
<thead>
<tr>
<th>BIRTH LOCATION</th>
<th>COUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home</td>
<td>14</td>
</tr>
<tr>
<td>Hospital</td>
<td>37</td>
</tr>
<tr>
<td>VILLAGE</td>
<td></td>
</tr>
<tr>
<td>Village One</td>
<td>46</td>
</tr>
<tr>
<td>Village Two</td>
<td>9</td>
</tr>
<tr>
<td>AGE, years</td>
<td></td>
</tr>
<tr>
<td>21-24</td>
<td>7</td>
</tr>
<tr>
<td>25-29</td>
<td>12</td>
</tr>
<tr>
<td>30-34</td>
<td>15</td>
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<tr>
<td>35-39</td>
<td>9</td>
</tr>
<tr>
<td>40 and over</td>
<td>12</td>
</tr>
<tr>
<td>NUMBER OF CHILDREN</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>15</td>
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<tr>
<td>3</td>
<td>12</td>
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<tr>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>5+</td>
<td>9</td>
</tr>
<tr>
<td>LITERACY</td>
<td></td>
</tr>
<tr>
<td>Not literate</td>
<td>23</td>
</tr>
<tr>
<td>Literate</td>
<td>32</td>
</tr>
<tr>
<td>AGE AT MARRIAGE</td>
<td></td>
</tr>
<tr>
<td>Under 17</td>
<td>12</td>
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<tr>
<td>18-20</td>
<td>19</td>
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<td>21-24</td>
<td>15</td>
</tr>
<tr>
<td>25-29</td>
<td>9</td>
</tr>
</tbody>
</table>

Additionally, women often felt disrespected by hospital staff. On the occasions when women did find staff present in the PMHC, some women shared that the hospital staff were disrespectful or unkind. As one woman put it, “Unfortunately, whoever they bring over here [to the PMHC] suffers from stress. They are just all cranky and not happy or willing to do the work with us”.

A second woman cited, “Here you just go to the hospital and the nurse just yells at you. Or she would say, ‘I’m busy right now.’ They don’t pay attention to anyone”.

Another woman shared that the nurses were unwilling to do the basics of care; they had equipment to start an IV but they didn’t do it. She said, They didn’t want to bother. I don’t know why. You get there and they keep looking at you, and they don’t know what to do with you. They just tell you to wait. They don’t do the job they are trained to do. If I were to go to a hospital and I sit there until I give birth, next time I should just stay home.
Theme Four: Locating and paying for transportation is the biggest obstacle in accessing maternity care at the PMHC or large Regional Hospital

Cost is a frequent barrier to accessing care at a PMHC or Regional Hospital. All the women who gave birth at a public hospital confirmed the hospital birth was provided to them free of charge. However, the women explained there are many incidental costs involved in hospital births, primarily the costs associated with transportation to the hospital and medication required during their stay. For some women, particularly those in Village Two, those costs can be prohibitive. One woman in Village Two shared, "And a lady, in the back of her
mind, she is thinking about how much it costs to go to the hospital. She doesn’t have the money to get there, so she decides to give birth at home”.

Although the plan set forth by the Moroccan Government includes a component for free transportation among hospitals, none of the women said they had access to free transportation to the hospital from their homes. The cost of a one-way ambulance ride can be a prohibitively high sum for some women.

Along with cost, the most common barrier to accessing care, for women in both villages, was lack of transportation to the hospital. Those in Village One shared about the hardship of walking a kilometer to the hospital, sometimes in the heat of the summer. The women in Village Two faced problems with locating and paying for an ambulance or taxi.

In describing the hardship of a long walk when one is sick or in labor, one woman laughingly shared, “There is no transportation to there and back. People who are sick, they are much worse by the time they arrive there.” A woman in Village Two shared her worries about how long it takes to reach the hospital in an emergency, “If you have a very far hospital and you are bleeding to death, what are you going to do? After my sister had the hemorrhage [when giving birth] she is anemic ever since.” Another woman shared that she knows of women who have died because they couldn’t make it to the hospital in time, “It’s really a struggle. It is survival of the fittest to get to the location where the hospital is; some people don’t make it”.

Although transportation remained a barrier, women in Village Two shared their gratitude for a newly paved road between their village and the PMHC. Previously the only means of accessing the hospital was through a winding dirt road often flooded in the wintertime.

Figure 2 shows the 4 Global Themes, mapped using the process shown in Figure 1. The themes reveal women feel safest at the two ends of the maternal health spectrum: at the level of lowest intervention (home), and at the level of highest intervention (Regional Hospital). The PMHC is where women expressed feeling least satisfied with their care. Additionally, transportation emerged as a primary barrier for accessing hospital care.

**Discussion**

The global themes that emerged from this study paint the picture of a maternal healthcare system that has improved over the past 30 years, but still falls short of providing quality healthcare for many rural women. Our study indicates that while the women were satisfied with the quality of care at the large Regional Hospital, they perceived the Village PMHC as understaffed, undersupplied and unwelcoming. A much larger study conducted across five African countries found similar discrepancies in care between primary and secondary facilities.

In the two villages included in this study, women shared that they were required to first seek care at the PMHC and could not opt to go directly to the Regional Hospital. Because of this, some women opted out of facility-based care, altogether. For those women who chose to give birth at home, they report respectful and compassionate care by the village kablas. While some women chose to give birth at home, other women would like to give birth in a facility but are unable to because of issues with transportation: either because they cannot afford it, or because they simply cannot find someone willing to transport them.

The low quality of care reported at the Village One PMHC and the issues of securing transportation may help explain the discrepancy in facility access and maternal health outcomes between rural and urban women in Morocco. Approaches to addressing maternal mortality in low-and middle-income countries (LMIC) have historically focused on increasing the number of women who give birth at health care facilities. While some maternal health researchers believe the increase in deliveries in medical facilities has been successful in decreasing maternal mortality, the aforementioned Harvard study casts doubt on this approach. The authors argue that increasing usage of maternal health care facilities is not sufficient, if the facilities are not adequate to meet the women’s needs, and other emerging research supports this conclusion.

While the maternal health literature is full of recommended solutions to the improve health of mothers and babies in low resource settings, the women from the two villages had some of their own
suggestions for improvement. At the end of each focus group, we asked the women, “What is one suggestion you would give for improving maternal health in your village”. Their responses were both pragmatic and wise. Some women had specific suggestions about the need for improved respectfulness of care: *the doctors need to have accountability and we ask for doctors who care*. Other women requested specific supplies: *we need a scale to weigh the babies and we should have a bag of supplies for the midwife to carry with her*. One woman shared that though there was a pharmacy and PMCH close to Village One, that those locations needed *equipment for blood pressure, and an ultrasound machine*. Several women pointed to transportation needs: *we need transportation to the hospital, and we need two ambulances*. Finally, one woman summarized the desire of many: *we need a hospital where women can give birth respectfully*.

**Strengths and Limitations**

This study focused on patient perspectives and did not include interviews with health care providers and administrators. Generalizations about the overall maternal health system should be qualified because providers’ perspectives were not included. Future research to the region is warranted, to conduct interviews with home and hospital providers.

A second limitation is the potential bias of women recalling emotionally charged events as far back as five years. Some women’s perspectives may be colored by bad birth outcomes as a result of medical complications, or they may inaccurately remember key details. However, the focus groups were able to partially mediate the recall bias. Many of the women in the focus groups had been present for each other’s births and were able to comment on and contextualize each other’s birth stories.

A major strength of this study is the community-based approach utilized in all phases of the research design and analysis. Because our research team was composed almost entirely of women from the local community, we were able to successfully recruit to the study, and create an environment where participants felt safe sharing their stories.

**Conclusion**

Although it is beyond the scope of this study to make sweeping recommendations for structural changes within the Morocco maternal health care system, the issues uncovered through our research provide suggestions about specific areas that could be addressed to improve maternal health in Morocco. The women offered several helpful suggestions for improvement including the need for better transportation, the need for health care providers to be trained in respectful maternity care practices, and the expansion of skills and scope for *kablas*.

Based on our findings, the Primary Maternal Health Center (PMHC) serving the villages is not meeting the needs of the women it serves. One potential solution is to remove the requirement that women enter into care at the PMHC and allow women to directly access care at the hospital of their choosing. Another possible solution, suggested by a participant, is to provide *kablas* (traditional birth attendants) with the training and materials needed to expand their birth practices in the villages. Further research is needed to determine which solution, or combination of solutions, would best solve the issues brought forth by the women in this study.

Regardless of the particularities of the solution, change is required to meet the needs of childbearing women in these communities. Women of both villages expressed faith in the ability of the Moroccan government to improve their situations. With their hope, they also shared the need for expediency. In the words of one woman, “Please look at our life, and we are really forgotten about. And whoever is educated and hears our suffering, come to us. We are waiting. Don’t take too long. We are waiting”.

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Contribution of Authors
Jami Baayd designed the research study, conducted the focus group discussions, coded the transcripts, wrote the initial manuscript draft, and oversaw manuscript revisions. Sara Simonsen co-designed the research study, contributed to writing of the manuscript and approved the final submission. Joseph Stanford reviewed the research design, provided editorial review of the manuscript drafts and approved the final submission. Sydney Willis contributed to the research design, double-coded the transcripts, wrote the second and third drafts of the manuscript, and approved the final submission. Caren Frost co-designed the research study, contributed to the writing of the manuscript and approved final submission.

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