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Factors associated with women's satisfaction with prenatal care in Porto Alegre, Rio Grande do Sul, Brazil

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Abstract *This article aims to identify factors associated with full satisfaction with prenatal care in health services in Porto Alegre (RS), Brazil. This is a cross-sectional study with 287 women that attended prenatal care in the state capital. Women were randomly selected at two large maternity hospitals (public and private) and interviewed at their homes around 30 days after delivery, from January to August 2016. Satisfaction was measured by a Likert scale (very satisfied to very unsatisfied). Prevalence ratios (PR) were estimated by Poisson regression with robust variance, using a hierarchical model. Factors associated with greater satisfaction were higher education (PR=1.49; 95% CI: 1.08-2.06); multiprofessional care (PR=1.29; 95% CI: 1.00-1.66); receiving information about breastfeeding (PR=1.33; 95% CI: 1.05-1.68) and place of delivery (PR=1.56; 95% CI: 1.12-2.17); and women feeling comfortable asking questions and participating in decisions (PR=5.17; 95% CI: 1.79-14.96). The findings suggest that prenatal care services that offer multiprofessional care, provide guidance, and make pregnant women feel comfortable asking and deciding about their care may generate greater satisfaction.*

Key words *Prenatal care, Women's health, Patient satisfaction*

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Introduction

Prenatal care is an essential tool for linking pregnant women to the health service network when provided by trained professionals. It can reduce adverse maternal and child health outcomes, and consists of clinical and educational actions that mainly aim to monitor the development of pregnancy, detect and manage conditions that may affect the well-being of pregnant women and fetuses, and empower women to self-care, delivery and breastfeeding[1-3].

The experience of pregnant women has been increasingly valued. It traverses other issues, far beyond the ability of services to provide routine and protocol care. According to the World Health Organization (WHO), a positive pregnancy experience involves maintaining women's organic and socio-cultural conditions, healthy pregnancy for both mother and child, the effective transition to labor and birth, and the achievement of a maternity experience with autonomy, competence, and self-esteem[4].

In Brazil, prenatal care is performed primarily in the public network. A nationwide study identified that 74.6% of pregnant women received care through the public system between 2011 and 2012, and 89.6% of prenatal assistance were performed in primary health care (PHC)[1]. Some aspects differentiate public network's PHC prenatal care from that performed in the private sector, such as the home-service proximity, the provision of care based on clinical protocols developed by the Ministry of Health, and the principle of reducing regional and socioeconomic care-related inequalities, which are PHC assumptions[5].

Satisfaction is a quality care indicator that emphasizes the users' role, considering their perception of certain services or products[6]. By identifying the positive changes in health outcomes of mothers and children associated with prenatal care, several authors studied the adequacy of care provided to the current recommendations, using direct quality indicators, such as the number of visits, procedures and standard tests, timely immunization, and others[1,2,7-9].

However, to date, few studies have assessed women's satisfaction with prenatal care. Those who are concerned with this approach are mostly qualitative, include a small number of women and, in general, evaluate the care provided to pregnant women by a single professional category and are not very comprehensive concerning the number and variety of services studied[10,11]. Because of these characteristics, they end up not portraying broadly the women's perception about the care received.

Thus, this study aims to identify, through women's perception, factors associated with full satisfaction with prenatal care, from January to August 2016.

Methods

Study design and population

A cross-sectional study was carried out with women who had prenatal care in public and private health networks of Porto Alegre, Rio Grande do Sul (RS). Women were randomly selected by a draw in two large maternity hospitals (one public and one private, responsible, in total, for approximately 25% of the 30,268 births that occurred in the state capital in 2016), regardless of the gestational risk's classification.

Women or infants with unfavorable outcomes at the time of delivery (death or intensive care hospitalization) were excluded from the study to avoid interference in the measurement of "satisfaction". Women with any breastfeeding contraindication were also excluded due to other breastfeeding-related outcomes measured in the research, which are not the subject of this study[12,13]. Women living in dangerous areas for home visits were also excluded from the study to preserve the research team's safety.

The sample size was calculated using the Power Sample program. Considering the prevalence of full satisfaction with prenatal care equal to 64%[14] and an estimated error of 6 p.p., the calculated sample resulted in 265 participants (totaling 318 with 20% for eventual losses).

Data collection

Data were collected from January to August 2016. Every day, all women who had given birth in the previous 24 hours and who met the inclusion criteria received a number, which was used for the draw. Two women in the public maternity and one in the private maternity were drawn daily, until reaching the desired sample. This proportion aimed to ensure reasonable representativeness concerning the use of public and private services, described in the literature as being approximately 70% and 30%, respectively, at the national level[15–17]. Between 31 and 37 days after delivery, an interview was carried out at home or,

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rarely, in another location preferred by women, for the application of a structured questionnaire, which was developed specifically for this study, based on the experience of researchers and the documents guiding prenatal care in the Brazilian context[5,18]. The women not found for the interview after at least three telephone calls, and one face-to-face attempt were considered losses. The interviews were carried out after a pilot project that pointed out the need for small semantic adjustments to the questionnaire. The field team consisted of 12 trained interviewers.

The exposure variables were divided into sociodemographic (age, schooling, occupation, self-reported skin color, socioeconomic level according to the Brazilian Association of Research Companies[19] and women's marital status); obstetric history (previous pregnancies and planning of current pregnancy); and prenatal care (type of service, number of visits, gestational age at onset of assistance, accompanied by the partner, multiprofessional care, participation in a course or group for pregnant women, receiving guidance on rights, place of delivery, birth and breastfeeding plan, search for information and feeling comfortable asking questions and participating in decisions, the latter being classified into three categories: yes, completely; more or less; and no).

The outcome – women's satisfaction with prenatal care – was measured at the end of the questionnaire, after reporting all the care and guidance provided during pregnancy by health professionals, with the question: "What is your satisfaction concerning care received during pregnancy?" The response was assessed using a Likert scale with five options: very satisfied, satisfied, neither satisfied/nor dissatisfied, dissatisfied, and very dissatisfied. Given the high percentage of responses in the "satisfied" and "very satisfied" categories found in the study, and the researchers' option to investigate aspects related to the highest degree of satisfaction, the outcome was considered as a binary variable, namely, full satisfaction (very satisfied), YES or NO.

Statistical and ethical aspects

The association between exposure variables and the "full satisfaction" outcome was assessed using Poisson regression with robust variance estimation, which provides estimates for the prevalence ratio, according to a hierarchical model[20,21]. The factors were ranked by level of proximity to the outcome as per the model's assumptions: distal (sociodemographic characteristics), intermediate (obstetric history), and proximal (characteristics of prenatal care). Under the rule of 10 events per factor, the calculated sample size (n: 318) allows the inclusion of 13 factors in a multivariable model[22]. Figure 1 shows the multivariable model's structure used in this study.

The estimates were adjusted for all factors that make up the same level, regardless of the p-value. Factors that were associated with the outcome at their level, considering $p<0.20$, were included in the following levels to adjust for confounding factors. In the final model, the level of significance adopted was $p<0.05$, and the results were expressed in prevalence ratios (PR) with their respective 95% confidence intervals (CI) and p-values. The age factor (continuous) met the assumption of linearity. Statistical analysis was performed with SPSS software version 18.0.

This study complies with the rules regulating human research[23] and was approved by the Rese-

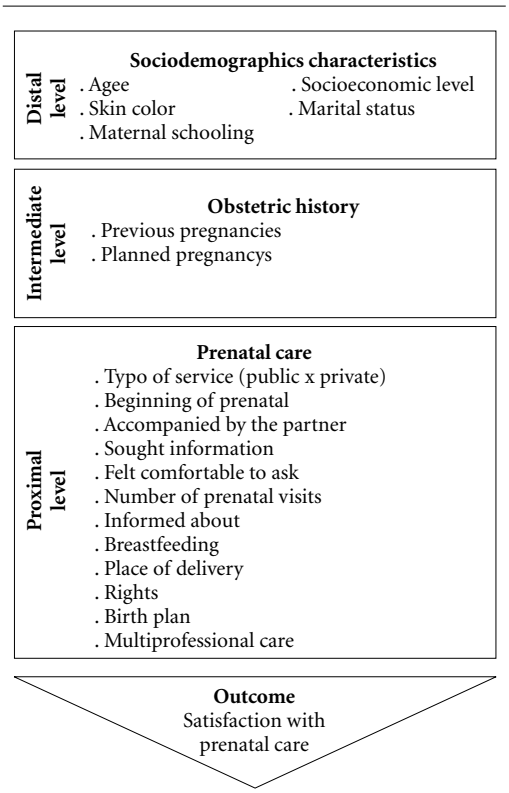

Figure 1. Hierarchical model of factors associated with women's satisfaction with prenatal care in Porto Alegre (RS), Brazil, 2015-2016.

Source: Author's elaboration.

arch Ethics Committees of the institutions involved. All women who agreed to participate in the study signed an Informed Consent Form (ICF).

Results

In total, 379 of the women drawn in this study were eligible, and 287 were interviewed. The number of refusals was 25 (6.6%), and 67 women (17.7%) were lost due to fail in the contact for scheduling the interviews. Women who were not interviewed differed concerning schooling and skin color, with lower education (no women had entered higher education versus 43.2%; p<0.01) and a higher prevalence of white skin color (87.7% versus 75.3%; p=0.032) compared to those interviewed.

The prevalence of full satisfaction in the sample was 46.3% (95% CI: 40.5-50.3). In the other categories, 38.0% said they were satisfied, 9.8% considered themselves neither satisfied nor dissatisfied with the care, 4.9% were dissatisfied, and 1.0% were very dissatisfied with the prenatal care. Table 1 shows the sociodemographic characteristics, the obstetric history, and the care received in the prenatal period according to the level of satisfaction of the participating women.

The sample studied consisted mainly of women between 20 and 34 years old, white, in a stable relationship, and with at least one previous pregnancy. Most of the fully satisfied women belonged to social classes A-B, had completed higher education and planned their pregnancy, while most of those not fully satisfied belonged to social classes C-D-E, had completed secondary school, and did not plan their pregnancy. (Table 1)

Regarding the prenatal care, a high number of women who attended the first visit until the sixth week of pregnancy (36.4%) and had a total number of visits of more than 8 (83.7%) has been observed. Only 21.7% of women were cared by other professionals besides those responsible for prenatal care (general practitioner, obstetrician-gynecologist, family physician or nurse). The presence of a companion in at least one prenatal visit occurred with 76% of pregnant women. Most women (84%) said that they felt completely comfortable asking questions. In respect of receiving guidance/information, 67.8% were instructed on the place of delivery, 53.9% on their rights, 30.9% felt fully guided about breastfeeding, and 13.2% received information about the elaboration of a birth plan. (Table 1)

At the distal level, only women's schooling level was associated with satisfaction with prenatal

Table 1. Analysis of sociodemographic characteristics, obstetric history, and prenatal care according to the satisfaction of women in Porto Alegre, 2015-2016.

Factors	Sample n(%)	Full satisfaction n(%)	
	n=287	Yes 133 (46,3%)	No 154 (53,7%)
Distal: sociodemographic			
Age (years)			
Mean + SD	29.1 (6.6)	30.3 (6.6)	28.0 (6.4)
≤ 19	23 (8.0)	8 (6.0)	15 (9.7)
20-34	199 (69.3)	84 (63.2)	115 (74.7)
≥35	65 (22.6)	41 (30.8)	24 (15.6)
Skin color			
White	216 (75.3)	108 (81.2)	108 (70.1)
Black or brown	71 (24.7)	25 (18.8)	46 (29.9)
Socioeconomic level*			
A – B	163 (57.2)	93 (70.5)	70 (45.8)
C – D – E	122 (42.8)	39 (29.5)	83 (54.2)
Schooling			
Higher education (completed or incomplete)	124 (43.2)	78 (58.6)	46 (29.9)
Elementary and secondary school	163 (56.8)	55 (41.4)	108 (70.1)
Marital status*			
Living with companion	188 (65.7)	100 (75.8)	88 (57.1)

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Factors	Sample n(%)	Full satisfaction n(%)	
	n=287	Yes 133 (46,3%)	No 154 (53,7%)
Intermediate: obstetric history			
Previous pregnancy			
Yes	163 (56.8)	69 (51.9)	94 (61.0)
Planned pregnancy			
Yes	154 (53.7)	83 (62.4)	71 (46.1)
Proximal: prenatal care			
Type of service			
Public	147 (51.2)	50 (37.6)	97 (63.0)
Private or mixed	140 (48.8)	83 (62.4)	57 (37.0)
Gestational age at onset (weeks)*			
≤ 6**	102 (36.4)	58 (45.0)	44 (29.1)
7 over	178 (63.6)	71 (55.0)	107 (70.9)
Number of visits*			
≤ 7**	46 (16.3)	13 (10.0)	33 (21.7)
8 and over	236 (83.7)	117 (90.0)	119 (78.3)
Multiprofessional care *			
Yes	62 (21.7)	43 (32.3)	19 (12.4)
Sought information			
Yes	221 (77.0)	109 (82.0)	112 (72.7)
Accompanied by the partner			
Yes, at least in one visit	218 (76.0)	115 (86.5)	103 (66.9)
Informed about her rights*			
Yes, fully	152 (53.9)	80 (61.5)	72 (47.4)
Informed about the place of delivery*			
Yes	194 (67.8)	105 (78.9)	89 (58.2)
Informed about breastfeeding*			
Yes, fully	88 (30.9)	55 (42.0)	33 (21.4)
No, or partially	197 (69.1)	76 (58.0)	121 (78.6)
Participated in a pregnant women's group/course			
Yes	52 (18.1)	27 (20.3)	25 (16.2)
Informed about birth plan*			
Yes	37 (13.2)	23 (17.7)	14 (9.3)
Felt comfortable to ask			
Yes, fully	241 (84.0)	130 (97.7)	111 (72.1)
No, or partially	46 (16.0)	3 (2.3)	43 (27.9)

* N different from 287 due to missing data ** Cutoff points differ from the recommendations of the Ministry of Health due to the concentration of women who had their first visit until the 12th week of pregnancy (82.5%) and who had six or more visits (94.3%).

Source: Author's elaboration.

care after adjustment. Enrollment in higher education, even without completing the course, was associated with full satisfaction (PR=1.49; 95% CI: 1.08-2.06; p=0.015). The intermediate factors were not statistically significant in the adjusted analysis. (Table 2)

At the proximal level, four factors were associated with full satisfaction: having received multiprofessional care (PR=1.29; 95% CI: 1.00-1.66; p=0.049); having been informed about the place of delivery (PR=1.56; 95% CI: 1.12-2.17; p=0.008); having received guidance on breastfeeding (PR=1.33; 95% CI: 1.05-1.68; p=0.017); and feeling comfortable asking questions (PR=5.17; 95% CI: 1.79-14.96; p=0.002). Of the professionals who shared the care of pregnant women

with prenatal care professionals, 50% were from medical specialties (endocrinology and psychiatry, mainly), 43.5% from other health professions (nutritionists, psychologists, dentists, or physiotherapists), and 6.5% received care from more than one of these categories.

Discussion

This study identified five factors associated with full satisfaction with prenatal care, namely, high schooling level (admission to higher education), multiprofessional team care, receiving guidance on breastfeeding and the place of delivery, women's feeling comfortable asking questions, and participating in decisions during the visits.

According to the literature, satisfaction with prenatal care varies according to the organization of the services and the evaluated items (structure, human resources, availability of supplies, and tests)[24]. A research carried out in northeastern Brazil showed that 59.6% of women were satisfied with the care received[24]. A very similar proportion was found in a municipality in southeastern Brazil, where 58.8% of women said they were satisfied with the care received[25]. Our study, developed in a southern capital city, found a percentage of 46.3% of full satisfaction with prenatal care. This lower prevalence can be explained by the distinction made to fully satisfied women, according to the objective of the present study. When the categories satisfied and fully satisfied were added, this study found a percentage of 84.3% satisfaction, a proportion similar to that evidenced internationally[26]. No Brazilian or international studies evaluating the outcome "full satisfaction" have been identified.

The concern with investigating the factors associated with full satisfaction is in line with national and international recommendations that aim to provide women with a positive experience of pregnancy and motherhood. Care in the pregnancy-puerperal cycle, usually assessed through the actions and services performed (number of visits, tests, and procedures), can be

Table 2. Multivariate analysis of factors associated with women's satisfaction with prenatal care, according to a hierarchical model, in Porto Alegre (RS), Brazil, 2015-2016.

Factors	Full satisfaction n (%)	PR_C (IC 95%)	PR_A* (IC 95%)	P-value
Distal				
Age (years)				
Mean + SD	30.3 (6.6)	1.03 (1.01-1.05)	1.00 (0.97-1.02)	0.970
Skin color				
White	108 (50.0)	1.42 (1.01-2.00)	1.09 (0.77-1.55)	0.596
Black or brown	25 (35.2)	1.00	1.00	
Socioeconomic level				
A – B	93 (57.1)	1.78 (1.33-2.39)	1.25 (0.87-1.82)	0.220
C – D – E	39 (32.0)	1.00	1.00	
Schooling				
Higher education (completed or incomplete)	78 (62.9)	1.86 (1.44-2.40)	1.49 (1.08-2.06)	0.015
Elementary and secondary school	55 (33.7)	1.00	1.00	
Marital status				
Living with companion	100 (53.2)	1.63 (1.19-2.23)	1.31 (0.92-1.86)	0.130
Without companion	32 (32.7)	1.00	1.00	
Intermediate: Obstetric history				
Previous pregnancy				
Yes	69 (42.3)	0.82 (0.64-1.05)	0.90 (0.71-1.15)	0.418
No	64 (51.6)	1.00	1.00	
Planned pregnancy				
Yes	83 (53.9)	1.43 (1.10-1.86)	1.16 (0.88-1.53)	0.283
No	50 (37.6)	1.00	1.00	

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Table 2. Multivariate analysis of factors associated with women's satisfaction with prenatal care, according to a hierarchical model, in Porto Alegre (RS), Brazil, 2015-2016.

Factors	Full satisfaction n (%)	PR_C (IC 95%)	PR_A* (IC 95%)	P-value
Proximal: prenatal care				
Type of service				
Public	50 (34.0)	0.57 (0.44-0.74)	1.02 (0.72-1.45)	0.904
Private or mixed	83 (59.3)	1.00	1.00	
Gestational Age (weeks)				
≤ 6	58 (56.9)	1.42 (1.11-1.82)	1.05 (0.83-1.34)	0.649
7 over	71 (39.9)	1.00	1.00	
Number of visits				
8 and over	117 (49.6)	1.75 (1.09-2.83)	1.12 (0.69-1.82)	0.643
≤ 7	13 (28.3)	1.00	1.00	
Multiprofessional care				
Yes	43 (69.4)	1.72 (1.37-2.17)	1.29 (1.00-1.66)	0.049
No	90 (40.2)	1.00	1.00	
Sought information				
Yes	109 (49.3)	1.35 (0.96-1.91)	1.27 (0.87-1.85)	0.201
No	24 (36.4)	1.00	1.00	
Accompanied by the partner				
Yes	115 (52.8)	2.02 (1.33-3.06)	1.37 (0.89-2.10)	0.143
No	18 (26.1)	1.00	1.00	
Informed about rights				
Yes, fully	80 (52.6)	1.36 (1.05-1.78)	1.07 (0.83-1.39)	0.577
No	50 (38.5)	1.00	1.00	
Informed about the place of delivery				
Yes	105 (54.1)	1.78 (1.27-2.48)	1.56 (1.12-2.17)	0.008
No	28 (30.4)	1.00	1.00	
Informed about breastfeeding				
Yes, fully	55 (62.5)	1.62 (1.27-2.04)	1.33 (1.05-1.68)	0.017
No, or partially	76 (38.6)	1.00	1.00	
Informed about birth plan				
Yes	23 (62.2)	2.10 (1.03-4.28)	0.89 (0.69-1.15)	0.378
No	107 (43.9)	1.00	1.00	
Felt comfortable to ask				
Yes, fully	130 (53.9)	8.29 (2.75-24.85)	5.17 (1.79-14.96)	0.002
No, or partially	3(6.5)	1.00	1.00	

95% CI: 95% confidence interval; PRC: Crude prevalence ratio; PRA: Adjusted prevalence ratio. * Adjusted for same-level factors and significant factors (p<0.20) of previous levels, according to the hierarchical model methodology.

Source: Author's elaboration.

seen from other perspectives, which value the perception of women and inspire the search for new concepts and practices in prenatal care. The challenge of providing women with full satisfaction with care must be one of the health services' quality objectives, alongside the implementation of techniques and procedures required for a safe pregnancy[4].

Regarding the sociodemographic characteristics evaluated, only the women's schooling was significantly associated with satisfaction with prenatal care. Women enrolled in higher education, even though they had not completed it, had a 49% higher prevalence of full satisfaction. A prenatal care assessment research in the extreme south of Brazil identified schooling, income,

and living with a companion as aspects associated with the adequacy of care (number of visits, early onset of prenatal care, timely tests, according with Takeda, Coimbra et al. and Silveira et al.). However, this assessment does not address satisfaction[27]. In a survey conducted in Southeast Brazil, which had satisfaction with prenatal care as an outcome, the authors did not identify an association with income, schooling, or women's skin color[25].

The findings of the *Nascer no Brasil* (Born in Brazil) survey possibly explain the greater satisfaction with prenatal care among women with higher education. In this research, pointing out that childbirth care-related variables were evaluated, the perception of shorter waiting times to receive care, respectful treatment by health professionals, privacy during physical exams and childbirth, clear explanations and the possibility of asking questions was significantly higher in women with a high level of education[15].

These findings possibly occur because women with higher education feel safer and comfortable questioning the professionals, getting involved in decisions about their care, seeking information from sources other than the professional who assists them and actively participating in the process of care, receiving valuable guidance and involving their partners. In the sample, noteworthy is the high proportion of women who were enrolled in higher education (43.2%), as well as in another study conducted in southern Brazil, where 31.1% of women had 12 or more years of study[28].

This research showed that only 67.8% of pregnant women were informed about the place of delivery, 53.9% felt fully informed about their rights, and only 30.9% received sufficient breastfeeding guidance. The low proportion of women effectively guided in prenatal care is present in other national studies, such as in research carried out in the network of prenatal care in Rio de Janeiro, where only 28.7% received information about childbirth and breastfeeding[29].

The empowerment of women, through guidance for the recognition of their rights, the safety and the clinical indication of each practice performed is essential to improve their birth experience. Moreover, prenatal care should be a space for sharing information regarding the benefits, techniques, and management of recurrent situations in breastfeeding. It is worth highlighting research conducted in the northeast Brazilian region, where 89.8% of women were instructed about breastfeeding in prenatal care, and the receipt of this information was associated with a higher prevalence of breastfeeding (PR: 5.44; p-value: 0.003)[30].

The professionals' concern with the application of routine procedures, such as checking blood pressure, measuring uterine height and fetal heartbeat demands priority attention from the prenatal care professionals, often at the expense of sharing important information with women, which could reinforce their knowledge to experience pregnancy and motherhood with autonomy and confidence[4,5].

As shown in other studies, the number of prenatal care visits was not associated with satisfaction in this study[25]. The quality of visits, concerning requesting exams, carrying out procedures, explaining, and providing guidance, can be a factor that interferes with satisfaction, besides the number of visits[31].

No association was also found between the place of prenatal care (public or private/mixed service) and satisfaction with care. A survey carried out in Turkey identified greater satisfaction among women who underwent prenatal care in public primary care centers, and facilitated geographical access and qualified interpersonal relationships were responsible for the greatest satisfaction[32]. National surveys on the subject show better quality indicators of prenatal care in private services. However, they do not discuss the satisfaction of pregnant women with the care received[33].

The lack of difference in the level of satisfaction with prenatal care in public and private services may be related to the critical advance in Brazilian PHC, especially in the area of maternal and child health, marked by the development of actions aimed at reducing morbidity and mortality, with large-scale implementation of guiding documents and care protocols that discuss, beyond routine clinical procedures, the importance of humanized care and of shared responsibility in prenatal care, childbirth, and postpartum[5,34,35].

This study identified a positive association between multiprofessional care and satisfaction, a finding that is controversial in the literature, although there are no specific data on prenatal care. A systematic review that included 26 studies of adequate methodological quality, with a sample of 15,526 participants, showed positive effects of multiprofessional care on patient satisfaction in 10 studies[36]. However, in this review, multiprofessional care was not associated with women's satisfaction[36,37] in the only study conducted in a maternal health care setting.

The results show a relevant association between full satisfaction with prenatal care and the feeling of being comfortable asking questions and participating in decisions. These findings corroborate with other national and international studies, in different care scenarios, which demonstrate the positive impact of the harmonious interpersonal relationship and respect between users and professionals in the satisfaction with the care received[10,38]. In this sense, professionals who enable pregnant women to express their fears and insecurities and to build the maternity process with shared responsibility, respect, and trust seem to promote greater satisfaction in prenatal care, as they allow women to clarify their concerns, know their rights and act proactively in their care.

This study has some limitations. Individual variations in self-reported responses and embarrassment in the face-to-face interview may have limited the reliability of the results to some extent. Any memory bias was minimized by conducting the interview shortly after delivery. The difference between lost women (17.7%) and those participating, concerning schooling and skin color, may limit the use of the value found as an estimate of the prevalence of full satisfaction, but do not influence the verification of associations. Finally, the exclusion of women living in extremely violent regions and the high socioeconomic and educational levels in the sample must be considered as aspects that possibly interfere with the ability to generalize the results.

Originality is among the main strengths of this study, as it seeks to understand aspects of health care quality that are barely explored in the specific context of prenatal care, with an emphasis on satisfaction, always through women's perception. We highlight the random nature of the sample and the face-to-face home interviews, which reduces the likelihood to avoid criticizing health services and minimize an eventual bias of gratitude. Noteworthy is that the outcome was assessed at the end of the interview, which allowed the woman to reflect on specific aspects of contact with health services before their evaluation.

Conclusions

This study showed an unprecedented association between full satisfaction with prenatal care and high schooling, multiprofessional care, and professional-pregnant woman relationship, which was favorable to the exchange of information/guidance and women's empowerment. These findings represent new knowledge, relevant and specific, that shall be useful in the context of policies that aim to implement good practices in the care of pregnant women and strengthen the premises of positive experiences of pregnancy, delivery, and birth, as proposed internationally by the WHO.

Collaborations

JC Paiz was responsible for the conception and design, analysis and interpretation of data, writing of the article and approval of the version to be published. PK Ziegelmann performed the data analysis and interpretation, critical review of the article and approval of the version to be published. ACM Martins and C Giugliani were responsible for the conception and design, analysis and interpretation of data, critical review of the article and approval of the version to be published. ERJ Giugliani was responsible for the conception and design, critical review of the article and approval of the version to be published.

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