Article

Psychometric properties of the Turkish version of the respectful maternity care scale

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Abstract

Background: Labor is an important experience for women that affects them physically and emotionally. Women and their families need safety and a humanistic approach during labor. Measuring women's perception of respectful maternity care provided in health facilities is important to provide holistic and humanistic care during labor.

Objectives: This study aimed to evaluate the psychometric properties of the Turkish version of the respectful maternity care (RMC) scale.

Methods: This methodological study was conducted on 150 postpartum women in Adana, Turkey from January to June 2021. Data were analyzed in SPSS v.22 and AMOS v.22 using suitable analysis methods. Researchers studied the RMC scale for the reliability of language, content, construct, validity, and internal consistency. The validity analysis of the scale was examined using Confirmatory factor analysis (CFA). The Root Mean Square Error of Approximation (RMSEA), Comparative Fit Index (CFI), Goodness of Fit Index (GFI), and Adjusted Goodness of Fit Index (AGFI) were used for confirmatory factor analysis.

Results: The Turkish version of RMC has 12 items and three components. An analysis of the new results indicated a three-factor structure with a Kaiser-Meyer-Olkin (KMO) value of .84 explaining 70.74% of the total variance. The results showed that the data had a good level of fit with the model, $\chi^2/df = 2.148$, CFI = .96, GFI = .92, NFI = .92, TLI = .94, RMSEA = .08. Cronbach's alpha of the scale was calculated 0.870.

Conclusion: The Turkish version of the RMC scale is a valid and reliable scale for Turkish society.

Implications of this paper in nursing and midwifery preventive care:

- The Turkish version of the RMC scale can be used to determine women's perception of respectful care to improve maternal services/labor practice.
- Identifying the understanding of respectful maternal care helps prevent disrespect and mistreatment of women during childbirth.

Introduction

Childbirth is an important and sensitive event in a woman's life. Childbirth is not merely a physiological condition; it also has psychological and cultural aspects for the woman and her family. Qualitative studies that investigated what women and their families wanted and needed during labor showed that safety and a humanistic approach were highlighted as important things [1,2]. The concept of "safe motherhood" is generally limited to physical safety, yet childbirth is also a transition period of deep personal and cultural importance for the woman and her family. As motherhood is unique to women, issues such as gender equality and gender violence are also at the center of childbirth care. Therefore, the concept of safe motherhood should be expanded in a way to goes beyond the prevention of diseases or death and includes respect for women's autonomy, dignity, emotions, choices, and preferences as well as companionship during childbirth care [3].

The World Health Organization (WHO) published a set of recommendations and a model for intrapartum care services for the enhancement of a positive pregnancy experience. This individual-centered point of view comprises the core of respectful maternity care. The WHO describes respectful maternity care as "the care organized for and provided to all women in a manner that maintains their dignity, privacy, and confidentiality, ensures freedom from harm and mistreatment, and enables informed choice and continuous support during labor and childbirth"

[4]. Respectful maternity care is reported to enhance the constant support provided to women throughout the labor process, prevent harm and mistreatment, enable them to make conscious choices, enhance positive labor and care experiences, and prevent care inequality [5]. Enhancing respectful maternity care is also claimed to reduce maternal morbidity and mortality. Disrespect and abuse of women during institutional maternity services are a deterrent to accessing maternity services in Ethiopia and other low- and middle-income countries. Promoting respect at interpersonal and health system levels attracts more women to health facilities, improves their childbirth experiences, and mitigates preventable deaths, thereby bridging maternal health inequities. Improving the RMC will attract more women to safe settings for institutional delivery in settings such as Ethiopia, where the majority of women still give birth at home, and maternal mortality can be reduced as a result [6,7]. Therefore, for all women, the WHO recommends respectful maternity care that is regulated and delivered in a way that protects their dignity, privacy, and confidentiality, prevents their harm or mistreatment, and enables them to make conscious choices and receive constant support during labor and delivery [4,5].

The literature associates negative labor experiences with poor support and care, fear, excessive pain, disturbance, and unwanted outcomes during labor. Participation in labor care-related decisions and the supportive care and positive attitudes of health personnel are reported to increase women's perception of positive care experience, form a positive memory related to labor, increase women's self-confidence and love for the baby, and help to adapt to motherhood better. It is highlighted that the meanings attributed to labor experiences by women are parallel to the care provided. Therefore, supportive, individualized care designed specifically for the person is recommended [2,8-10]. Improving respectful maternal care is a recommended practice during childbirth as a strategy to eliminate the mistreatment of women and improve maternal health [11].

Assessment of respectful maternity care by valid questionnaires is necessary to promote maternal health [12]. When the literature is searched, it is seen that the measurement tools for evaluating respectful maternal care have increased but are still limited in number. It has been seen that the measurement tools for evaluating respectful maternal care are based on the views of midwives [13,14], women [12,15-26], and students [27,28].

The first measurement tool to assess respectful maternity care was developed by Sheferaw et al. in 2016 with 509 women in 11 public health facilities in Ethiopia. The study utilized a mixed approach of qualitative and quantitative methods. The qualitative approach used in-depth interviews with postpartum women. In the quantitative approach, expert review was undertaken by trained data collectors using email and interviews with postpartum women. Following the review of literature and in-depth interviews with women, seven dimensions with five to 12 items each (making for a total of 60 items) occurred. After eliminating a number of the items, 15 items were approved in four dimensions, namely abuse-free care, friendly care, discrimination-free care, and timely care [12]. The RMC scale developed by Sherefaw et al. has been tested in Iran by Hajizadeh et al., [22] and Esmkhani et al. [23] as a valid and reliable measurement tool for Iranian women. Taavoni et al. developed the quality of respectful maternity care questionnaire in Iran (QRMCQI). The QRMCQI has 59 items and, in three sections labor, delivery, and post-partum [18]. The women's perspective-respectful maternity care (WP-RMC) Questionnaire was developed in Iran by Ayoubi et al. The WP-RMC has 19 items that are loaded with three factors: Providing comfort, participatory care, and mistreatment [19]. The Turkish validity and reliability of the scale were made by Çamlıbel et al [25]. Midwives' knowledge and practice scale on respectful maternity care (MKP-RMC) was developed by Moridi et al. The MKP-RMC scale has 23-item in knowledge and 23-item in practice section that loaded in three factors: Giving emotional support, providing safe care, and preventing mistreatment [13]. The Turkish validity and reliability of the scale was made by Dağlı et al. [14]. The respectful maternity care scale (RMCS) was developed for Turkish women by Dişsiz et al. The RMCS consists of 29 items and 3 sub-dimensions; consensual dignified care, psychological abuse and neglected care, physical abuse, non-confidential, and discrimination [26]. Dzomeku et al. developed a tool for measuring

postpartum women's experiences of respectful maternity care at a tertiary hospital in Kumasi, Ghana. They have created a 23 items RMC scale (23i-RMC) with three main factors labeled as follows: Verbal abuse-free, discriminatory-free and dignified care (VADDC), physical and psychological abuse-free care (PPAC), and compassionate care (CC) [20]. The Mother's Autonomy in Decision-Making Scale (MADM) was developed to assess women's experiences with maternity care [17]. The Mothers on Respect ındex (MORI) is a scale developed to assess the nature of respectful patient-provider interactions and their impact on a person's sense of comfort, behavior, and perceptions of racism or discrimination (16). Both scales were initially developed and validated in North American contexts, and have since been translated and validated in some European settings [15,21] and Australia [24]. Dhakal et al., developed and tested a tool to measure bachelor of nursing students' perceptions towards respectful maternity care in Nepal, a lower-middle-income country. Students' perceptions towards the Respectful Maternity Care Scale (SPRMC) has 18 items and three sub-dimensions; respectful care, safety& comfort and supportive care [27]. The Turkish validity and reliability of the scale were made by Çamlıbel and Uludağ [28].

Evaluating the various medical and communication aspects of the care provided in maternity centers with appropriate tools is necessary to provide respectful care to women and newborns. There was no scale to evaluate RMC in Turkey when starting this study. The present study aimed to examine psychometric analyses and perform the reliability and validity of the "Respectful Maternity Care" Scale in Turkish women to measure women's perceptions of respectful maternity care provided in health facilities.

Methods

This study used a methodological design to conduct psychometric properties and perform the reliability and validity of the "Respectful Maternity Care" Scale in Turkish women between January 2021 and June 2021.

The target population of the study was women in the postpartum period who had childbirth in a public hospital in Adana city, located in southern Turkey. The inclusion criteria were defined as women who participate voluntarily, were older than 18 years old, able to speak and understand Turkish, had a vaginal birth, were healthy pregnancies, and not having any complications during labor or in the first 24 h after birth. The exclusion criterion was having a cesarean section. In the hospital where the study was conducted, there was no one other than health professionals (midwife, obstetrician) at the birth. The women did not attend a birth preparation class. The sample size of the study was calculated based on the literature knowledge about methodological studies, which indicates that the sample size should be 5-10 times higher than the number of items in the scale [29-31]. Considering that the number of items in the "Respectful Maternity Care" Scale is 15, reliability and validity were performed with 150 individuals [32].

Data were collected through the "Personal Information Form", the "Respectful Maternity Care Scale" and the "City Birth Trauma Scale".

The personal information form developed by the researchers included 11 questions regarding the participants' socio-demographic and labor-related features. The interview form consists of questions about the participant's age, education level, employment status, social security status, income status, family type, the day of birth, the place of birth, the person who performed the birth, labor duration, and the presence of a companion at the birth.

The Respectful Maternity Care (RMC) Scale was developed by Sheferaw, Mengesha, and Wase (2016) in Ethiopia. Written permission was obtained to use the RMC scale from the first author through email. Sheferaw et al. (2016) found that the scale was a valid and reliable tool for assessing women's perceptions of respectful maternity care in health facilities ($\alpha = 0.845$). The RMC Scale has 15 items, which are classified into four dimensions based on a 5-point Likert scale including; strongly agree (5), agree (4), don't know (3), disagree (2), and strongly disagree (1). The scale included 4 dimensions of friendly care (first 7 items), abuse-free care (items 8, 9, 10), timely care (items 11, 12, 13), and discrimination-free care (items 14, 15). There are reverse-coded items (9, 10, 11, 13, 14, 15). Before calculating each dimension, the reverse items should be

recorded as follows: 5 to 1, 4 to 2, 1 to 5, and 2 to 4.

Each dimension is calculated as follows:

1. Friendly care: (Item 1 to Item 7) × 100/35
2. Abuse free care: (Item 8 + Item 9 + Item 10) * 100/15
3. Timely care: (Item 11+ Item12 + Item13) * 100/15
4. Discrimination free care: (Item14 + Item 15) *100/10

High mean scores on this scale indicate a more positive respectful maternity care experience during childbirth [12].

Initially, language validity was enhanced to determine the validity of the Turkish form of the RMC Scale. Group and back-translation methods were used to determine the RMC scale's language validity [31,33,34]. The scale was translated from English to Turkish by two academic midwives who were competent in two languages (Turkish and English). Following the translation process, the researchers cooperated to prepare the Turkish text. A Turkish language expert evaluated this version of the scale, and revisions were made based on her recommendations. Then the scale was retranslated to English by two different experts one of whom specialized in the English Language and Literature Department and one of whom was a translator. After the back translation process, the scale was sent to the author of the scale and approved. The translation illustrated that the scale's original and the back-translation text were consistent.

Expert opinions were received to assess the content validity of the RMC scale following the translation procedure. The final version of the scale was sent to a group of 10 experts including 7 academic midwives/nurses, 2 female gynecologists, and 1 psychologist lecturer. The experts were contacted via email. Content validity conducted based on expert views was done using the Davis Technique (1992) [35]. The experts were asked to evaluate the scale items by scoring each item between 1 and 4. Experts were asked to respond to each item using "1: not relevant," "2: somewhat relevant," "3: highly relevant," and "4: extremely relevant". Experts were asked to give suggestions for responses other than "extremely relevant". The experts did not make any suggestions related to cultural aspects of the scale. The content validity index (CVI) of all the items in the scale was found to be over 0.80. For this reason, no items were removed from the scale within the scope of content validity. As a result, the content validity ratio of the scale was found 0.97.

The scale, which was agreed upon by the experts as a result of the assessments done in terms of language and content validity, was piloted with 20 women who met the research criteria and were not included in the study to test the comprehensibility and applicability of the scale [33]. No changes were made to the items after the pilot administration.

Criterion-referred validity analysis of the RCM scale analyzed correlations between CityBiTS [31,33].

Post-traumatic stress disorder (PTSD), adapted specifically to childbirth by Ayers, Wright, and Thornton, is used for the assessment of PTSD symptoms and diagnosis criteria according to DSM-V criteria [36]. Turkish validity and reliability of the City Birth Trauma Scale (CityBiTS) were performed by Bayri Bingöl et al. [37]. The scale is utilized for the determination of post-traumatic stress symptoms. It can only determine the level of symptoms and does not have a diagnostic feature. Questions 3 to 7 assess symptoms of re-experiencing childbirth, questions 8 and 9 assess avoidance symptoms, questions 10 to 16 assess negative cognitions and mood symptoms, and questions 17 to 22 assess hyperarousal symptoms. The total score ranges from 0 to 60 between questions 3 and 22. Higher scores indicate higher PTSD symptoms. Questions 23 and 24 assess dissociation symptoms. These questions are not symptoms of PTSD and should be taken into consideration if dissociation symptoms are of interest specifically. If a "0" point is received in the 25th question, it means that PTSD started before labor and if "2 points" is received, it is accepted to be late-onset PTSD. The 25th question is the prevalence criteria of PTSD due to labor. Cronbach's alpha reliability coefficient was found to be 0.91 for the whole scale in the Turkish reliability and validity of the scale [37].

Data were analyzed using Statistical Package for Social Sciences (SPSS) for Windows 20.0 program and Analysis of Moment Structures (AMOS) 22.0 SPSS package program using

suitable analysis methods. The socio-demographic characteristics and obstetric features of the participants were analyzed using descriptive statistics. The Kaiser-Meyer-Olkin (KMO) test was used to determine sampling adequacy, while Bartlett's test of sphericity was used to determine whether the correlation was suitable for factor analysis. The amount of KMO accepted is .70. The scale consists of a three-factor structure. The factor loadings of the first-factor range between .925 and .628, the factor loadings of the second factor range between .758 and .673, and the factor loadings of the third-factor range between .883 and .738. Davis technique was used in the Content Validity Index (CVI) evaluation. Validity analyses of the scale were examined using the Exploratory factor This was achieved with the input of several experts. The individuals used for content validity were specialists who had conducted studies in this field analysis (EFA) and Confirmatory factor analysis (CFA). Exploratory Factor Analysis (EFA) was conducted with a sample of 150 participants, and Confirmatory Factor Analysis (CFA) was carried out with a separate sample of 150 participants. The Root Mean Square Error of Approximation (RMSEA), Comparative Fit Index (CFI), Goodness of Fit Index (GFI), and Adjusted Goodness of Fit Index (AGFI) were used for confirmatory factor analysis. The results showed that the data had a good level of fit with the model, $\chi^2/df = 2.148$, CFI = 0.96, GFI = 0.92, NFI = 0.92, TLI = 0.94, RMSEA = 0.08. χ^2/df should be below 5, CFI, GFI, NFI, and TLI should be .90 or above. Finally, the RMSEA value should be below .08.

Convergent or concurrent validity was evaluated using the Pearson correlation coefficient. Cronbach's alpha reliability coefficient was used for internal consistency. The significance value was accepted as 0.05 For outlier detection Mahalanobis Distance and Cook's distance were evaluated. Mahalanobis Distance is a measure used to identify multivariate outliers by calculating the distance of each observation from the center of the data distribution. Cook's Distance also identifies influential data points that might overly affect the results. Skewness and Kurtosis values are used as indicators. Acceptable ranges (e.g., skewness close to 0, kurtosis between -1 and +1). Boxplots are visual tools to detect univariate outliers for each variable**.**

Results

Participants included in the sample did not leave the study, and the study was completed with 150 (100%) participants. Table 1 presents the findings regarding the sociodemographic characteristics of the participants. The mean (SD) age of the participating women was 25.86 (5.70). More than half of the participants had an education level of eight years and above (51.3%), and a great majority were housewives (95.2%). Of all the participants, 95.2% had social security and 49.3% reported their income level as medium. Of the women participating in the study, 141 had midwives and 9 had obstetricians perform their births, and 51.3% were on the first postpartum day and 48.7% were on the second postpartum day. Participants did not have a companion during their birth. There was no accompanying person at the labor.

Table 1: Results regarding the socio-demographic characteristics of the participants (n = 150)

	Characteristics	n	%
Age*	25 years ↓	74	49.3
	25 years ↑	76	50.7
Education level	Literate	27	18
	Primary school	46	30.7
	Middle school	38	25.3
	High school	29	19.3
	University and ↑	10	6.7
Working status	Housewife	143	95.3
	Working	7	4.7
Income level	Good	19	12.7
	Middle	73	48.6
	Bad	58	38.7
Social security existence	Yes	143	95.3
	No	7	4.7
Family type	Nuclear	96	64
	Extended	54	36

***25.86±5.70**

To assess face validity, after the translation process, the scale was applied to 20 women not included in the study who fit the sample's characteristics, as a pilot study. No changes were made in the items after the pilot administration

The draft Turkish RCM scale was presented to 10 experts (midwife, nurse, medicine and pscyhology educator) for their opinions. The content validity index of all items belonging to the scale was above 0.80. The CVI score was 0.97.

The construct validity of the scale was evaluated using EFA and CFA analyses.

Exploratory factor analysis (EFA) was performed to analyze the factor structure of the RMC Scale using the principal components and the Varimax rotation technique. The results indicated a 4-factor structure that explained 68.59% of the total variance with a KMO value of 0.84. However, the items "Health professional(s) slapped me for different reasons during childbirth", "Health professional(s) shouted at me because I did not do what I was told" and "Health professional(s) responded to my needs whether I asked or not", were eliminated because they were not loaded in suitable factors, and the analyses were repeated. An analysis of the new results obtained indicated a three-factor structure with a KMO value of 0.84 with a factor load ranging from 0.63 to 0.93 and explaining 70.74% of the total variance. Cronbach's alpha internal consistency of the scale was calculated 0.870. Besides, Cronbach's alpha values calculated for the sub-scales of the scale were 0.94, 0.62, and 0.70, respectively. Table 2 demonstrates the factor loads, explained variance values, eigenvalues, and Cronbach's alpha values of the scale.

Table 2: Findings on the exploratory factor analysis of the respectful maternity care scale

Items	F1	F2	F3	h^2
4 The healthcare professional(s) showed concern and empathy	.925			.875
2 The healthcare professional(s) were friendly to me	.894			.837
1 The healthcare professional(s) provided me with gentle care	.856			.780
3 The healthcare professional(s) talked positively about pain and relief	.850			.743
5 All the healthcare professional(s) respected me as an individual	.841			.802
6 The healthcare professional(s) talked with me in a language that I could understand	.841			.735
7 The healthcare professional(s) called me by my name	.628			.484
11 I was made to wait for a long time before I received service		.758		.621
12 I was allowed to perform the cultural rituals in the institution		.718		.515
13 The service was delayed due to the internal problems of the health institution		.673		.605
15 Some health professionals insulted me and my companions due to my characteristics			.883	.809
14 Some health professionals did not treat me well due to my characteristics			.738	.684
Eigenvalue	5.647	1.825	1.018	
Total Variance Explained	47.059	62.268	70.749	
Cronbach Alpha	.94	.62	.70	

F1: Friendly care, F2: Timely care, F3: Discrimination-free care

Confirmatory factor analysis (CFA) was performed to analyze the factor structure of the RMC scale (Figure 1). The structure obtained in the factor analysis of exploratory factor analysis was tested in CFA. The results showed that the data had a good level of fit with the model, χ^2/df = 2.148, CFI = 0.96, GFI = 0.92, NFI = 0.92, TLI = 0.94, RMSEA = 0.08. As seen in Figure 1, a three-factor structure with factor loads ranging from 0.40 and 0.96 was obtained. All the paths from latent variables to indicator variables and constructional correlations between latent variables were significant.

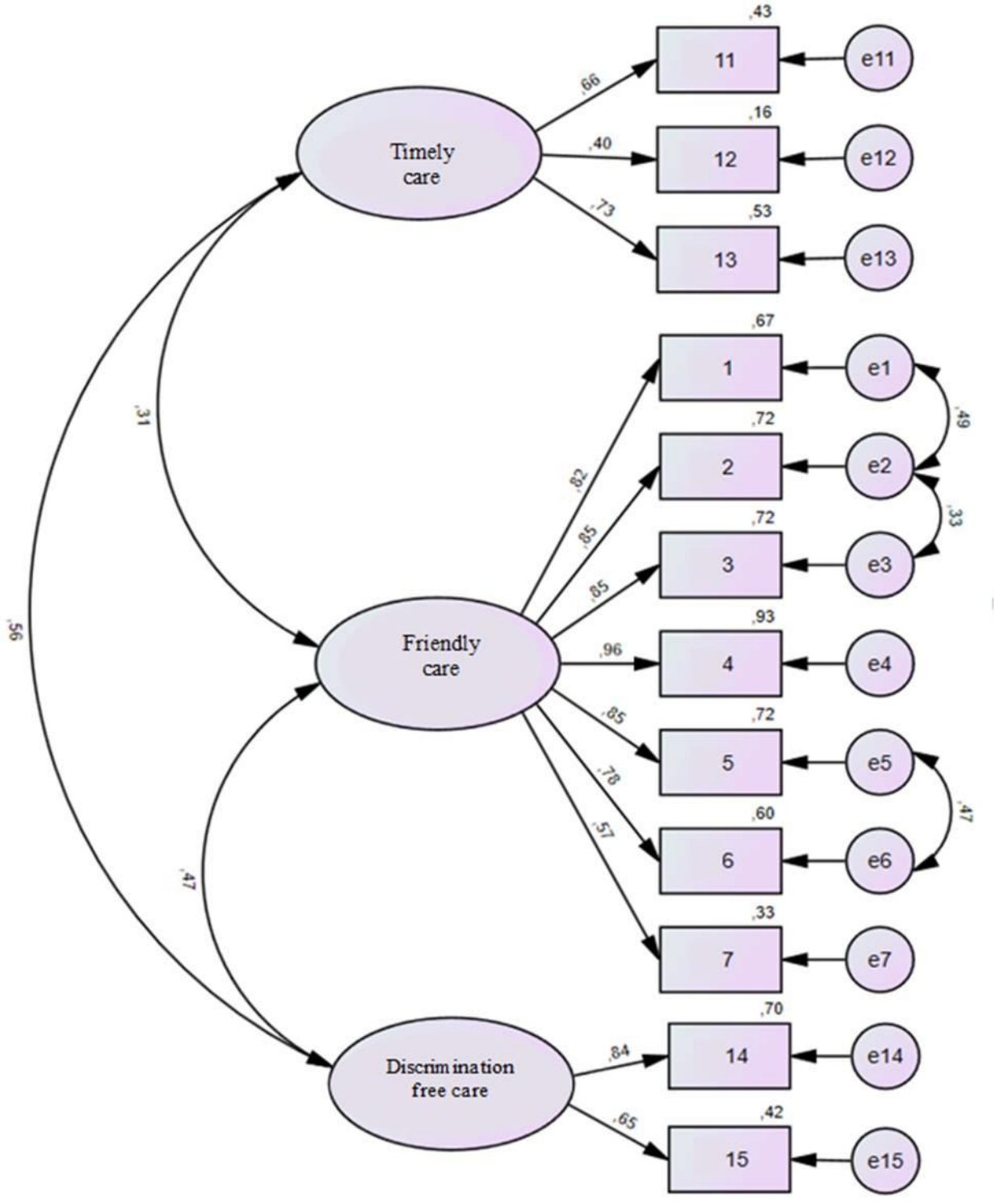

Figure 1: Findings on the confirmatory factor analysis of the respectful maternity care scale

Relationships between CityBiTS total score and Respectful Maternity Care Scale sub-scales and total score were analyzed to test the convergent validity of the RMC Scale. The results obtained showed negative, low-level, and significant relationships between the CityBiTS total score

and friendly care, timely care, discrimination-free care, and respectful maternity care scale total score. In addition, positive and significant relationships were found between the scale sub-scales and the total score (Table 3)

Table 3: Relationships between city birth trauma scale total score and respectful maternity care scale sub-scales and total score

Scales		1	2	3	4
1. CityBiTS total	r	1			
	p				
2. Friendly care	r	-,284***	1		
	p	,000			
3. Timely care	r	-,214**	,227**	1	
	p	,005	,003		
4. Discrimination-free care	r	-,224**	,404***	,382***	1
	p	,003	,000	,000	
5. RMC	r	-,329***	,907***	,579***	,632***
	p	,000	,000	,000	,000

***p < .001, **p < .01.

The internal consistency method was used to assess reliability. Cronbach's alpha of the scale was calculated 0.870. Besides, Cronbach's alpha values calculated for the dimension of the scale were 0.94, 0.62, and 0.70, respectively (Table 2).

Discussion

This study, which performed the psychometric properties of the Respectful Maternity Care Scale, concluded that the Turkish form of the RMC scale was a valid and reliable tool. Turkish form of the RMC Scale was found to be a suitable measurement tool in terms of language and content validity. The KMO value of the Sheferaw et al.'s RMC scale was reported to be 0.903 [12]. In the study conducted by Esmkhani et al. to determine the validity and reliability of the Persian version of Respectful Maternal Care, KMO was found to be 0.734 [23]. In another study evaluating the validity and reliability of RMC in Iranian women by Hajizadeh et al., KMO was found to be 0.945 [22]. This study found the KMO value as 0.84. These values indicate the adequacy of the number of samples for factor analysis [36,37].

The original scale includes 15 items and four components including friendly care, abuse-free care, discrimination-free care, and timely care [12]. Although measurement tools that evaluate respectful care are limited in the literature, their number has been increasing in recent years [13-28]. The WP-RMC has 19 items and three factors; providing comfort, participatory care, and mistreatment [19]. The QRMCQI has 59 items, in three sections labor, delivery, and post-partum [18]. The RMCS consists of 29 items and 3 sub-dimensions: Consensual dignified care, psychological abuse, and neglected care, physical abuse, non-confidential, and discrimination [26]. The MKP-RMC scale has 23-item in knowledge and 23-item in practice section that loaded in three factors: Giving emotional support, providing safe care, and preventing mistreatment [13]. This study obtained a three-factor structure with factor loads ranging between .40 and .96 DFA results. The minimum value for the factor loads of the items in the measurement tool is reported to be between 0.30 and 0.40 in the literature [37,38]. As the DFA results showed that the factor loads of the 8th, 9th, and 10th items were below 0.40, they were removed from the scale. Hence, the Turkish form of the RMC Scale was turned into 3 sub-scales (friendly care, discrimination-free care, and timely care) and 12 items. The results of the confirmatory factor analysis performed to analyze the factor structure of the RMC scale indicated that the data had a good fit with the model. These findings indicate that the fit indices of the tool were within a suitable range, indicating that the construct validity was achieved [34,38-40].

Concurrent validity is based on the evaluation of the relationship between the measurement tools

analyzed following the administration of similar or distinctive scales whose validity was determined before to the same sample group [30]. This study utilized the City Birth Trauma Scale as the distinctive form. These instruments were chosen as they are well-known and were tested for reliability and validity. This study reported negative, low-level, and significant relationships between the RMC Scale total and sub-scales and the City Birth Trauma Scale.

Analysis of inter-item consistency of the RMC scale developed by Sheferaw et al. showed good internal correlation with Cronbach's alpha of 0.857 for standardized items for the full 15-item scale: 0.889 for friendly care, 0.75 for abuse-free care, 0.71 for timely care, and 0.666 for discrimination-free care sub-scales [12]. In the study by Esmkhani et al., the scale consisted of four sub-dimensions with 14 items, and the dimensions of the items were named as 4 dimensions: Abusive care, effective care, friendly care, and respectful communication. Cronbach alpha values for the sub-dimensions were found to be 0.757, 0.717, 0.765, and 0.710, respectively [23]. In the study by Hajizadeh et al., the scale consisted of only one factor with 13 items. The Cronbach's alpha coefficient was found as 0.93 [22]. This study found Cronbach's alfa internal consistency as .870 for the total scale, 0.94 for friendly care, 0.62 for timely care, and 0.70 for discrimination-free care sub-scales. These results indicate that the RMC scale is reliable [39].

The strength of the study is that it has been incorporated into Turkish culture by conducting psychometric analyses of a scale that does not have too many items and is easy to use. In this way, the views of Turkish women regarding respectful maternal care can be evaluated and the health system can be improved to ensure that they receive appropriate care. This study has some limitations. Firstly, data from this study were collected from women who gave birth in one hospital, so the results cannot be generalized to all postpartum women. Secondly, the participants who entered the study for confirmatory construct validity were the same people who completed the scale for exploratory validity in this study. The scale can be tested by repeating the study in a larger sample and multicenter studies can be conducted.

Conclusion

This study performed the reliability and validity of the Turkish version of the RMC scale. The results of the study show that the Turkish version of the RMC scale can be used as a tool to assess women's perceptions of maternity care provided in health facilities.

Ethical Consideration

Permission was obtained from the first author to use the scale. Ethics committee approval was obtained from the Noninvasive Clinical Research Ethics Committee from the Medical Faculty of Cukurova University (Code number: 12.04.2020-106/26). At the beginning of the study, the participants were given information about the study, and their written and verbal consent was received following the Declaration of Helsinki. Besides, written permission was obtained from the institution where the study was conducted.

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Conflict of interest

There was no conflict of interest for all the authors.

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Authors' contributions

SGS: Conceptualisation, methodology, formal analysis, writing – original draft, writing - review & editing.

GA: Conceptualisation, acquisition of data, writing – original draft, writing - review & editing.

BAV: Conceptualisation, methodology, formal analysis, writing – original draft, writing - review & editing.

EG: Conceptualisation, methodology, formal analysis, writing – original draft, writing - review & editing.

EDS: Conceptualisation, methodology, formal analysis, writing – original draft, writing - review & editing.

References

1. Downe S, Lawrie TA, Finlayson K. and Oladapo OT. Effectiveness of respectful care policies for women using routine ıntrapartum services: A systematic review. Reproductive Health. 2018;15:23. https://doi.org/10.1186/s12978-018-0466-y
2. Downe S, Finlayson K, Oladapo OT, Bonet M, Gulmezoglu AM. What matters to women during childbirth: a systematic qualitative review. PLoS One. 2018;13(4):14-31. https://doi.org/10.1371/journal.pone.0194906.
3. White Ribbon Alliance. Respectful maternity care the universal rights of women & newborns charter https://whiteribbonalliance.org/wpcontent/uploads/2022/05/WRA_RMC_Charter_FINAL.pdf
4. World Health Organization. WHO recommendations: Intrapartum care for a positive childbirth experience. Geneva. 2018. https://iris.who.int/bitstream/handle/10665/260178/9789241550215-eng.pdf?sequence=1
5. Bonet M, Ciabati L, De Oliveira LL, Souza R, Browne JL, Rijken M, Fawcus S, Hofmeyr GJ, Liabsuetrakul T, Gulumser C, Blennerhassett A, Lissauer D, Meher S, Althabe F, Oladapo O. WHO intrapartum care algorithms working group. constructing evidence-based clinical intrapartum care algorithms for decision-support tools. BJOG: An International Journal of Obstetrics & Gynaecology. 2024;131(S2):6-16. https://doi.org/ 10.1111/1471-0528.16958.
6. Asefa A. Unveiling respectful maternity care as a way to address global inequities in maternal health. BMJ Global Health. 2021;6(1):e003559. https://doi.org/10.1136/bmjgh-2020-003559.
7. Sheferaw ED, Bazant E, Gibson H, Fenta HB, Ayalew F, Belay TB, ... & Stekelenburg J. Respectful maternity care in Ethiopian public health facilities. Reproductive Health. 2017;14(1):1-12. https://doi.org/10.1186/s12978-017-0323-4
8. Bohren MA, Tunçalp Ö, & Miller S. 2020. Transforming intrapartum care: Respectful maternity care. Best Practice & Research Clinical Obstetrics & Gynaecology. 2020;67:113-126. https://doi.org/10.1016/j.bpobgyn.2020.02.005.
9. Jolivet RR, Gausman J, Kapoor N, Langer A, Sharma J, & Semrau KE. Operationalizing respectful maternity care at the healthcare provider level: a systematic scoping review. Reproductive Health. 2021;18:1-15. https://doi.org/10.1186/s12978-021-01241-5.
10. Yildiz H. 2019. Intrapartum care model for a positive childbirth experience: World Health Organisation recommendations. Journal of Health Sciences of Kocaeli University. 2019;5(2):98-105. https://doi.org/10.30934/kusbed.546900
11. Asefa A, Morgan A, Bohren MA, & Kermode M. Lessons learned through respectful maternity care training and its implementation in Ethiopia: an interventional mixed methods study. Reproductive Health. 2020;17:1-12. https://doi.org/10.1186/s12978-020-00953-4
12. Sheferaw ED, Mengesha, TZ, & Wase SB. Development of a tool to measure women's perception of respectful maternity care in public health facilities. BMC Pregnancy and Childbirth. 2016;16:1-8. https://doi.org/10.1186/s12884-016-0848-5.
13. Moridi M, Pazandeh F, Hajian S, Potrata B (2020) Development and psychometric properties of Midwives' Knowledge and Practice Scale on Respectful Maternity Care (MKP-RMC). PLoS ONE. 2020;15(11): e0241219. https://doi.org/10.1371/journal.pone.0241219
14. Dağlı E, Reyhan FA, Topkara FN, & Moridi M. Turkish validity and reliability study of the "respectful maternity care" knowledge and practice scale of midwives. European Journal of Obstetrics & Gynecology and Reproductive Biology. 2023; 19:100222. https://doi.org/10.1016/j.eurox.2023.100222
15. Baji P, Rubashkin N, Szebik I, Stoll K, & Vedam S. (2017). Informal cash payments for birth in Hungary: are women paying to secure a known provider, respect, or quality of care? Social Science & Medicine. 2017;189:86-95. http://dx.doi.org/10.1016/j.socscimed.2017.07.015
16. Vedam S, Stoll K, Rubashkin N, Martin K, Miller-Vedam Z, Hayes-Klein H, & Jolicoeur G. The mothers on respect (MOR) index: measuring quality, safety, and human rights in childbirth. SSM-Population Health. 2017;3:201-210. http://dx.doi.org/10.1016/j.ssmph.2017.01.005
17. Vedam, S., Stoll, K., Martin, K., Rubashkin, N., Partridge, S., Thordarson, D., ... & Changing Childbirth in BC Steering Council. (2017). The Mother's Autonomy in Decision Making (MADM) scale: Patient-led development and psychometric testing of a new instrument to evaluate experience of maternity care. PloS one, 12(2), e0171804. DOI: 10.1371/journal.pone.0171804
18. Taavoni S, Goldani Z, Rostami Gooran N, Haghani H. Development and assessment of respectful maternity care questionnaire in Iran. International Journal of Community Based Nursing & Midwifery. 2018;6(4):334-349. https://pmc.ncbi.nlm.nih.gov/articles/PMC6226608/
19. Ayoubi S, Pazandeh F, Simbar M, Moridi M, Zare E, & Potrata B. A questionnaire to assess women's perception of respectful maternity care (WP-RMC): development and psychometric properties. Midwifery. 2020; 80:102573. https://doi.org/10.1016/j.midw.2019.102573
20. Dzomeku VM, Mensah ABB, Nakua KE, Agbadi P, Lori JR, & Donkor P. Developing a tool for measuring postpartum women's experiences of respectful maternity care at a tertiary hospital in Kumasi, Ghana. Heliyon. 2020; 6:e04374. https://doi.org/10.1016/j.heliyon.2020.e04374
21. Feijen-de Jong EI, Van der Pijl M, Vedam S, Jansen DEMC, & Peters LL. Measuring respect and autonomy in Dutch maternity care: applicability of two measures. Women and Birth. 2020; 33(5):e447-e454. http://dx.doi.org/10.1016/j.wombi.2019.10.008
22. Hajizadeh K, Asghari Jafarabadi M, Vaezi M, Meedya S, Mohammad-Alizadeh-Charandabi S, & Mirghafourvand M. The psychometric properties of the respectful maternity care (RMC) for an Iranian population. BMC Health Services Research. 2020;20:1-7. https://doi.org/10.1186/s12913-020-05729-x
23. Esmkhani M, Namadian M, Nooroozy A, & Korte JE. Psychometric properties of a Persian version of respectful maternity care questionnaire. BMC Pregnancy and Childbirth. 2021;21:1-9. https://doi.org/10.1186/s12884-021-03693-w
24. Jenkinson B, Kearney L, Kynn M, Reed R, Nugent R, Toohill J, & Bogossian F. Validating a scale to measure respectful maternity care in Australia: Challenges and recommendations. Midwifery. 2021;103:103090. https://doi.org/10.1016/j.midw.2021.103090

25. Çamlibel M, Uludağ E, & Pazandeh F. Psychometric evaluation of the women's perception of respectful maternity care scale Turkish version. Women & Health. 2022;62(8):700-710. https://doi.org/10.1080/03630242.2022.2118407
26. Dişsiz M, Demirgöz Bal M, Karaçam Yılmaz ZD, Bayrı Bingöl F, & Aşcı Ö. Development and psychometric properties of the respectful maternity care scale (RMCS). Journal of Reproductive and Infant Psychology. 2023;1-16. https://doi.org/10.1080/02646838.2023.2270690
27. Dhakal P, Gamble J, Creedy DK, & Newnham E. Development of a tool to assess students' perceptions of respectful maternity care. Midwifery. 2022;105:103228. https://doi.org/10.1016/j.midw.2021.103228
28. Çamlibel M, & Uludağ E. The Turkish version of the students' perceptions of respectful maternity care scale: An assessment of psychometric properties. Nurse Education in Practice.2023;*70:*103684. https://doi.org/10.1016/j.nepr.2023.103684
29. Buyukozturk S. Factor analysis: Main concepts and their use in developing scales. Education Management in Theory and Practice. 2002;32:470–483. https://dergipark.org.tr/en/download/article-file/108451
30. Esin MN. Data collection methods and tools, & reliability and validity of data collection tools. 2nd ed. In: Erdogan S, Nahcivan N, & Esin MN, editors. Research in nursing: Process, Practice and Critique. Istanbul: Nobel Medical Publishing; 2015. p-p. 216-219
31. Gozum S, Aksayan S. Guidelines for cross-cultural scale adaptation II: Psychometric properties and cross-cultural comparison. Journal of Research and Development in Nursing. 2003;5:3-14.
32. Doğan N, Soysal S, & Karaman H. Can exploratory and confirmatory factor analysis be applied to the same sample? In Ö. Demirel & S. Dinçer, (Eds.), Education in a globalizing world. Pegem Akademi, İstanbul. 2017;p-p. 372-400
33. Gökdemir F, Yılmaz T. Processes of using, modifying, adapting and developing likert type scales. Journal of Nursology. 2023;26(2):148-160. https://doi.org/10.5152/JANHS.2023.22260
34. Karacam Z. Adaptation of scales to Turkish. Journal of Midwifery and Health Sciences. 2019;2(1):28-37. https://dergipark.org.tr/en/download/article-file/765916
35. Davis LL. Instrument review: Getting the most from a panel of experts. Applied Nursing Research. 1992;5(4):194–197. https://doi.org/10.1016/S0897-1897(05)80008-4
36. Ayers S, Wright DB, Thornton A. Development of a measure of postpartum PTSD: The City Birth Trauma Scale. Frontiers in Psychiatry. 2018;9:409. https://doi.org/10.3389/fpsyt.2018.00409.
37. Bayri Bingöl F, Demirgöz Bal M, Dişsiz M, Taylan Sormageç M, & Dikmen Yildiz P. Validity and reliability of the Turkish version of the City Birth Trauma Scale (CityBiTS). Journal of Obstetrics and Gynaecology. 2020;41(7):1023-1031. https://doi.org/10.1080/01443615.2020.1821354
38. Capik C. Use of confirmatory factor analysis in validity and reliability studies. Anadolu Nursing and Health Sciences Journal. 2014; 17(3), 196–205. https://dergipark.org.tr/en/download/article-file/29691
39. Tavsancil E. Measuring attitudes and data analysis with SPSS. Nobel Publishing, Ankara. 2014; p-p. 3–58.
40. Celik HE, & Yilmaz V. Structural equality modelling. (3. Ed), Ani Publishing, Ankara. 2016; p-p. 23–51.