

ORIGINAL ARTICLE OPEN ACCESS

Childbirth Experience, Mistreatment, and Migrant Status: A Retrospective Cross-Sectional Study

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Received: 15 March 2024 | **Revised:** 3 October 2024 | **Accepted:** 9 January 2025

Funding: This work was supported by Rannís Icelandic Centre for Research, Developmental Fund for Immigration Issues of the Icelandic Ministry of Social Affairs and the Labour Market, Memorial Fund of Midwife Björg Magnúsdóttir and Magnús Jónasson and Nursing and Midwifery Research Fund of Ingibjörg R. Magnúsdóttir. The authors declare that there is no funding bias in this research.

Keywords: childbirth experience | health inequity | healthcare professionals | migrants | mistreatment

ABSTRACT

Introduction: Childbirth experience can affect women's long-term health and well-being. However, there is limited knowledge on whether migrant status affects woman's experience during childbirth. We aimed to answer the following research questions: (1) Is there a difference in childbirth experience between migrant and native-born women in Iceland; and (2) Are migrant women more likely to experience mistreatment in childbirth compared to native-born women in Iceland?

Methods: An online survey was developed including the Childbirth Experience Questionnaire 2 to assess overall childbirth experience, and descriptive analysis and linear regression were conducted to determine differences between migrant and native-born women in Iceland. The mistreatment by care providers in childbirth indicators were used to evaluate mistreatment in childbirth, and frequencies and logistic regression were conducted. Both regression models were adjusted for sociodemographic and obstetric factors.

Results: A total of 1365 women participated. Migrant women reported statistically significantly lower scores for birth experience compared to native-born women ($F [12, 1352] = 23.97, p < 0.001$). There was no statistical difference between groups regarding mistreatment in childbirth. One in four of all women reported at least one form of mistreatment.

Conclusion: This study suggests that there are areas in maternity care that can be improved upon, particularly in providing care for migrant women and addressing mistreatment in childbirth for all. Our results suggest further research in this area as well as evaluation of maternity systems, training in cultural competency and effective communication.

1 | Introduction

A woman's childbirth experience can affect her physical, psychological and social well-being as well as the health of her child. Women who have a positive experience of childbirth

describe feeling in control and receiving quality care [1]. Those who mentally prepare themselves for birth, receive support and use minimal interventions during labor are more likely to have a positive birth experience [2, 3]. Additional factors associated with a positive experience are vaginal birth without epidural, no

Abbreviations: CEQ-2, Childbirth Experience Questionnaire version 2; MCPC, mistreatment by care providers in childbirth indicators; REDCap, research electronic data capture; SPSS, statistical package for social sciences; WHO, World Health Organization.

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labor augmentation, no birth complications and a known midwife providing care [4].

Unfortunately, not all women have a positive birth experience, and it is ultimately the woman herself who determines whether her experience is positive or negative [5]. All over the world, women are reporting negative childbirth experiences, especially those who are not satisfied with professional support during labor, have a prolonged labor or give birth with the assistance of vacuum extraction, forceps or cesarean section [3]. Furthermore, mistreatment by healthcare providers during childbirth contributes to a woman's negative experience [6, 7]. Forms of mistreatment include physical abuse, sexual abuse, verbal abuse, stigma, discrimination, failure to meet professional standards of care and poor rapport between women and care providers [8].

Migrant women are known to be a socially and economically disadvantaged group at risk of experiencing childbirth negatively because of their status [9–12]. Recent studies in Iceland suggest that migrant women are more likely to experience episiotomy, instrumental births, postpartum hemorrhage, and cesarean section [11]. Yet, they are less likely to use pain-relief methods [10]. Additionally, there is evidence that they perceive less respectful maternity care and less autonomy in decision-making when compared native-born women [9]. There is a lack of research in comparing overall birth experience between these two groups. More research is needed that focuses on women from disadvantaged backgrounds receiving maternity care [13].

The purpose of our study was to identify differences in childbirth experience and mistreatment between migrant and native-born women. Therefore, we aim to answer the following research questions:

1. Is there a difference in childbirth experience between migrant and native-born women in Iceland?
2. Are migrant women more likely to experience mistreatment by care providers during childbirth compared to native-born women in Iceland?

2 | Methods

2.1 | Study Setting

This study was conducted in Iceland, a Nordic country with a population of approximately 387,000 residents [14]. Currently, migrants make up 18.4% of the population, with the largest group originating from Poland [14]. The most challenging barrier to migrant integration is lack of effective language learning [15]. Iceland has a universal healthcare system in which maternity care is primarily provided by midwives; however, general practitioners and obstetricians are consulted when pregnancy or birth complications arise. In 2021, a total of 4895 babies were born [16]. Women who give birth at home, in small midwifery-led birth units or in rural health institutions (~10%) have the possibility of receiving continuous care from a known and trusted midwife [16]. Generally, there are good maternal and neonatal outcomes, with a perinatal mortality rate of 3.5 per 1000 babies born which is lower than the average of 6.7 in Europe [17].

Iceland has a maternal mortality rate of 3 per 100,000 births which is lower than the average rate of 13 per 100,000 births in high-income countries [18].

2.2 | Survey Development and Distribution

A survey was developed to collect information on sociodemographic and obstetric characteristics, childbirth experience and mistreatment in childbirth. The Childbirth Experience Questionnaire, version 2 (CEQ-2) [19–21] was used to evaluate childbirth experience and the mistreatment by care providers in childbirth (MCPC) [8, 22] indicators were used to assess mistreatment in childbirth (Table 1). The survey was originally developed in English and then translated via forward and back translation into Icelandic [21] and Polish. The survey was distributed through email and social media platforms (Facebook and Instagram) to reach a diverse group of women [23]. The inclusion criteria to participate in the study were: (1) woman age > 18 years at time of survey; (2) received maternity care in Iceland 2015–2021; and (3) fluency in Icelandic, English or Polish which are the most spoken languages.

2.3 | Instruments

2.3.1 | Childbirth Experience Questionnaire, Version 2

The CEQ-2 scale has been translated and validated in many countries, including Iceland [19–21, 24–32]. Validation of the CEQ-2 scale in Icelandic has shown high internal consistency, but further work is needed to determine the optimal number of items and domains of the questionnaire in Icelandic because two items (“I was tired during labor and birth” and “As a whole, how painful did you feel childbirth was?”) were not sufficiently related to other scale items to warrant inclusion [21]. However, for the purposes of this study, the decision was made to use all scale items to compare participants' scores across all three languages, as well as to compare Iceland's scores to other countries [19, 24–26, 28, 31, 32]. Participants answered 22 items assessing women's childbirth experience in four domains: own capacity, perceived safety, professional support and participation. A 4-point Likert response format was used. Subscale scores were computed for domains by summing values of the items in each domain and dividing by the number of items to calculate the mean. Then, the total CEQ-2 score was computed by adding domain scores and dividing by four. The highest possible overall score was four points and the lowest possible was one point. A higher score reflected a more positive birth experience.

2.3.2 | Mistreatment in Childbirth

Through extensive research, the World Health Organization (WHO) developed a typology of mistreatment during childbirth which further led to the development of the MCPC indicators [8, 22]. These indicators measure the domains that align with WHO's typology of mistreatment such as stigma, failure to meet professional standards of care, lack of informed consent, and loss of autonomy [22]. The indicators used in this

TABLE 1 | Domains and survey items used to assess childbirth experience (Childbirth Experience Questionnaire, version 2) and mistreatment during childbirth (mistreatment by care provider during childbirth).

Domain	Items
Childbirth Experience	
Own capacity	Labor and birth went as I had expected I felt strong during labor and birth I felt capable during labor and birth I was tired during labor and birth (R) I felt happy during labor and birth I felt that I handled the situation well As a whole, how painful did you feel childbirth was? (R)* As a whole, how much control did you feel you had during childbirth?*
Professional support	Both my partner and I were treated with warmth and respect I would have preferred the midwife to be more present during labor and birth (R) I would have preferred more encouragement from the midwife (R) The midwife conveyed an atmosphere of calm The midwife helped me to find my inner strength
Perceived safety	I felt scared during labor and birth (R) My impression of the team's medical skills made me feel secure I have many positive memories from childbirth I have many negative memories from childbirth (R) Some of my memories from childbirth make me feel depressed (R) As a whole, how secure did you feel during childbirth?*
Participation	I wish the staff had listened to me more during labor and birth (R) I took part in decisions regarding my care and treatment as much as I wanted I received the information I needed during labor and birth

(Continues)

TABLE 1 | (Continued)

Domain	Items
Mistreatment by care providers in childbirth	
Physical abuse	You experienced physical abuse (including aggressive physical contact, inappropriate sexual conduct, refusal to provide anesthesia for an episiotomy, etc.)
Verbal abuse	Healthcare providers (doctors, midwives) shouted or scolded you
Failure to meet professional standards of care	Your physical privacy was violated (i.e., being uncovered or having people in the delivery room without your consent) Your private or personal information was shared without your consent Healthcare providers threatened to withhold treatment or to force you to accept treatment you did not want Healthcare providers ignored you, refused your request for help or failed to respond to requests for help in a reasonable amount of time

Abbreviation: R, reversed score.

*Visual analog scale (VAS), 0–100 points in which values 0–40 were coded as 1; 41–60 were coded as 2; 61–80 were coded as 3; and 81–100 were coded as 4.

study consisted of six items in three domains: Physical abuse (1 item); verbal abuse (1 item); and failure to meet professional standards of care (4 items). Participants were asked if they experienced any of the mistreatment indicators by answering yes/no.

2.4 | Data Collection

The survey was accessible online using research electronic data capture (REDCap). Data were collected from April 1st–30th, 2021. Convenience sampling was used. All answers were anonymous. Survey results were stored in a password-protected drive at the University of Iceland.

2.5 | Covariates

The following sociodemographic variables were collected: age; highest level of education completed (university education, other); monthly income in Icelandic currency (ISK) for the entire household before taxes; relationship status (married/cohabitation, single); social complications (housing problems, financial difficulties, lack of support from friends and family, difficulty accessing health care, physical abuse, mental abuse, anxiety, and depression).

The following obstetric variables were collected: parity (primiparous, multiparous); pregnancy complications (spotting/

bleeding for more than a few days, anemia, high blood pressure, gestational diabetes, placenta problems, infection, GBS positive, problems with the baby's growth/amniotic fluid, problems with the baby's position, twins or more, premature labor); place of birth (hospital setting, other); induction (yes, no); epidural (yes, no); and mode of birth (vaginal, cesarean section). In our study, "hospital setting" was defined as mixed-risked birth units, and "other" included births at home, in small low-risk midwifery units, at birth centers or in transit to the intended place of birth. The type of care provider was not included because all childbearing women in Iceland receive care from midwives, and obstetricians provide additional care if required.

2.6 | Data Analysis

Statistical package for the social sciences (SPSS) version 29 was used to analyze data. A $p < 0.05$ was considered statistically significant. The reliability of CEQ-2 was determined by calculating Cronbach's alpha coefficients for the instrument in Icelandic, English and Polish. A Cronbach's alpha > 0.7 indicated internal consistency, an indicator of scale reliability. For the 22-item scale, Cronbach's alpha coefficients were 0.948 in Icelandic ($n = 1159$), 0.934 in English ($n = 134$) and 0.940 in Polish ($n = 72$) demonstrating reliability in all three languages. To evaluate childbirth experience, descriptive statistics were used to calculate the means and standard deviations for CEQ-2 subscale scores. A hierarchical multiple linear regression model was used to determine statistical significance between the two groups (Model 1). Then, hierarchical multiple regression was conducted to determine differences between the two groups adjusting for sociodemographic factors (Model 2) and sociographic factors and obstetric factors (Model 3). Regression assumptions were tested.

For each of the MCPC indicators, descriptive statistics were used to calculate frequencies for the overall prevalence of mistreatment in the study population as well as between the two groups. To further evaluate mistreatment in childbirth between the two groups, a binary logistic regression model was performed to ascertain the effects of migrant status, sociodemographic factors and obstetric factors on the likelihood of experiencing any mistreatment during childbirth by care providers. Linearity of the continuous variables with respect to the logit of the dependent variable of mistreatment was confirmed via Box-Tidwell procedure.

3 | Results

3.1 | Sample Characteristics

The sample consisted of 1365 women who participated and completed the survey in full (Table 2). The mean age of the sample was 30.4 years with a range from 18 to 46 years. About 85% percent of women were native-born Icelandic whereas 15% were migrant women with approximately half originating from Poland. In the sample, there were high percentages of women who were married/cohabitating (94.7%), university-educated (60.7%), primiparous (68.0%), gave birth in a hospital setting (89.4%) and gave birth vaginally (85.8%).

When looking at obstetric factors, 62% of women reported at least one pregnancy complication. The most common complications were gestational diabetes (16.2%) and hypertensive disorders (18.2%). Thirty-five percent of women reported induction of labor, and almost half of all participants used epidural analgesia for pain relief. There were no statistical differences in sociodemographic or obstetric characteristics between native-born and migrant women except in maternal age; migrant women who participated tended to be older than the native-born Icelandic women (Table 2).

3.2 | Childbirth Experience

Overall, the average total CEQ-2 score was $M = 3.11$, $SD = 0.67$. Migrant women reported statistically significant lower total CEQ-2 scores ($M = 2.88$, $SD = 0.50$) than native-born women ($M = 3.16$, $SD = 0.68$) when adjusted for sociodemographic and obstetric factors. Furthermore, migrant women reported statistically significantly lower scores for perceived safety, professional support and participation compared to native-born women. In particular, the following items contributed to the lower CEQ-2 scores among migrant women: "I would have preferred the midwife to be more present during labor and birth"; "I wish the staff listened to me more during labor and birth"; and "I have many negative memories from childbirth" (Table 3).

In Table 4, the full hierarchical multiple regression model of country origin, sociodemographic factors and obstetric factors predicted that CEQ-2 scores were statistically significant between migrant and native-born women in Iceland, $R^2 = 0.175$, $F(12, 1352) = 23.97$, $p < 0.001$ (Table 4, Model 1); adjusted $R^2 = 0.168$ accounted for 16.8% of the explained variability, a medium effect size [33]. Migrant status accounted for 17% of the variance in childbirth experiences. Sociodemographic factors explained an additional 6% and obstetric factors an additional 8% of differences in childbirth experience.

3.3 | Mistreatment in Childbirth by Care Providers

The logistic regression model of the occurrence of mistreatment in childbirth by care providers showed that there was no statistically significant difference between migrant and native-born women in Iceland, $[X^2(1) = 2.26, p = 0.216]$ when adjusted for sociodemographic and obstetric factors. Although there was no difference between the two groups, approximately 24% ($n = 328$) of all women participating in the study reported at least one form of mistreatment, and 8.9% ($n = 121$) reported two or more forms of mistreatment. The most common form of mistreatment was failure to meet professional standards of care, with 15.6% ($n = 213$) reporting that health care providers ignored them, refused their requests for help or failed to respond to their requests for help in a reasonable amount of time (Table 5).

4 | Discussion

These results show that migrant women reported less positive childbirth experiences in comparison to native-born women;

TABLE 2 | Sociodemographic and obstetric characteristics of native in the survey among native-born ($n = 1159$) and migrant women ($n = 206$) in an Icelandic population of mothers giving birth during 2015–2021 ($N = 1365$).

Maternal characteristics	Native-born, $n = 1159$ n (% within group)	Migrant, $n = 206$ n (% within group)	Total (% of entire sample)	p (difference between groups)
Maternal age (years)				
< 25	195 (16.8)	25 (12.1)	220 (16.1)	0.005*
25–29	521 (45.0)	75 (36.4)	597 (43.7)	
30–34	292 (25.2)	71 (34.5)	363 (26.6)	
≥ 35	151 (13.0)	35 (17.0)	186 (13.6)	
Relationship status				
Single	59 (5.1)	13 (6.3)	72 (5.3)	0.469
Married/living with partner	1100 (94.9)	193 (93.7)	1294 (94.7)	
Education				
University	708 (61.0)	121 (58.7)	829 (60.7)	0.534
Other	451 (39.0)	85 (41.3)	537 (39.3)	
Monthly income (ISK)				
< 300.000	97 (8.4)	19 (9.2)	116 (8.5)	0.058
300.000–499.999	216 (18.6)	56 (27.2)	272 (19.9)	
500.000–699.999	321 (27.8)	53 (25.7)	375 (27.5)	
700.000–899.999	240 (20.7)	34 (16.5)	274 (20.1)	
≥ 900.000	285 (24.6)	44 (21.4)	329 (24.1)	
Social complications				
None	574 (49.5)	101 (49.0)	675 (49.4)	0.904
At least one	585 (50.5)	105 (51.0)	691 (50.6)	
Parity				
Primiparous	793 (68.4)	135 (65.5)	929 (68.0)	0.409
Multiparous	366 (31.6)	71 (34.5)	437 (32.0)	
Pregnancy complications				
None	392 (33.8)	66 (32.0)	458 (33.5)	0.623
At least one	767 (66.2)	140 (68.0)	908 (66.5)	
Place of birth**				
Hospital	1032 (89.1)	188 (91.3)	1221 (89.4)	0.343
Out of hospital	127 (10.9)	18 (8.7)	145 (10.6)	
Induction of labor				
Yes	420 (36.3)	69 (33.5)	490 (35.9)	0.440
No	739 (63.7)	137 (66.5)	876 (64.1)	
Epidural				
Yes	563 (48.6)	103 (50.0)	667 (48.8)	0.715
No	596 (51.4)	103 (50.0)	699 (51.2)	
Mode of birth***				

(Continues)

TABLE 2 | (Continued)

Maternal characteristics	Native-born, <i>n</i> = 1159 <i>n</i> (% within group)	Migrant, <i>n</i> = 206 <i>n</i> (% within group)	Total (% of entire sample)	<i>p</i> (difference between groups)
Vaginal	996 (85.9)	175 (85.0)	1171 (85.8)	0.709
Cesarean	163 (14.1)	31 (15.0)	194 (14.2)	

*Chi-squared tests for significance, $p < 0.05$ considered statistically significant.

**Place of birth—"Hospital" refers to mixed-risk hospital birth units; "out of hospital" refers to birth taking place at home, in smaller midwifery-led units, birth centers or in transit to the intended place of birth.

***Mode of birth: "vaginal" birth includes vaginal birth with or without forceps or vacuum extraction; "cesarean section" includes elective and emergency surgery.

however, there was no statistical difference between the two groups regarding the occurrence of MCPC. Overall, the scores from the childbirth questionnaire suggest that most women have a positive birth experience. The overall mean total CEQ-2 score for this study population was 3.11 points on a scale from one to four points. Other countries that have used the CEQ-2 scale to evaluate childbirth experience have reported similar mean total scores. Studies from other Nordic countries have reported mean total CEQ-2 scores with a range of 3.09–3.34 [25, 27, 34], and in studies conducted in European countries, scores were similar in the United Kingdom (3.06–3.23) [19], the Netherlands (3.25) [30] and Spain (2.96–3.18) [31] to the Icelandic scores.

In this study, there is a difference between migrant women and native-born women when it comes to birth experience, indicating inequities in care. Although migrant women in this study reported higher levels of sense of capacity to give birth than their native-born counterparts, they perceived less safety, less professional support, and less active participation. These items were all related to communication and interactions with healthcare professionals. Migrant women reported lower scores in items related to communication, such as preferring the midwife to be more present and encouraging and wishing the staff had listened to them more. These results are in alignment with other studies about migrant childbearing women in Iceland. For instance, one study found that migrant women in Iceland were more likely to perceive less respect from care providers and perceive less autonomy when making decisions about their care [9]. Another Icelandic study found that migrant women were less likely to utilize non-pharmacological pain-relief methods during labor yet were more likely to experience complications in childbirth [10]. This phenomenon has also been described in the United States, where there is a history of over- and under-utilization of pain relief methods for women of color, with some considering it to be a sign of obstetric racism [35–38].

This study contributes to the growing evidence on inequities and inadequate maternity care for migrant women in high-income countries. In a recent Norwegian study, migrant women were more likely to experience that their needs were not met during childbirth when compared to native-born women [39]. In a systematic review of migrant women's experiences of maternity care in Europe, women expressed difficulties navigating the healthcare system in a new country, lack of trust in healthcare providers, difficulties in communication, inadequate information, different expectations of care, lack of understanding of their culture and traditions and fear of mistreatment because of their background [40]. On the other hand, they valued healthcare professionals who were supportive, provided reliable information, had respectful attitudes, made them feel safe and took

their concerns seriously [40]. For this reason, there is hope that midwives and other healthcare professionals have the power to improve care with cultural sensitivity and compassionate communication.

In a systematic scoping review on effective models of care for migrant women, results indicated that key elements of effective maternity care models included culturally responsive care, continuity of care, effective communication, psychosocial and practical support, support to navigate systems and flexible and accessible services [41]. A positive and empowering pregnancy, childbirth, and postpartum period is the foundation for physically and mentally healthy mothers and their children; however, if a woman's first steps into motherhood are characterized by oppression, uncertainty, distrust, fear, and mistreatment, the mother and child will begin their life together at a disadvantage, perpetuating their socially vulnerable status in society.

This study shows no statistical difference in MCPC between migrant women and native-born women. However, 24% of all women reported at least one form of mistreatment by care providers during childbirth, with 8.9% reporting two or more. The most common forms of mistreatment reported were that healthcare providers ignored women, refused their requests for help or failed to respond to their requests for help. Again, here is evidence of difficulties in communication. For example, 8% of women indicated that healthcare providers scolded or shouted at them, and approximately 5% of women expressed that their physical privacy was violated. Currently, no other studies have specifically looked at mistreatment in childbirth in Iceland, but according to an Icelandic longitudinal cohort study, approximately 5% of women considered their birth to be a negative experience [3].

The concepts of mistreatment in childbirth and obstetric violence can be complicated and difficult to define. Although many studies on mistreatment and obstetric violence exist in low- and middle-income countries [8], research is beginning to emerge in high-income countries [12, 42]. In the United States, 17% of women experience at least one form of mistreatment such as loss of autonomy, being shouted at or being ignored during labor and childbirth [22]. Of migrants who had recently immigrated to the United States, 23.5% reported at least one type of obstetric mistreatment compared to 16.9% of native-born women [22]. In a Swiss study, 28% of women experienced at least one form of mistreatment, with most indicating ineffective communication and lack of informed consent [43]. In a Swedish qualitative study, women reported psychological and physical abuse during childbirth interpreted as "obstetric violence" such as lack of information and consent, insufficient pain relief, lack

TABLE 3 | Childbirth Experience Questionnaire, version 2 (CEQ-2) differences in dimension scores and overall mean scores among native-born ($n = 1159$) and migrant women ($n = 206$) in an Icelandic population of mothers giving birth during the period 2015–2021 ($N = 1365$).

Domain	Items	Native-born M (SD)	Migrant M (SD)	TOTAL M (SD)	Adjusted p
Own capacity		2.66 (0.72)	2.73 (0.64)	2.67 (0.72)	< 0.001
	Labor and birth went as I had expected	2.58 (1.03)	2.81 (1.04)		< 0.001
	I felt strong during labor and birth	3.24 (0.95)	2.91 (0.99)		< 0.001
	I felt capable during labor and birth	3.18 (0.91)	3.01 (0.88)		0.02
	I was tired during labor and birth (R)	2.06 (1.05)	2.47 (1.06)		< 0.001
	I felt happy during labor and birth	2.97 (1.01)	2.95 (0.95)		0.83
	I felt that I handled the situation well	2.82 (1.03)	3.13 (0.89)		< 0.001
	As a whole, how painful did you feel childbirth was?(R)	1.96 (1.02)	1.99 (1.08)		0.91
	As a whole, how much control did you feel you had during childbirth?	2.45 (1.19)	2.59 (1.18)		0.41
Professional support		3.35 (0.76)	2.98 (0.58)	3.31 (0.75)	< 0.001
	Both my partner and I were treated with warmth and respect	3.58 (0.75)	3.48 (0.72)		0.06
	I would have preferred the midwife to be more present during labor and birth (R)	3.22 (0.96)	2.39 (1.10)		< 0.001
	I would have preferred more encouragement from the midwife (R)	3.21 (0.98)	2.41 (1.03)		< 0.001
	The midwife conveyed an atmosphere of calm	3.52 (0.80)	3.43 (0.76)		0.11
	The midwife helped me to find my inner strength	3.25 (0.94)	3.20 (0.88)		0.47
Perceived safety		3.29 (0.78)	2.87 (0.61)	3.27 (0.77)	< 0.001
	I felt scared during labor and birth (R)	2.89 (1.09)	2.51 (0.98)		< 0.001
	My impression of the team's medical skills made me feel secure	3.53 (0.80)	3.34 (0.83)		0.002
	I have many positive memories from childbirth	3.27 (0.98)	3.17 (0.95)		0.20
	I have many negative memories from childbirth (R)	3.18 (1.02)	2.43 (1.17)		< 0.001
	Some of my memories from childbirth make me feel depressed (R)	3.52 (0.89)	2.58 (1.19)		< 0.001
	As a whole, how secure did you feel during childbirth?	3.34 (0.99)	3.25 (1.01)		0.30

(Continues)

TABLE 3 | (Continued)

Domain	Items	Native-born <i>M</i> (SD)	Migrant <i>M</i> (SD)	TOTAL <i>M</i> (SD)	Adjusted <i>p</i>
Participation		3.32 (0.83)	2.90 (0.66)	3.31 (0.81)	< 0.001
	I wish the staff had listened to me more during labor and birth (R)	3.40 (0.96)	2.43 (1.12)		< 0.001
	I took part in decisions regarding my care and treatment as much as I wanted	3.25 (0.92)	3.01 (0.95)		< 0.001
	I received the information I needed during labor and birth	3.32 (0.92)	3.29 (0.82)		0.65

*Linear regression model adjusting for age, relationship status, education, income, social complication, parity, pregnancy complication, induction, epidural, birth setting and mode of birth. $p < 0.05$ considered statistically significant indicated by bold text.

TABLE 4 | Hierarchical multiple regression predicting CEQ-2 scores from country of origin, sociodemographic factors and obstetric factors ($N = 1365$).

Variable	CEQ-2 scores		
	Model 1	Model 2	Model 3
	<i>B</i>	<i>B</i>	<i>B</i>
Constant	3.158*	2.947*	2.672*
Foreign origin	-0.282*	-0.281*	-0.274*
Age over 30 years		0.090	0.001
In a relationship		0.066	0.024
University education		0.052	0.059
Income > 500.000kr		0.113	0.099
Multiparity			0.277*
No pregnancy complication			0.101
Vaginal birth			0.271*
R^2	0.023	0.041	0.102
F	32.256*	11.645*	19.230*
ΔR^2	0.023	0.038	0.097
ΔF	32.256*	6.366*	30.602*

Note: $N = 1365$.

* $p < 0.001$.

of trust and perceived safety from healthcare professionals and abuse including threats [42]. In a Dutch study, the most commonly reported instances of disrespect and abuse included lack of choices, lack of communication, lack of support and harsh treatment or physical violence [12]. The aforementioned research shows slight differences among high-income countries in the types of mistreatment occurring; however, the forms of mistreatment seem to be based on poor communication and lack of informed consent.

Considering the current research, it is evident that MCPC and obstetric violence is a worldwide phenomenon; therefore,

healthcare professionals and systems must adapt a human rights-based approach to address these violations of human and reproductive rights. It is important to identify roots of mistreatment beyond the individual level such as patriarchal care, medicalized approaches, harmful gender stereotypes, power dynamics, and weak health systems that contribute to mistreatment [44]. Only then can improvements be made in maternity care, to ensure well-being and safety for both mother and baby.

Further research is needed to map out the context and causes of inequities and mistreatment in the Icelandic healthcare system as well as healthcare systems globally. The results of our study indicate a need for training in cultural sensitivity and compassionate communication [45]. A mix of both quantitative and qualitative approaches has been recommended as the optimal strategy to evaluate mistreatment in childbirth and advocate for change [46]. In addition, using an intersectionality perspective to evaluate childbirth experience can provide useful information on how oppression and exclusion intersect and drive inequities [47]; however, larger sample sizes of migrant women are needed to look at the intersection of race, immigration status, poverty, domestic violence, and other factors.

4.1 | Strengths and Limitations

One of the strengths of our study is that the sample population mirrors the demographics of Icelandic society as well as its obstetric profile [14, 16]. The study design also emphasizes inclusivity through the investment of time and resources to ensure survey availability in three different languages, reflecting the largest immigrant groups in Iceland. This enabled migrant women to complete the survey who might not otherwise have participated in research because of language barriers. Also, this study includes a large and diverse sample size of over 1300 women with 15% of participants from migrant communities which is representative of the migrant population in Iceland [14].

This study also has limitations. A self-reported survey was used to collect data on childbirth experience and mistreatment by care providers. When participating in self-report surveys, respondents may have recall bias or have tendencies to embrace or avoid extreme responses. Another limitation is that most participants

TABLE 5 | Mistreatment by care providers in childbirth (MCPC) based on the typology of mistreatment developed by the World Health Organization, $N = 1365$.

Indicator	Native-born n (% within group)	Migrant n (% within group)	Total n (%)
Physical abuse (including aggressive physical contact, inappropriate sexual conduct, a refusal to provide anesthesia for an episiotomy, etc.)	27 (2.3)	3 (1.5)	30 (2.2)
My private or personal information was shared without my consent	26 (2.2)	2 (1.0)	28 (2.0)
Healthcare providers threatened to withhold treatment or to force me to accept treatment	54 (4.7)	10 (4.9)	64 (4.7)
My physical privacy was violated (i.e., being uncovered or having people in the delivery room without my consent)	64 (5.5)	8 (3.9)	72 (5.3)
Health care providers scolded or shouted at me	100 (8.6)	11 (5.3)	111 (8.1)
Health care providers ignored me, refused my requests for help or failed to respond to requests for help in a reasonable amount of time	176 (15.2)	37 (18.0)	213 (15.6)

Note: Native-born women, $n = 1159$; migrant women, $n = 206$.

were well-educated, employed professionals from high-income countries; consequently, the difference between the two groups could be more profound if it had included more women from low-income countries or those who have not had the opportunity to complete higher education. Also, we did not collect data on which provider the participant associated mistreatment with, and therefore, it is unclear if mistreatment is associated with the type of care provider. This could be interesting for future data collection. Nevertheless, the results of the study contribute to the emerging evidence of the experiences of migrant women receiving maternity care and uncover areas needing improvement.

4.2 | Clinical Implications

This research demonstrates the need for reflection and evaluation of patriarchal medicalised systems, cultural competency, and communication skills. Our results indicate that action is needed to ensure that migrant women feel safe and encounter higher levels of professionalism from care providers. Even in a maternal healthcare system that emphasizes woman-centered care such as in Iceland, there are differences in childbirth experience between migrant and native-born women. This calls for a campaign to raise awareness of inequities and mistreatment in maternity services. Training programs in cultural sensitivity and communication could improve care and reduce health inequities. All women deserve to be heard, to receive reliable, unbiased information, and to play an active role in making decisions about their bodies and their care. Finally, we must make a strong effort to prevent and eliminate MCPC for all women, and this study highlights areas of improvement in communication and informed consent.

Ethics Statement

This study was approved by the National Bioethics Committee in Iceland on September 29, 2020 (VSNb2020090017/03.01) and performed in accordance with the Declaration of Helsinki.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

References

1. G. McKelvin, G. Thomson, and S. Downe, "The Childbirth Experience: A Systematic Review of Predictors and Outcomes," *Women and Birth* 34, no. 5 (2021): 407–416.
2. M. Taheri, A. Takian, Z. Taghizadeh, N. Jafari, and N. Sarafraz, "Creating a Positive Perception of Childbirth Experience: Systematic Review and Meta-Analysis of Prenatal and Intrapartum Interventions," *Reproductive Health* 15, no. 1 (2018): 73.
3. V. L. Sigurdardottir, J. Gamble, B. Gudmundsdottir, H. Kristjansdottir, H. Sveinsdottir, and H. Gottfredsdottir, "The Predictive Role of Support in the Birth Experience: A Longitudinal Cohort Study," *Women and Birth* 30, no. 6 (2017): 450–459.
4. I. Hildingsson, A. Karlström, and B. Larsson, "Childbirth Experience in Women Participating in a Continuity of Midwifery Care Project," *Women and Birth* 34, no. 3 (2021): e255–e261.
5. S. Shorey, Y. Y. Yang, and E. Ang, "The Impact of Negative Childbirth Experience on Future Reproductive Decisions: A Quantitative Systematic Review," *Journal of Advanced Nursing* 74, no. 6 (2018): 1236–1244.
6. S. Ayers, A. Horsch, S. Garthus-Niegel, et al., "Traumatic Birth and Childbirth-Related Post-Traumatic Stress Disorder: International Expert Consensus Recommendations for Practice, Policy, and Research," *Women and Birth* 37, no. 2 (2024): 362–367.
7. E. Leavy, M. Cortet, C. Huissoud, et al., "Disrespect During Childbirth and Postpartum Mental Health: A French Cohort Study," *BMC Pregnancy and Childbirth* 23, no. 1 (2023): 241.
8. M. A. Bohren, J. P. Vogel, E. C. Hunter, et al., "The Mistreatment of Women During Childbirth in Health Facilities Globally: A Mixed-Methods Systematic Review," *PLoS Medicine* 12 (2015): e1001847.

9. E. L. Mangindin, K. Stoll, F. Cadée, H. Gottfredsdóttir, and E. M. Swift, "Respectful Maternity Care and Women's Autonomy in Decision Making in Iceland: Application of Scale Instruments in a Cross-Sectional Survey," *Midwifery* 123 (2023): 103687.
10. E. Guðmundsdóttir, M. Nieuwenhuijze, K. Einarsdóttir, B. Hálfðánsdóttir, and H. Gottfredsdóttir, "Use of Pain Management in Childbirth Among Migrant Women in Iceland: A Population-Based Cohort Study," *Birth* 49 (2022): 486–496.
11. E. Ý. Guðmundsdóttir, H. Gottfredsdóttir, B. Hálfðánsdóttir, M. Nieuwenhuijze, M. Gissler, and K. Einarsdóttir, "Challenges in Migrant Women's Maternity Care in a High-Income Country: A Population-Based Cohort Study of Maternal and Perinatal Outcomes," *Acta Obstetrica et Gynecologica Scandinavica* 100, no. 9 (2021): 1665–1677.
12. M. S. G. van der Pijl, C. J. M. Verhoeven, R. Verweij, et al., "Disrespect and Abuse During Labour and Birth Amongst 12,239 Women in The Netherlands: A National Survey," *Reproductive Health* 19, no. 1 (2022): 160.
13. J. Sandall, C. Fernandez Turienzo, D. Devane, et al., "Midwife Continuity of Care Models Versus Other Models of Care for Childbearing Women," *Cochrane Database of Systematic Reviews* 4 (2024): CD004667.
14. "Statistics Iceland. Population of Iceland," 2023.
15. L. Hoffmann, P. Innes, A. Wojtyńska, and U. D. Skaptadóttir, "Adult Immigrants' Perspectives on Courses in Icelandic as a Second Language: Structure, Content, and Inclusion in the Receiving Society," *Journal of Language, Identity & Education* 23, no. 2 (2024): 304–319.
16. S. Fæðingaskráningar, *Starfsárið 2021* (Reykjavík, Iceland: Icelandic Directorate of Health, Landspítali University Hospital, 2023).
17. World Health Organization, "Perinatal Deaths per 1000 Births," (2022), https://gateway.euro.who.int/en/indicators/hfa_84-1170-perinatal-deaths-per-1000-births/#id=18889&fullGraph=true.
18. World Health Organization, "Maternal Mortality," (2024), <https://www.who.int/news-room/fact-sheets/detail/maternal-mortality#:~:text=The%20MMR%20in%20low%20income,the%20burden%20of%20maternal%20mortality>.
19. K. F. Walker, A. Dencker, and J. G. Thornton, "Childbirth Experience Questionnaire 2: Validating Its Use in the United Kingdom," *European Journal of Obstetrics & Gynecology and Reproductive Biology* 5 (2020): 100097.
20. A. Dencker, C. Taft, L. Bergqvist, H. Lilja, and M. Berg, "Childbirth Experience Questionnaire (CEQ): Development and Evaluation of a Multidimensional Instrument," *BMC Pregnancy and Childbirth* 10, no. 1 (2010): 81.
21. V. L. Sigurðardóttir, E. L. Mangindin, K. Stoll, and E. M. Swift, "Childbirth Experience Questionnaire 2—Icelandic Translation and Validation," *Sexual & Reproductive Healthcare* 37 (2023): 100882.
22. S. Vedam, K. Stoll, T. K. Taiwo, et al., "The Giving Voice to Mothers Study: Inequity and Mistreatment During Pregnancy and Childbirth in the United States," *Reproductive Health* 16, no. 1 (2019): 77.
23. "Gallup. Samfélagsmiðlamæling," Reykjavík, Iceland 2019.
24. M. K. Al-kubaisi and A. Radeef, "Translation and Validation Study of the Malaysian Version of the Childbirth Experience Questionnaire-CEQ," *Journal of International Dental and Medical Research* 11, no. 1 (2018): 357–361.
25. S. Boie, H. H. Lauridsen, J. Glavind, M. K. Smed, N. Ulbjerg, and P. Bor, "The Childbirth Experience Questionnaire (CEQ)—Validation of Its Use in a Danish-Speaking Population of New Mothers Stimulated With Oxytocin During Labour," *PLoS One* 15, no. 5 (2020): e0233122.
26. R. C. M. da Silva Vieira, C. H. J. Ferreira, C. R. de Carvalho, M. L. R. do Prado, A. C. S. Belez, and P. Driusso, "Cross-Cultural Adaptation and Psychometric Evaluation of the Brazilian Portuguese Version of the Childbirth Experience Questionnaire," *BMC Pregnancy and Childbirth* 20 (2020): 477.
27. A. Dencker, L. Bergqvist, M. Berg, J. T. V. Greenbrook, C. Nilsson, and I. Lundgren, "Measuring Women's Experiences of Decision-Making and Aspects of Midwifery Support: A Confirmatory Factor Analysis of the Revised Childbirth Experience Questionnaire," *BMC Pregnancy and Childbirth* 20, no. 1 (2020): 199.
28. S. Kazemi, A. Dencker, F. Pazandeh, A. Montazeri, S. Sedigh-Mobarakabadi, and S. Hajian, "Psychometric Evaluation of the Persian Version of the Childbirth Experience Questionnaire (CEQ)," *BioMed Research International* 2020 (2020): 6879283.
29. K. Y. W. Lok, H. S. L. Fan, R. W. T. Ko, et al., "Validating the Use of the Revised Childbirth Experience Questionnaire in Hong Kong," *BMC Pregnancy and Childbirth* 22, no. 1 (2022): 126.
30. L. L. Peters, M. S. G. van der Pijl, S. Vedam, et al., "Assessing Dutch Women's Experiences of Labour and Birth: Adaptations and Psychometric Evaluations of the Measures Mothers on Autonomy in Decision Making Scale, Mothers on Respect Index, and Childbirth Experience Questionnaire 2.0," *BMC Pregnancy and Childbirth* 22 (2022): 134.
31. F. J. Soriano-Vidal, A. Oliver-Roig, J. Cabrero-García, N. Congost-Maestre, A. Dencker, and M. Richart-Martínez, "The Spanish Version of the Childbirth Experience Questionnaire (CEQ-E): Reliability and Validity Assessment," *BMC Pregnancy and Childbirth* 16, no. 1 (2016): 372.
32. X. Zhu, Y. Wang, H. Zhou, L. Qiu, and R. Pang, "Adaptation of the Childbirth Experience Questionnaire (CEQ) in China: A Multisite Cross-Sectional Study," *PLoS One* 14, no. 4 (2019): e0215373.
33. G. E. Gignac and E. T. Szodorai, "Effect Size Guidelines for Individual Differences Researchers," *Personality and Individual Differences* 102 (2016): 74–78.
34. S. Turkmen, M. Tjernström, M. Dahmoun, and M. Bolin, "Post-Partum Duration of Satisfaction With Childbirth," *Journal of Obstetrics and Gynaecology Research* 44, no. 12 (2018): 2166–2173.
35. A. Dmowska, P. Fielding-Singh, J. Halpern, and N. Prata, "The Intersection of Traumatic Childbirth and Obstetric Racism: A Qualitative Study," *Birth* 51, no. 1 (2024): 209–217.
36. V. A. Mathur, T. Morris, and K. McNamara, "Cultural Conceptions of Women's Labor Pain and Labor Pain Management: A Mixed-Method Analysis," *Social Science & Medicine* 261 (2020): 113240.
37. D. A. Davis, "Obstetric Racism: The Racial Politics of Pregnancy, Labor, and Birthing," *Medical Anthropology* 38, no. 7 (2019): 560–573.
38. E. M. Hailu, S. R. Maddali, J. M. Snowden, S. L. Carmichael, and M. S. Mujahid, "Structural Racism and Adverse Maternal Health Outcomes: A Systematic Review," *Health & Place* 78 (2022): 102923.
39. K. Reppen, L. Henriksen, B. Schei, E. B. Magnussen, and J. J. Infanti, "Experiences of Childbirth Care Among Immigrant and Non-Immigrant Women: A Cross-Sectional Questionnaire Study From a Hospital in Norway," *BMC Pregnancy and Childbirth* 23, no. 1 (2023): 394.
40. F. Fair, L. Raben, H. Watson, V. Vivilaki, M. van den Muijsenbergh, and H. Soltani, "Migrant Women's Experiences of Pregnancy, Childbirth and Maternity Care in European Countries: A Systematic Review," *PLoS One* 15, no. 2 (2020): e0228378.
41. H. J. Rogers, L. Hogan, D. Coates, C. S. E. Homer, and A. Henry, "Responding to the Health Needs of Women From Migrant and Refugee Backgrounds-Models of Maternity and Postpartum Care in High-Income Countries: A Systematic Scoping Review," *Health & Social Care in the Community* 28, no. 5 (2020): 1343–1365.
42. A. Annborn and H. R. Finnbogadóttir, "Obstetric Violence a Qualitative Interview Study," *Midwifery* 105 (2022): 103212.
43. S. Meyer, E. Cignacco, S. Monteverde, M. Trachsel, L. Raio, and S. Oelhafen, "We Felt Like Part of a Production System': A Qualitative

Study on Women's Experiences of Mistreatment During Childbirth in Switzerland," *PLoS One* 17, no. 2 (2022): e0264119.

44. C. Zampas, A. Amin, L. O'Hanlon, et al., "Operationalizing a Human Rights-Based Approach to Address Mistreatment Against Women During Childbirth," *Health and Human Rights* 22, no. 1 (2020): 251–264.

45. F. Fair, H. Soltani, L. Raben, et al., "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 and Childbirth* 21, no. 1 (2021): 340.

46. V. Savage and A. Castro, "Measuring Mistreatment of Women During Childbirth: A Review of Terminology and Methodological Approaches," *Reproductive Health* 14, no. 1 (2017): 138.

47. M. A. Bohren, A. Iyer, A. J. D. Barros, et al., "Towards a Better Tomorrow: Addressing Intersectional Gender Power Relations to Eradicate Inequities in Maternal Health," *eClinicalMedicine* 67 (2024): 102180.