



Miscommunication influences how women act when fetal movements decrease an interview study with Swedish Somali migrant women

Anna Andrén^{a,*}, Anna Akselsson^a, Ingela Rådestad^a, Salma Burhan Ali^b, Helena Lindgren^{a,c}, Hodan Mohamoud Osman^d, Kerstin Erlandsson^{c,e}

^a Sophiahemmet University, Stockholm, Sweden

^b Region Uppsala, Enköping Hospital, Department of Gynecology, Sweden

^c Department of Women's and Children's Health, Karolinska Institutet, Sweden

^d College of Health Science and Medicine, Faculty of Nursing and Midwifery, Hargeisa University, Somaliland

^e School of Health and Welfare, Dalarna University, Sweden

ARTICLE INFO

Keywords:

Midwifery

Fetal movement

Stillbirth prevention

Somalia

Migrant health

Qualitative research

ABSTRACT

Objective: To explore how Swedish Somali migrant women perceive fetal movements, process information about fetal movements, and take actions if decreased fetal activity occurs.

Design: A qualitative study based on individual semi-structured interviews. The interviews were analysed using content analysis.

Setting: The study was conducted in Sweden.

Participants: Swedish Somali migrant women ($n=15$) pregnant in their third trimester or recently given birth.

Findings: The analysis led to the main category: tailored information about fetal movements enhances the possibility to seek care if the movements decrease. The results are described in the generic categories: explanatory models determine action; and understand and interpret information.

Key conclusions: Miscommunication on fetal movements can be a hurdle for Swedish Somali migrant women that may have impact on stillbirth prevention and the quality of care. Improved communication and information tailored to individual needs is essential to achieve equality for women and their newborns.

Implications for practice: The midwife can be used as a hub for reassuring that adequate information about fetal movements reaches each individual woman in antenatal care. Individualised information on fetal movements based on the women's own understanding is suggested to increase the possibility that the pregnant woman will seek care if the movements decrease. Somali women's verbal communication can be used to spread accurate information in the Somali community on the importance of seeking care if fetal movements decrease.

Introduction

Migration has implications both for health care provision in receiving countries and for the health outcomes of immigrant populations. Compared to receiving-country-born women, non-Western migrant women have an increased risk of negative pregnancy and birth outcomes (World Health Organization [WHO], 2018). Receiving sub-optimal care, difficulties accessing maternity health care services, and a low rate of antenatal care visits may explain these differences (Saastad et al., 2007; Flenady et al., 2016; Johnsen et al., 2020). In addition, migrant women often face stressors such as poor health, low socioeconomic status, and financial difficulties which may further

impact their care needs (WHO, 2018).

Somali migrant women are among the most exposed to adverse neonatal outcomes such as stillbirth, infants small for gestational age, and neonatal death (Råssjö et al., 2013; Liu et al., 2019; Vik et al., 2019; Damsted Rasmussen et al., 2021). There are approximately 70,000 people born in Somalia living in Sweden, of which 38,0% are women of childbearing age (WHO definition: 15–49 years old). Somalia is the sixth most common country of birth among foreign-born citizens in Sweden and the most common country of birth for people born in Sub-Saharan Africa (Statistics Sweden [SCB], 2023).

Decreased fetal movements can be a sign that the unborn baby's life is at risk (Holm Tveit et al., 2009; Dutton et al., 2012). Seeking care for

* Corresponding author at: Sophiahemmet University, Box 5605, 114 86 Stockholm, Sweden.

E-mail address: anna.andren@shh.se (A. Andrén).

<https://doi.org/10.1016/j.midw.2023.103796>

Received 8 October 2022; Received in revised form 23 August 2023; Accepted 24 August 2023

Available online 29 August 2023

0266-6138/© 2023 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

decreased fetal movements enables for health care providers to diagnose compromised fetal well-being and take appropriate action (Turner et al., 2021; National Board of Health and Welfare, 2022). A study based on data from a large cluster-randomised controlled trial has identified that, compared to women of Swedish origin, Swedish Somali migrant women seek care for decreased fetal movements to a lower extent during their pregnancies (Akselsson et al., 2020a, Akselsson et al., 2020b).

Most women in Sweden attend a minimum of eight antenatal care appointments with a midwife during pregnancy, and the care provided is funded by the state and free of charge (The Swedish Society of Obstetrics and Gynecology [SFOG] 2016). Midwives' key role within the maternity health care system provides midwives with the means to address most reproductive, maternal, and newborn health care needs, and to raise the awareness of public health care messages (Lindgren et al., 2022).

Given the increased risk of stillbirth among Swedish Somali migrant women, and with the purpose of accelerating cultural sensitivity for midwives providing care in antenatal health care contexts, the objective of this study was to explore how Swedish Somali migrant women perceive fetal movements, process information about fetal movements, and take actions if decreased fetal activity occurs.

Methods

An inductive qualitative design was chosen as this provides a simple, straightforward approach for deriving findings from semi-structured interviews (Elo and Kyngäs, 2008).

Participants

The participants were invited to the study by their midwife at the antenatal clinic they attended ($n=10$), or by health care providers with a personal connection to the Somali community ($n=5$). Midwives working in four different antenatal care clinics situated in two of the largest cities in Sweden were involved in the recruitment process. All women who agreed to participate received both verbal and written information about the study. They were told that the interviews would be recorded, and that they could withdraw from the study at any time. Written, informed consent was obtained prior to the interviews.

Women eligible to participate in the study were Swedish Somali migrant women, with a singleton pregnancy after 28 weeks of gestation, or who had recently given birth in Sweden. The interviews were conducted after gestational week 28 since the women by then had received information about fetal movements from their midwife and had time to reflect upon their baby's movements. Four nulliparous and eleven multiparous women, between the ages 23 to 40, who had given birth to two to twelve children each, participated in the study. Of the multiparous women, seven had given birth in both Sweden and Somalia. At the time of the interviews, the women lived in one of the two largest cities in Sweden, and their residential length ranged from six to 28 years, with an average of nine years. Twelve interviews took place during gestational week 29 to 40, and three women were interviewed between two and seven weeks postpartum. Thirteen women were co-living with their partner. Seven women were working, three were studying and five were on maternal leave. Five women lacked formal education, four had primary school level education, five had secondary school level education, and one woman had a university degree (Table 1).

Data collection

An interview topic guide with open-ended questions was developed through a consultative process with five midwives experienced in caring for Swedish Somali migrant women in antenatal care. This topic guide was designed to ascertain how the study participants experienced and perceived fetal movements, information on fetal movements, and decreased fetal movements. Follow-up questions were used as probes,

Table 1

Study participants' characteristics ($n=15$).

Parity	Primiparous	4
	Multiparous	11
Marital status	Single	2
	Co-living with partner	13
Level of education	No formal education	5
	Primary school	4
	Secondary school	5
	University	1
Occupation	Working	6
	Studying	3
	Parental leave	6

encouraging participants to share experiences, to add important information related to the topic guide, and to explain their ideas.

The individual, semi-structured interviews were conducted by the first author between October 2021 and September 2022. The interviews lasted between 24 and 81 minutes (*median*=42) and the study participant choose the location. Nine women were interviewed at the antenatal clinic they attended, five were interviewed in their homes, and one interview was conducted digitally. In accordance with the women's individual wishes, five interviews were carried out with a Somali speaking interpreter present over the phone, and ten were conducted in the Swedish language. Four different female interpreters were used, none of whom were known to any of the study participants. The interpreters were informed about the aim of the study beforehand but did not have any further knowledge in the research area or any involvement in the study procedures. When 15 interviews had been conducted, the data consisted of rich descriptions of the study phenomena.

Data analysis

The audio-recorded interviews were transcribed word-by-word by the first author. The first and the last authors conducted the primary data analysis using content analysis inspired by Elo and Kyngäs (2008). Firstly, all transcripts were read several times until the authors became familiar with the data. Secondly, the authors searched for meaning units corresponding to the objective of the study. Text that did not relate to the objective was extracted. The meaning units were condensed and labelled with a code. Thereafter, the codes were sorted by similarities and differences into two generic categories, relating to the participants' experiences and perceptions of fetal movements, information about fetal movements, and decreased fetal movements. The meaning units labelled with codes were then organised further by similarities and differences into sub-categories. The meaning units, codes, generic categories, and sub-categories were discussed and elaborated on with all co-authors. The sub-categories and generic categories were adjusted and further worked upon. During this process, the research group critically reflected upon how their own disciplinary, theoretical, and personal assumptions might influence the data analysis. Through this inductive analysis process, an overarching main category was eventually identified.

Results

The analysis resulted in the main category: tailored information about fetal movements enhances the possibility to seek care if the movements decrease, and the generic categories: explanatory models determine action; and understand and interpret information. The content of the generic categories are illustrated in seven sub-categories: (a) trusting life, the baby, and God (b) patiently waiting and hoping to sense fetal movements again, (c) findings explanation through own investigation and beliefs, (d) interpreting fetal movements based on inaccurate information, (e) navigating through a flow of information, (f) assimilating information more easily when provided in first language, and (g)

adequate knowledge and support increase the ability to make decisions beneficial for the unborn baby (Table 2). To illustrate the content of the categories, quotations from the study participants are presented within each sub-category using fictive names.

Explanatory models determine action

Trusting life, the baby, and God

The women's view of pregnancy and childbirth was characterised by trust in that everything would turn out well for themselves and their babies, and they perceived fetal movements as a natural part of pregnancy. Monitoring fetal movements was a way of connecting with the unborn baby. When the baby moved, the women felt a bond to their baby and described feeling happy and content. The movements reminded them of the joy of becoming a mother:

I felt happy deep down in my heart when my baby moved... happy that the baby is moving and coming soon... I dreamed that I will have my baby... that I will become a mother again. (Khadidja, mother of three)

The women described communicating with their babies by talking to them, sensing their body parts, pressing with their hands on the stomach, or by praying to God for protection of the unborn baby. Observing and talking about the movements also enabled for other family members to connect with the baby in the womb.

Although there was trust in the Swedish healthcare system, many of the women acknowledged there were aspects of life that humans cannot influence or control, because they are predetermined. One woman described a situation where a friend was scheduled for a planned induction due to post-term pregnancy and who went home to collect her things. When she returned to the hospital a couple of hours later, the baby was dead:

Although I do the right things following the instructions of the doctors, there are things that cannot be influenced by the doctors. (Asha, fourth child)

Another woman answered, *"I don't know, maybe God?"* (Samira, fourth child) when questioned about what she thought could cause her baby to move less.

Patiently waiting and hoping to sense fetal movements again

All women were aware of that decreased fetal movements could be a sign of that something was wrong with the baby, and that the baby's life could be at risk. Thus, they had no knowledge about the physiological

process of the phenomenon, which often caused them anxiety. When decreased movements occurred, some women described how they patiently waited and hoped for the fetal movements to be sensed again. No matter how weak the movements were, the women hoped the unborn baby would be alive and healthy:

On Monday, I felt that the movements became less, weaker you could say. I thought maybe the baby was just tired, so I waited. On Tuesday night, I expected him to move a lot but nothing happened and then in the morning when I woke up I thought he would move but nothing happened, he didn't move. (Khadidja, mother of three)

Hoping fetal movements will be sensed again was related to trust in the unborn baby and oneself, often without disclosing the situation to others like the doula, sister, friends, husband, mother, or other members of the extended family. The women tried to think positive thoughts, such as decreased fetal movements most often ended up with a healthy baby moving in the womb. If they had been to the hospital before for a check-up, they refrained from seeking care again. One woman explained her thought when decreased fetal movements occurred:

The anxiety is just in my head, just like last time everything will be fine with the baby this time. I have checked the fetal movements once at the labour ward due to decreased fetal activity; I will not seek care for the same condition again. I think that the child is fooling on me. (Asha, fourth child)

Being patient, observing and waiting for the baby to hopefully wake up and move as a sign of being healthy was part of a pattern to trust not only oneself and the baby, but also that God would manage the situation:

I am thinking that if I go to the hospital and get everything there... still, no one can stop the death. I pray to Allah for the baby to be healthy and alive. (Hamdi, fourth child)

Finding explanations through own investigations and beliefs

Reduced fetal movements called for various actions since it was a sign that something was not as it should be. The main idea among the women was to first evaluate themselves whether the baby was healthy or not as fetal movements decreased. When their own investigation could not explain the reduced fetal movements, it was time to seek care even if it was both time-consuming and possibly unnecessary. At the point of seeking care, they were prepared for carrying a dead baby in their womb:

Double check yourself first and if the baby does not move after taking a cold shower. If that does not help, I'll go to the hospital. (Asha, fourth child)

The women spent time drinking cold drinks, taking cold showers, or pressing with cold hands on the stomach when the unborn baby did not move to evaluate if it was possible to wake the baby up from a sleep state or not:

A baby who does not move may be asleep or tired. It can sleep for 30 minutes... To drink cold water or put cold hands on the stomach makes the baby move again. (Najmo, fifth child)

Being responsible for the unborn baby, the woman recognised the decreased fetal activity but tried to normalise it. She imagined girls moving more than boys, that the baby followed her own circadian rhythm and slept while she rested, or that some babies just moved less than others. Having experience of a quiet baby, or hearing other women speak about their babies, despite moving less, being born perfectly healthy, was reassuring and would strengthen the notion that movements played a minor role in determining the baby's health. Being a multipara gave women knowledge that could make them less anxious and more confident in knowing how fetal movements should feel like.

One woman's own investigation resulted in an explanation of why the baby did not move. After waiting several hours, at the time of seeking care, this woman already knew her baby was not alive anymore, and she went to the hospital to give birth:

I discovered myself that the baby was not alive. The stomach sank down and became heavy. The baby was hard and did not move. I understood that something was wrong. (Saida, twelfth child)

To this day, she still blames herself for not seeking care in time:

I still regret that I didn't go to the hospital right away when I felt the baby's

Table 2

The main category, along with its relating generic categories and sub-categories, describes how Swedish Somali migrant women perceive fetal movements, process information about fetal movements and take actions if decreased fetal activity occurs.

Main category	Generic categories	Sub-categories
Tailored information about fetal movements enhances the possibility to seek care if the movements decrease	Explanatory models determine action	<ul style="list-style-type: none"> • <i>Trusting life, the baby, and God</i> • <i>Patiently waiting and hoping to sense fetal movements again</i> • <i>Finding explanations through own investigations and beliefs</i> • <i>Interpreting fetal movements based on inaccurate information</i>
	Understand and interpret information	<ul style="list-style-type: none"> • <i>Navigating through a flow of information</i> • <i>Assimilating information more easily when provided in first language</i> • <i>Adequate knowledge and language support increase the ability to make decisions beneficial for the unborn baby</i>

movements had decreased... it wouldn't have hurt to go to the hospital, get checked and come back home. (Saida, twelfth child)

Interpreting fetal movements based on inaccurate information

Ideas such as the baby following the mother's circadian rhythm, that a baby can sleep for 24 hours without moving, or that cold water or sweets can be used to wake the baby up, were commonly described by the women. These misconceptions appeared to be well-integrated and had been passed on through generations. Women had learned from their mothers to put cold hands on the stomach as a way to wake the baby up. One woman said she was recommended by her midwife to drink cold water when decreased movements occurred, and two women received this advice from their doulas. One woman explained calling her doula when she had not sensed movement for several days:

I called the doula. She told me that I should drink cold water, or I should eat something sweet to see if it starts to move. So, I did, I drank cold water, but I noticed that nothing changed. (Khadidja, mother of three)

The women also described receiving advice and explanations from their health care providers, which could also add to delayed care-seeking behaviour. One woman said:

When I was in the emergency room last month, the doctor said I had a lot of amniotic fluid and that it caused me not being able to detect the movements sometimes. (Safiyo, first child)

The explanation regarding amniotic fluid stopped this woman from seeking further care, since she was provided an explanation as to why her baby did not move as much. The same women had, on another occasion when contacting the Swedish national helpline for healthcare advice (1177), received advice that made her refrain from seeking care directly at the hospital for decreased fetal activity:

1177 told me I had to drink something sweet and if that didn't work, I could go to the emergency room. (Safiyo, first child)

Understand and interpret information

Navigating through a flow of information

The women described navigating through a flow of information where different sources of information were being validated by themselves. When assessing fetal movements, deciding between what was normal and when it was necessary to seek care, advice was considered from the midwife, doula, doctor, relatives, and friends. The midwife was considered a trustworthy source of information, possessing both the right knowledge and experience. When feeling worried about reduced fetal movements, going to the midwife for a check-up and being provided with information based on the findings was reassuring. If the midwife said there was no problem with the baby and that everything was fine, there was no need to worry.

The women described feeling responsible for the baby's health and wellbeing, but if they lacked previous knowledge, they did not always know what to ask for. Instead, they had to trust that the midwife provided all information needed about fetal movements. As a multipara, one woman experienced that health care providers had a preunderstanding that she already had knowledge about fetal movements, and about when and where to seek care. Therefore, they did not give her adequate information:

They may think that you have experienced and already know about fetal movements. The responsibility is placed on the woman to get hold of adequate information, that she herself should take responsibility for monitoring fetal movements and seeking information. (Asha, fourth child)

The same woman experienced that having regular appointments with a midwife she knew felt the safest and could make the effort to seek care for decreased fetal movements less demanding:

It's safer because you come to your own midwife where you usually go, so you know where to sit, you know where to wait, you know where to call. So, it does not take much effort... It's just quick to get there and so much easier, I think. (Asha, fourth child)

Even though the midwife's advice was highly valued, when deciding

on whether there was sufficient reason to seek care for decreased fetal movements or not, women also sought guidance from relatives and friends. The women discussed fetal movements with their mothers, sisters, husbands, and friends. When turning to others for advice, the first choice was women with extensive experience of being pregnant, giving live births or stillbirths. However, the women also hesitated to ask their friends or family for advice since they were not sure if they could trust them. Some women pointed out that in Somalia, fetal movements are not discussed, and therefore, the knowledge about it is limited, even among women with substantial pregnancy experience.

When information provided by the midwife was not sufficient, the women searched for information on the Internet, or watched video clips on YouTube rather than asking their midwife directly. Using the Internet made it possible for women to access information in a language they understood:

I am always looking for information in my first language. There are various Internet pages from my home country where midwives and doctors write in my first language. I have taken information there. (Amal, second child)

When in need of advice regarding decreased fetal movements from a health care provider, before contacting their midwife or the hospital, some women called 1177 where a nurse would give advice in English or Swedish at any time of the day:

If it was urgent, if the baby did not move for several hours and I was very worried, I would immediately call 1177. (Safiyo, first child)

Assimilating information more easily when provided in first language

Some women described difficulties in understanding information about fetal movements when provided in Swedish. Information was assimilated more easily when provided in their first language. Therefore, receiving information in Somali was considered beneficial, especially if the information was in written form:

If it is in Somali, you dare to read it and you understand much more. Sometimes you get information in Swedish, and you understand maybe 20 or 30%, so you put it away without reading it. (Asha, fourth child)

For women who had trouble understanding the information provided, looking at video clips on the Internet in their first language was one way to access information about fetal movements. However, a conversation with someone was preferred. One woman stated:

Maybe it's good to watch a video, but it's better to get in touch with someone and talk. (Hamdi, fourth child)

Because of their improved language skills, some women experienced that they understood the midwife's oral information better with each pregnancy. Communicating with an interpreter made it easier to overcome the language barrier when the midwife provided oral information and during conversations. However, when seeking care for decreased fetal movements in the hospital or at the antenatal clinic, an interpreter was rarely used. In those situations, the women were satisfied just knowing the baby was fine. They did not demand any further explanations or conversations. The far most important way to overcome the Swedish language barrier was to meet the same midwife throughout the pregnancy:

If you speak just a little Swedish, you dare to speak much more with your regular midwife with whom you are comfortable... If she doesn't book an interpreter and it's a quick appointment you may make it and understand if she speaks clearly. She knows how much Swedish you know, not like someone that you meet for the first time. (Asha, fourth child)

Adequate knowledge and support increase the ability to make decisions beneficial for the unborn baby

Despite not always receiving sufficient language support, all women described having received information from their midwife about fetal movements and that they should seek care if the movements decreased. Fetal movements were one way to assess the baby's wellbeing. If the baby moved in the womb that meant it was healthy. Based on the midwife's recommendation, some of the women described that they

monitored their baby's movements every day in a structured manner and that they had knowledge about their baby's movement pattern.

I always tried to keep track of its movements. Sometimes a few hours passed when I didn't think about it, but then I would lie down and try to think. I noticed that my son moved the most in the evening and in the morning when I woke up... but he was calm during the day. (Khadidja, mother of three)

For those women who had been pregnant before in Somalia, receiving information from the midwife about fetal movements gave them new and valuable knowledge. No one had monitored fetal movements or attended any kind of antenatal care during prior pregnancies in their birth country:

It was new information, and, you know, in that time [being pregnant in Somalia], I was quite young and then...I did not think much. So, I had not checked if the baby moved or not...with the baby born in Sweden, it was not the same. (Khadidja, mother of three)

When acting upon decreased fetal movements, adequate knowledge and language support from health care providers were prerequisites for the ability to make decisions as to whether seek care or not. Feeling welcomed at the hospital, being listened to, and taken seriously could lead to more women seeking care for decreased fetal movements. Having been to the hospital for a check-up with a doctor could further increase awareness of how fetal movements should be assessed daily, and how it would be beneficial for the unborn baby. In addition, receiving positive and encouraging feedback from family and friends who understood the value of monitoring fetal movements was of great value and would strengthen the woman's ability to make decisions beneficial for the unborn baby. One woman had undergone an emergency caesarean section when seeking care for decreased fetal movements. She was praised by family and friends for having saved her baby's life and were contacted by her midwife in antenatal care who commended her on acting wisely when seeking care.

Several women considered their husbands to be an important support when it came to acting upon decreased fetal movements. For example, many of the women experienced a language barrier when in contact with health care providers and they were depending on their husbands to help them call the hospital:

Because I didn't have enough language skills to cope, I called my husband who was at work. I told him "The baby is not moving, what should I do?" He was the one who contacted the hospital. (Saida, twelfth child)

The husbands could also provide emotional support. One woman said her husband had surprised her by understanding how monitoring fetal activity would benefit the baby. He used to remind her every day when coming home from work about the baby's movements, which she sometimes had forgotten to think about during the day:

He asks a lot about movements, and that surprises me. When he comes home from work, he asks if the baby has moved today. As an alert, he reminds me sometimes... And it's a good question to ask a pregnant woman who is alone and has no family nearby and who lives in a new city. (Safiyo, first child)

Discussion

We found that insufficient information about fetal movements and inadequate communication gave room for women's own interpretations with the risk of them normalising decreased fetal movements and waiting to seek care. For the women, the midwife had a high degree of credibility, but language barriers opened the possibility that they would seek information from less credible sources in their first language.

None of the women in our study were fully aware of reasons why less or weaker movements could occur. Information provided by the midwives about fetal movements did not seem to involve education about the physiology of decreased movements and its association with growth restriction and stillbirth. Lack of explanations made women make up their own interpretations, such as that the baby was just resting, that there was a difference in movement pattern between the sexes, or that the baby followed the mother's circadian rhythm and sleeping while she

was resting. Our results are in line with a study conducted with migrant women in the United Kingdom, which showed that even though women had received advice on how to keep their baby safe during pregnancy, they did not associate this information with stillbirth prevention (Stacy et al., 2021). The level of health literacy is one factor that may impact an individual's ability to read and understand information, relate to and evaluate information, and communicate health messages, both in receiving advice regarding their own health but also in supporting others in their health-related decisions (Berkman, et al., 2010). Findings from a Norwegian study including a sample of 302 Somali women living in Oslo revealed that 71% demonstrated inadequate health literacy (Gele et al., 2016). Similarly, a study conducted in Sweden found that low education or being born in Somalia were risk factors associated with an increased risk of having inadequate, functional health literacy (Wångdahl et al., 2014).

The women in our study had difficulties understanding information about fetal movements when provided in Swedish. Not being able to read the written information they received made them disregard it; they instead turned to other sources of information. Difficulties in communicating have been highlighted as one of the most prominent hurdles that healthcare professionals experience when caring for migrant women in antenatal care settings (Binder et al., 2012; Andersson et al., 2021; Kasper et al., 2022). Miscommunication is also one of the main barriers faced by migrant women accessing antenatal care (Ahne et al., 2019; Konje and Konje, 2021). However, in our study, the women acknowledge that seeing a known midwife facilitated communication and reduced the languages barrier. The World Health Organization (2018) recommends that information on warning signs of pregnancy complications and health system navigation is tailored and provided in the target group's first language.

The women in our study had a belief in pregnancy and childbirth as normal processes. Some of them emphasised that Western medicine could not always be trusted and that some things were up to God to decide. Previous studies have identified that Somali women in Western countries have a fear of medical interventions during childbirth which may refrain them from seeking timely obstetric care (Essén et al., 2000; Hill et al., 2012; Jacoby et al., 2015; Clark et al., 2018). A study with Somali women in the United States found that women held on to cultural beliefs that influenced their attitudes regarding health and illness and created normalised conceptualisations of pregnancy and childbirth. Perinatal care was not important if they felt their pregnancy was proceeding normally (Njenga, 2022). Further, recent studies with Somali women in Norway and the United States have found that a negative encounter with a health care provider in antenatal care may cause women to withdraw from care (Utne et al., 2020; Agbemenu et al., 2021).

We found that midwives' check-ups and private conversations during antenatal care appointments were highly valued. However, to ensure high quality care for all women, health care providers must adapt the information provided about fetal movements based on individual circumstances and needs. Thus, this requires cultural sensitivity and an awareness of cultural beliefs and its impact on care-seeking behavior (Renfrew et al., 2014; Shorey et al. 2021; Njenga, 2022). Culturally sensitive maternity care training has been reported to increase midwives' knowledge, skills, and cultural competence significantly (Johnsen et al., 2020; Fair et al., 2021). Further, midwives have an obligation not only to provide care with respect for cultural diversity, but to eliminate harmful practices within those same cultures. By developing a partnership with the individual women and by sharing information, midwives can support women's right to actively participate in decisions affecting themselves and their children (International Confederation of Midwives [ICM], 2014), leaving no women behind (WHO, 2020).

Strengths and limitations

The inductive, qualitative design of this study allowed participants to

describe their experiences and perceptions. Further, the possibility for the participants to speak Somali or Swedish further strengthens the credibility of the study (Elo et al., 2014). Due to a shortage of Somali-speaking interpreters in Sweden, four different female interpreters were used. This may have resulted in slightly different interpretations that could influence both the dependability and the credibility of the study (Twinn, 1997). To ensure that the analysis mirrored the women's descriptions and not the authors', disciplinary, theoretical, and personal assumptions were identified early in the team discussions, and the analysis was carried out in collaboration with all co-authors.

One of the strengths of this study that increases its trustworthiness is that we adopted a consultative process for the development of the interview guide. In addition, two members of the research team shared the same cultural and linguistic background as the women interviewed.

Recruitment of ethnic minorities in public health research remains a challenge (Nielsen et al., 2017). The relatively small sample size of 15 women is a limitation for the transferability of the findings. Furthermore, Swedish Somali women is a heterogeneous group, and we do not suggest that the participants are representative of all Somali women in Sweden. However, the women gave rich descriptions of their experiences of fetal movements, and we believe that the findings can be of value for all midwives caring for migrant women in antenatal health care settings.

Clinical implications

This study highlights the importance of individualised education and information on fetal movements based on the women's own understanding. Somali women's verbal communication can be used to spread accurate information in the Somali community on the importance of seeking care if the fetal movements decrease. Midwife is a trusted profession that can be used as a hub for reassuring that adequate education and information about fetal movements reach each individual woman in antenatal care to promote equality and ensure all children's right to health.

Conclusions

Miscommunication on fetal movements can be a hurdle for Swedish Somali migrant women that may have impact on stillbirth prevention and the quality of care. Improved communication and information tailored to individual needs is essential to achieve equality for women and their newborns.

Ethical approval

Ethical approval was obtained from the Swedish Ethical Review Authority (Dnr 2021-00743).

Funding sources

This study was supported by grants from Sophiahemmet University and General Maternity Hospital Foundation

CRediT authorship contribution statement

Anna Andrén: Conceptualization, Methodology, Investigation, Formal analysis, Writing – original draft. **Anna Akselsson:** Conceptualization, Formal analysis, Writing – review & editing, Project administration. **Ingela Rådestad:** Conceptualization, Formal analysis, Writing – review & editing, Supervision, Project administration, Funding acquisition. **Salma Burhan Ali:** Formal analysis, Writing – review & editing. **Helena Lindgren:** Formal analysis, Writing – review & editing. **Hodan Mohamoud Osman:** Formal analysis, Writing – review & editing. **Kerstin Erlandsson:** Conceptualization, Methodology, Formal

analysis, Writing – original draft, Supervision.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgements

We wish to thank all the women who generously shared their experiences. We would also like to thank all midwives at the antenatal clinics, as well as Caisha Ahmed Arai, Matilda Persson, and Sahra Said Arab, for their invaluable help in recruiting study participants.

References

- Agbemenu, K., Banke-Thomas, A., Ely, G., Johnson-Agbakwu, C., 2021. Avoiding obstetrical interventions among US-based Somali migrant women: a qualitative study. *Ethn. Health* 26 (7), 1082–1097. <https://doi.org/10.1080/13557858.2019.1613519>.
- Ahrne, M., Schytt, E., Andersson, E., Small, R., Adan, A., Essén, B., Byrskog, U., 2019. Antenatal care for Somali-born women in Sweden: Perspectives from mothers, fathers and midwives. *Midwifery* 74, 107–115. <https://doi.org/10.1016/j.midw.2019.03.022>.
- Akselsson, A., Lindgren, H., Georgsson, S., Pettersson, K., Skokic, V., Rådestad, I., 2020a. Pregnancy outcomes among women born in Somalia and Sweden giving birth in the Stockholm area - a population-based study. *Glob. Health Action* 13 (1), 1794107. <https://doi.org/10.1080/16549716.2020.1794107>.
- Akselsson, A., Lindgren, H., Georgsson, S., Pettersson, K., Steineck, G., Skokic, V., Rådestad, I., 2020b. Mindfetalness to increase women's awareness of fetal movements and pregnancy outcomes: a cluster-randomised controlled trial including 39 865 women. *BJOG* 127 (7), 829–837. <https://doi.org/10.1111/1471-0528.16104>.
- Andersson, E., Nazanian, S., Estefania, O., Small, R., 2021. Swedish and Australian midwives' experiences of providing antenatal care for Somali-born women: A qualitative study. *Sex Reprod. Healthc.* 28, 100607 <https://doi.org/10.1016/j.srhc.2021.100607>.
- Berkman, N.D., Davis, T.C., McCormack, L., 2010. Health literacy: what is it? *J. Health Commun.* 15 (Suppl 2), 9–19. <https://doi.org/10.1080/10810730.2010.499985>.
- Binder, P., Borné, Y., Johnsdotter, S., Essén, B., 2012. Shared language is essential: communication in a multiethnic obstetric care setting. *J. Health Commun.* 17 (10), 1171–1186. <https://doi.org/10.1080/10810730.2012.665421>.
- Clark, C.L., Glavin, K., Missal, B.E., Saeteren, B., 2018. Is there a common experience? Somali new mothers' childbirth experiences in Norway and the United States. *Public Health Nurs.* 35 (3), 184–191. <https://doi.org/10.1111/phn.12399>.
- Damsted Rasmussen, T., Villadsen, S.F., Kragh Andersen, P., Smith Jervelund, S., Nybo Andersen, A.M., 2021. Social and ethnic disparities in stillbirth and infant death in Denmark, 2005–2016. *Sci. Rep.* 11 (1), 8001. <https://doi.org/10.1038/s41598-021-87084-3>.
- Dutton, P.J., Warrander, L.K., Roberts, S.A., Bernatavicius, G., Byrd, L.M., Gaze, D., Kroll, J., Jones, R.L., Sibley, C.P., Frøen, J.F., Heazell, A.E., 2012. Predictors of poor perinatal outcome following maternal perception of reduced fetal movements - a prospective cohort study. *PLoS One* 7 (7). <https://doi.org/10.1371/journal.pone.0039784> e39784.
- Elo, S., Kyngäs, H., 2008. The qualitative content analysis process. *J. Adv. Nurs.* 62 (1), 107–115. <https://doi.org/10.1111/j.1365-2648.2007.04569.x>.
- Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K., Kyngäs, H., 2014. Qualitative content analysis: a focus on trustworthiness. *SAGE Open* 4 (1), 2158244014522633. <https://doi.org/10.1177/2158244014522633>.
- Essén, B., Johnsdotter, S., Hovellius, B., Gudmundsson, S., Sjöberg, N.O., Friedman, J., Ostergren, P.O., 2000. Qualitative study of pregnancy and childbirth experiences in Somali women resident in Sweden. *BJOG* 107 (12), 1507–1512. <https://doi.org/10.1111/j.1471-0528.2000.tb11676.x>.
- Fair, F., Soltani, H., Raben, L., van Streun, Y., Sioti, E., Papadakaki, M., Burke, C., Watson, H., Jokinen, M., Shaw, E., Triantafyllou, E., van den Muijsenbergh, M., Vivilaki, V., 2021. Midwives' experiences of cultural competency training and providing perinatal care for migrant women a mixed methods study: operational refugee and migrant maternal approach (ORAMMA) project. *BMC Pregnancy Childbirth* 21 (1), 340. <https://doi.org/10.1186/s12884-021-03799-1>.
- Flenady, V., Wojcieszek, A.M., Middleton, P., Ellwood, D., Erwich, J.J., Coory, M., Khong, T.Y., Silver, R.M., Smith, G.C.S., Boyle, F.M., Lawn, J.E., Blencowe, H., Leisher, S.H., Gross, M.M., Horey, D., Farrales, L., Bloomfield, F., McCowan, L., Brown, S.J., Goldenberg, R.L., 2016. Stillbirths: recall to action in high-income countries. *Lancet* 387 (10019), 691–702. [https://doi.org/10.1016/s0140-6736\(15\)01020-x](https://doi.org/10.1016/s0140-6736(15)01020-x).
- Gele, A.A., Pettersen, K.S., Torheim, L.E., Kumar, B., 2016. Health literacy: the missing link in improving the health of Somali immigrant women in Oslo. *BMC Public Health* 16 (1), 1134. <https://doi.org/10.1186/s12889-016-3790-6>.

- Hill, N., Hunt, E., Hyrkäs, K., 2012. Somali immigrant women's health care experiences and beliefs regarding pregnancy and birth in the United States. *J. Transcult. Nurs.* 23 (1), 72–81. <https://doi.org/10.1177/1043659611423828>.
- Holm Tveit, J.V., Saastad, E., Stray-Pedersen, B., Børdahl, P.E., Frøen, J.F., 2009. Maternal characteristics and pregnancy outcomes in women presenting with decreased fetal movements in late pregnancy. *Acta Obstet. Gynecol. Scand.* 88 (12), 1345–1351. <https://doi.org/10.3109/00016340903348375>.
- International Confederation of Midwives, 2014. International Code of Ethics for Midwives (ICM). <https://www.internationalmidwives.org/assets/files/general-files/2019/10/eng-international-code-of-ethics-for-midwives.pdf>.
- Jacoby, S.D., Lucarelli, M., Musse, F., Krishnamurthy, A., Salyers, V., 2015. A Mixed-Methods Study of Immigrant Somali Women's Health Literacy and Perinatal Experiences in Maine. *J. Midwifery Womens Health* 60 (5), 593–603. <https://doi.org/10.1111/jmwh.12332>.
- Johnsen, H., Christensen, U., Juhl, M., Villadsen, S.F., 2020. Contextual factors influencing the MAMAAct intervention: a qualitative study of non-western immigrant women's response to potential pregnancy complications in everyday life. *Int. J. Environ. Res. Public Health* 17 (3). <https://doi.org/10.3390/ijerph17031040>.
- Kasper, A., Mohwinkel, L.-M., Nowak, A.C., Kolip, P., 2022. Maternal health care for refugee women - a qualitative review. *Midwifery* 104, 103157. <https://doi.org/10.1016/j.midw.2021.103157>.
- Konje, J.K., Konje, J.C., 2021. Experiences of accessing maternity care in the UK: Perspectives from Somali migrant women in Leicester. *Eur. J. Midwifery* 5, 56. <https://doi.org/10.18332/ejm/143167>.
- Lindgren, H., Bogren, M., Osika Friberg, I., Berg, M., Hök, G., Erlandsson, K., 2022. The midwife's role in achieving the Sustainable Development Goals: protect and invest together - the Swedish example. *Glob. Health Action* 15 (1), 2051222. <https://doi.org/10.1080/16549716.2022.2051222>.
- Liu, C., Ahlberg, M., Hjern, A., Stephansson, O., 2019. Perinatal health of refugee and asylum-seeking women in Sweden 2014-17: a register-based cohort study. *Eur. J. Public Health* 29 (6), 1048–1055. <https://doi.org/10.1093/eurpub/ckz120>.
- National Board of Health and Welfare, 2022. Nationellt Kunskapsstöd Om Intrauterin Fosterdöd. <https://www.socialstyrelsen.se/globalassets/sharepoint-dokument/artiklarkatalog/kunskapsstod/2022-8-8088.pdf>.
- Nielsen, A.L., Jervelund, S.S., Villadsen, S.F., Vitus, K., Ditlevsen, K., Tørslev, M.K., Kristiansen, M., 2017. Recruitment of ethnic minorities for public health research: An interpretive synthesis of experiences from six interlinked Danish studies. *Scand. J. Public Health* 45 (2), 140–152. <https://doi.org/10.1177/1403494816686267>.
- Njenga, A., 2022. Somali refugee women's cultural beliefs and practices around pregnancy and childbirth. *J. Transcult. Nurs.* 33 (4), 484–490. <https://doi.org/10.1177/10436596221085299>.
- Renfrew, M.J., McFadden, A., Bastos, M.H., Campbell, J., Channon, A.A., Cheung, N.F., Silva, D.R., Downe, S., Kennedy, H.P., Malata, A., McCormick, F., Wick, L., Declercq, E., 2014. Midwifery and quality care: findings from a new evidence-informed framework for maternal and newborn care. *Lancet North Am. Ed.* 384 (9948), 1129–1145. [https://doi.org/10.1016/S0140-6736\(14\)60789-3](https://doi.org/10.1016/S0140-6736(14)60789-3).
- Råssjö, E.B., Byrskog, U., Samir, R., Klingberg-Allvin, M., 2013. Somali women's use of maternity health services and the outcome of their pregnancies: a descriptive study comparing Somali immigrants with native-born Swedish women. *Sex Reprod. Healthc.* 4 (3), 99–106. <https://doi.org/10.1016/j.srhc.2013.06.001>.
- Saastad, E., Vangen, S., Frøen, J.F., 2007. Suboptimal care in stillbirths - a retrospective audit study. *Acta Obstet. Gynecol. Scand.* 86 (4), 444–450. <https://doi.org/10.1080/00016340701207724>.
- Shorey, S., Ng, E.D., Downe, S., 2021. Cultural competence and experiences of maternity health care providers on care for migrant women: a qualitative meta-synthesis. *Birth* 48 (4), 458–469. <https://doi.org/10.1111/birt.12581>.
- Stacey, T., Haith-Cooper, M., Almas, N., Kenyon, C., 2021. An exploration of migrant women's perceptions of public health messages to reduce stillbirth in the UK: a qualitative study. *BMC Pregnancy Childbirth* 21 (1), 394. <https://doi.org/10.1186/s12884-021-03879-2>.
- Statistics Sweden [SCB], 2023. *Invandring Till Sverige*. (SCB). <https://www.scb.se/hitta-statistik/sverige-i-siffror/manniskorna-i-sverige/invandring-till-sverige/>.
- The Swedish Society of Obstetrics and Gynecology, 2016. *Mödrhälsövård, Sexuell och Reproductiv Hälsa*. (ARG Report 76). <https://www.sfog.se/natupplaga/ARG76web4a328b70-0d76-474e-840e-31f70a89eae9.pdf>.
- Turner, J.M., Flenady, V., Ellwood, D., Coory, M., Kumar, S., 2021. Evaluation of pregnancy outcomes among women with decreased fetal movements. *JAMA Netw. Open* 4 (4), e215071. <https://doi.org/10.1001/jamanetworkopen.2021.5071>.
- Twinn, S., 1997. An exploratory study examining the influence of translation on the validity and reliability of qualitative data in nursing research. *J. Adv. Nurs.* 26 (2), 418–423. <https://doi.org/10.1046/j.1365-2648.1997.1997026418.x>.
- Utne, R., Antrobus-Johannessen, C.L., Aasheim, V., Aasekjær, K., Vik, E.S., 2020. Somali women's experiences of antenatal care: a qualitative interview study. *Midwifery* 83, 102656. <https://doi.org/10.1016/j.midw.2020.102656>.
- Vik, E.S., Aasheim, V., Schytt, E., Small, R., Moster, D., Nilsen, R.M., 2019. Stillbirth in relation to maternal country of birth and other migration related factors: a population-based study in Norway. *BMC Pregnancy Childbirth* 19 (1), 5. <https://doi.org/10.1186/s12884-018-2140-3>.
- World Health Organization, 2018. *Improving the Health Care of Pregnant Refugee and Migrant Women and Newborn children. Technical Guidance on Refugee and Migrant Health*. (WHO Regional Office for Europe). https://www.euro.who.int/_data/assets/pdf_file/0003/388362/tc-mother-eng.pdf.
- World Health Organization, 2020. *Women's Health and Rights: 25 Years of Progress?* (WHO). <https://www.who.int/news/item/08-03-2020-women-s-health-and-rights-25-years-of-progress>.
- Wängdahl, J., Lytsy, P., Mårtensson, L., Westerling, R., 2014. Health literacy among refugees in Sweden - a cross-sectional study. *BMC Public Health* 14, 1030. <https://doi.org/10.1186/1471-2458-14-1030>.