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Obstetric violence: influences of the Senses of Birth exhibition in pregnant women childbirth experience

Sônia Lansky (http://orcid.org/0000-0001-5533-4858) [1]
Kleyde Ventura de Souza (https://orcid.org/0000-0002-0971-1701) [2]
Eliane Rezende de Morais Peixoto (https://orcid.org/0000-0003-2179-6071) [2]
Bernardo Jefferson Oliveira (https://orcid.org/0000-0002-9528-9147) [2]
Carmen Simone Grilo Diniz (http://orcid.org/0000-0002-0069-2532) [3]
Nayara Figueiredo Vieira (https://orcid.org/0000-0001-6218-1394) [2]
Rosiane de Oliveira Cunha (https://orcid.org/0000-0002-6442-3358) [2]
Amélia Augusta de Lima Friche (https://orcid.org/0000-0002-2463-0539) [2]

Abstract *Excessive interventions during labor in Brazil have been reported as disrespect and abuse and contribute to neonatal and maternal morbidity and mortality. The Senses of Birth exhibition aims to encourage normal birth to promote health and improve the experience of childbirth in the country. This article describes the characteristics of 555 women who visited the exhibition during pregnancy and their perception of obstetric violence in childbirth. Obstetric violence was reported by 12.6% of the women, mostly low-income and unmarried. It was associated to lithotomic position and Kristeller maneuver during childbirth and non-immediate skin-to-skin contact with the baby. The main categories of obstetric violence reported were: not accepted interventions /accepted interventions on the basis of partial information (36.9%), undignified care / verbal abuse (33.0%); physical abuse (13.6%); non-confidential / non-privative care (2.9%) and discrimination (2.9%). Visiting the exhibition significantly increased pregnant women's knowledge about obstetric violence. However, recognition of obsolete or harmful practices as obstetric violence was still low. Initiatives such as Senses of Birth may contribute to increase knowledge and social mobilization to disseminate good practices in childbirth care.*

Key words *Violence against women, Parturition, Maternal and child health, Health education*

[1] Secretaria Municipal de Saúde de Belo Horizonte. Av. Afonso Pena 2336, Funcionários. 30130-170 Belo Horizonte MG Brasil. sonialansky@gmail.com
[2] Escola de Enfermagem, Universidade Federal de Minas Gerais. Belo Horizonte MG Brasil.
[3] Faculdade de Saúde Pública, Universidade de São Paulo. São Paulo SP Brasil.

Introduction

The concept of disrespect and abuse during childbirth is used internationally to designate what is called obstetric violence (OV), violence at birth, institutional or structural violence in childbirth care[1-4]. This terminology was proposed for the identification of any act of violence directed at the pregnant woman, parturient or puerperal woman or her baby, practiced during the professional assistance that means disrespect to their autonomy, physical and mental integrity, their feelings, options and preferences. The World Health Organization recently recognized obstetric violence in 2014 as a public health issue that directly affects women and their babies[5]. It is considered obstetric violence delays in care, denial of hospitalizations in the health services, negligent care, refusal to administer analgesics, physical, verbal and / or psychological mistreatment, disrespect for privacy and freedom of choice, coercive or not consenting procedures, detention of women and their babies in health institutions, among others[5,6]. It covers the non-use of recommended procedures as well as the use of unnecessary, non-recommended and / or obsolete procedures that may cause harm.

Procedures not technically indicated can lead to consequences and iatrogenies, with avoidable effects on the health of the woman and the baby, such as dystocia at childbirth, hemorrhages and neonatal hypoxia, as well as female dissatisfaction and postpartum depression[5-7].Obstetric violence is a gender-based violence, targeting specifically women and permeating unequal power relations in our society[8-9]. In countries such as Venezuela and Argentina, for example, OV was typified in national legislation as violence against women[4]. In Brazil, a research study on women and gender in public and private spaces[10] found that one in four women suffers some kind of violence during childbirth, from shouting, painful procedures without consent or information, lack of analgesia and even negligence. In the Born in Brazil survey, a national study of 23,940 postpartum women, identified an excess of interventions in childbirth and birth. It showed a model of care based on unnecessary and often harmful interventions, exposing women and children to iatrogenias[11]. More than half of the women had an episiotomy;91.7% gave birth in lithotomy position, while the evidence recommends vertical positions; oxytocin and artificial rupture of the amniotic membrane for acceleration of labor was used in 40% of the women; 37% were submitted to the Kristeller maneuver (pressure in the uterus for the expulsion of the baby),an aggressive procedure that brings deleterious consequences for women in labor and their babies[11].

Hyper-medicalization of childbirth in Brazil is expressed by the high rates of cesarean section (56.7% in 2015)[12], the abusive use of oxytocin and episiotomy, among others, and has been associated with iatrogenic effects and maternal and infant morbidity such as iatrogenic prematurity, neonatal admission in intensive care, maternal hemorrhage and infection[13,14]. There is a gap between scientific evidence available since 1985[15] and the recently updated guidelines for Care During Childbirth of the Ministry of Health[16,17], which calls for changes to the health promotion model and quaternary prevention, based on the principle of non-maleficence bioethics: first do not causeinjury[13]. In addition to the universalization of health care access, it is necessary to improve quality and safety of care, since disrespectful or abusive care can negatively affect health[18].

The consequences of obstetric violence on the use of health services is a concern, as the quality of care affects women experience of giving birth, the child experience of being born and the whole society culture about birth, which compromises credibility of childbirth care services[6].

The excess of preventable infant deaths and the high levels of maternal mortality in Brazil have been highlighted as the effect, in part, of the excess of interventions without indication in labor and childbirth, with persistent preventable deaths by improving quality of health care[11,13-14]. The infant mortality rate (IMR) of 14/1000 in Brazil is considered high when compared to the indexes of countries with equal or lower levels of economic and technological development, such as Chile, Costa Rica or Cuba, which have already reached 1 digit of IMR[19-21]. A ratio of less than 20 maternal deaths per 100,000 live births is recommended, while Brazil presents a rate of 60 / 100,000[22].

Obstetric violence is therefore a relevant topic for maternal and child health public policy in Brazil, as well as for health professionals and managers training, focusing in the need to change health care practices and the model of care during childbirth. Brazilian cultural is highly influenced by the perception of birth context associated to the excessive use of procedures during childbirth. Loneliness of women giving birth without a companion, interferences in the physiologic process of labor which increases discomfort, lack of privacy and the professional and

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institutional control over the process have been considered as contributing factors to the excess of cesarean sections in the Brazil[4]. Thus, from the perspective of women, cesarean delivery has become an alternative to violence or maltreatment during childbirth[4,10].

In order to contribute to change culture about childbirth and value normal birth and decrease unnecessary interventions, the Senses of Birth exhibition an initiative to improve social mobilization and dissemination of evidence-based practices in childbirth was structured in 2015[23]. It is an innovative health education initiative with interactive installations to evolve the visitor. It combines different languages (digital art with theatrical techniques) and supports (videos and photographs, scenarios, panels) to engage the participant and promote critical thinking, as well as provide up-to-date information based on scientific evidence. Between March 2015 and January2017 eleven editions were organized in public spaces of wide circulation in five Brazilian municipalities (Belo Horizonte, Rio de Janeiro, Niterói, Ceilândia, and Brasília) and received 36,444 visitors. An evaluation of the effects of the exhibition on knowledge and perceptions of the visitorsabout normal birth and other aspects related to childbirth care, the risks of cesarean section and recommended care by scientific knowledge, the rights of women and the baby, among others effects was carried on to assess changes and cultural transformation, social mobilization and empowerment of women in childbirth. The objective of this article is to analyze the profile of pregnant women who visited the Senses of Birth, their perception aboutviolence in childbirth and the socioeconomic-demographic and health care factors associated with the report of OV.

Methods

This is a cross-sectional multicenter study with quantitative and qualitative components, part of the Senses of Birth study. Data were collected in postpartum interviews conducted by telephone or electronic mail between June 2015 and January 2017 with 555 (43%) of the 1290 pregnant women who visited the exhibition between March 2015 and March 2016 and accepted to participate in the search. A semi-structured questionnaire was applied immediately after participation in the exhibition, with the collection of socioeconomic and demographic data, data from previous pregnancies and current gestation, as well as questions related to pregnant women's knowledge and perception about issues related to childbirth, in order to measure the impact of exposure on the change of information, knowledge and perception on the subject. The postpartum questionnaire was administered by telephone or electronically answered by the women, with questions about their experience in childbirth. The event of interest in this study was the woman's perception of obstetric violence, obtained through the question "Do you consider having experienced violence / maltreatment during childbirth / cesarean delivery / baby's birth? Yes / No / I do not know ". The objective of this question was to evaluate the perception of the woman about the experience of violence / mistreatment and to analyze the associated variables.

The explanatory variables were divided into four groups: (1) Socio-demographic characteristics: age (< 19 years, 20 to 34 years and 35 years, skin color (black [brown / black], white or other [yellow and indigenous), marital status (single, separated, married or in stable union), schooling (elementary, high school, graduate school), family income (< 2 minimum wages (MW), 2 to 5, 5 to 10, > 10 MW/ (2) Information on delivery: place of delivery (SUS / private / home), type of delivery (cesarean / vaginal and vaginal with forceps or vacuum extractor), health plan (yes / no); satisfaction in childbirth (terrible/poor/ indifferent and good /excellent); (3) Health care markers in childbirth: position in birth (supine / lithotomic and non-supine), Kristeller maneuver during delivery, episiotomy and episiotomy reported (yes, no, do not know), use of non-pharmacological methods for pain relief during labor, companion throughout the period in hospital for childbirth, skin-to-skin contact with the baby immediately after birth, skin-to-skin contact with the baby during the first hour after birth (yes or no); (4) knowledge about OV before and after participation in the Senses of Birth (none / little / reasonable and good/very good).Schooling categories include completed and incomplete levels. Family income was stratified into multiple value of the minimum wage at the time of the research (R$ 788.00). For the variable satisfaction at delivery, the interviewee evaluated their delivery on a scale between 1 (very bad) and 5 (great). For the analysis, the scores from 1 to 3 were grouped in the "terrible /bad/indifferent" category, and 4 and 5, in the "good /excellent" category. The childbirth care indicators were: position in childbirth (squatting, on the stool, semi-sitting, on knees or other) considered for the "non-supine"

category, and the position lying in the "supine or lithotomic" category; the question "at the time of childbirth, someone went up in your belly to "facilitate" birth to evaluated the use of Kristeller's maneuver; and "was there a cut in the vagina at the time of birth"?to evaluate if an episiotomy was performed; if so, the question "were you informed that this cut would be made?" assessed whether the episiotomy was reported to the woman. For the calculation of the proportions of the variables "position at birth", "Kristeller", "episiotomy" and "reported episiotomy", only women who had vaginal delivery were considered.

For the variable "use of non-pharmacological methods for pain relief" were considered all women who went through labor. It was considered skin to skin contact between mother and baby without clothes or cloths wrapping the baby. A numerical identifier variable was created for each case in the pregnant and postpartum databases and the two databases were combined using the Merge Files tool. A descriptive analysis was carried out by means for the calculation of the frequency of categorical data and univariate analysis. Pearson's chi-square test and the p-value calculation were performed. To evaluate the independent effect of the exposure variables a multivariate analysis was performed by logistic regression. Two initial regression models were constructed:

Model 1 - considers the subsample of women who had vaginal / vaginal delivery with forceps and the variables: position at delivery, Kristeller, episiotomy, reported episiotomy; Model 2 - considers all the women participating in the study: includes the variable "Type of delivery" and excludes variables related exclusively to normal birth.

Logistic regression was performed in two stages in each of these models. Initially, the variables that obtained a p value equal to or less than 0.20 in the univariate analysis were evaluated separately for each block of demographic socio-economic variables / information on childbirth and health care markers at childbirth. The sequential deletion strategy was applied and only the variables with p value equal to or less than 0.10 remained in the intermediate model. All variables that remained in the intermediate model formed a general multivariate model, and the same sequential deletion strategy was used.

Only the variables with p value lower than 0.05 remained in the final model of each group. The fit quality of the final model was evaluated by the Hosmer-Lemeshowe test and the explanatory power of the model was evaluated by Nagelkerke pseudo-R^2. For the calculation of the odds ratio (OR) the category "I do not know" (25 women, 4.5%) of the event OV perception were lost. We opted for the exclusion of the explanatory variables *satisfaction in childbirth* in the logistic regression model, since this variable expresses content similar to that of the OV response variable (who considers OV is likely to be dissatisfied with childbirth) and *informed episiotomy*, due to the small number of available information and consequent instability effect of the model. The data collected in each phase of the study were compiled in separate datasets and the statistical software IBM SPSS Statistics 20R was used for analysis.

Analysis of the perception of women about the experience of obstetric violence considered the OV categories elaborated by Bower & Hill[3] and synthesized in Brazil by Tesseret al[24]. From the affirmative answer to the question: "Do you consider that you have experienced violence / maltreatment during childbirth / cesarean delivery / birth of the baby?" and the reports to the open question "Do you consider having experienced violence / maltreatment at birth / cesarean section / at birth of the baby-Please comment", 64 reports were organized by means of simple frequency in the categories: physical abuse; imposition of non-consented intervention / interventions accepted on the basis of partial or distorted information; non-confidential or non-private care; undignified care and verbal abuse; discrimination based on certain attributes; abandonment, neglect or refusal of assistance, detention in services. Among the 70 affirmative answers with the perception of OV six (6) were excluded: one (01), because there was no report and five (05) because they did not present content elements that allowed their classification into the proposed categorization. Examples of reports of obstetric violence situations were selected as fragments to illustrate the participants' experiences with their respective categorization according to the proposal of Tesser et al.[24].

This study is part of the research "Senses of Birth: Effects of an Interactive Exhibition to Transform the Perception of Childbirth " approved by the Committee ofEthics in Research of the Federal University of Minas Gerais. All participants signed a free and informed consent, in accordance to the 412/2012 Resolution of the National Health Council

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Results

The profile of the study group is predominantly of young women aged between 20 and 34 years (77.3%); 16.8% of the women were 35 years of age or older and 5.9% were adolescents (Table 1). The majority (51.8%) self-reported as black (brown / black), married or with stable union (84.5%) and 77.4% had higher education. Most women reported having a family income above 2 minimum wages (80.2%), 21.6% had above 10 minimum wages and 78.8% had health insurance.Most of the women had a hospital delivery in the Supplementary Health System (59.2%), 36.3% used the SUS and 4.5% had a home birth (Table 1). The proportion of cesarean surgery in the studied group was 46.2%, 53.8% of the women had vaginal delivery and the satisfaction rate with childbirth (good / optimal) was 77.7%.

Among the group of women who had vaginal delivery, 46.4% were in the lithotomy position at delivery, in 23.7% the Kristeller maneuver was performed, in 30.4% the episiotomy was performed, and the procedure was performed was not reported for 35.6% of the women (Table 2). Among those who had labor, 82.4% reported having had access to some kind of non-pharmacological method for pain. The presence of the companion throughout the hospitalization period was reported by 85.2% of the women interviewed, 70.1% had immediate skin-to-skin contact with their baby, and 57.3% had skin-to-skin contact in the first hour of life.

Among the 555 women interviewed during pregnancy and after delivery, 70 (12.6%) responded that they experienced violence in childbirth and 25 (4.5%) reported they did not know if there was violence. Regarding the information on obstetric violence, 48.4% of the women reported that they had good or very good knowledge before participating in the Senses of Birth exhibition and this proportion increased to 87.0% after the visit; the difference was statistically significant ($X^2 = 54.34$, $p < 0.001$) (data not shown). There was also an increase in the proportion of women with good / very good knowledge about OV before and after participating (from 42.0% to 91.2%) among women who reported OV in the postpartum interview (Table 2). Regarding the information on obstetric violence, 48.4% of the women reported that they had good or very good knowledge before participating in the Senses of Birth, and this proportion increased to 87.0% after the visit to the exhibition; the difference found was statistically significant ($X^2 = 54.34$, $p < 0.001$) (data not shown). There was also an increase in the proportion of women with good / very good knowledge about OV before and after participating in Senses of Birth (from 42.0% to 91.2%) among women who reported OV in the postpartum interview (Table 2). However, there was no association between knowledge on OV and OV reporting before and after the visit, and this variable was not considered for the multivariate analysis model. Considering the statistical significance ($p < 0.20$) in the univariate analysis, age, skin color, marital status, family income, health plan, place of birth, type of delivery, delivery position, Kristeller maneuver, episiotomy, companion during childbirth, immediate skin-to-skin contact and skin-to-skin contact in the first hour of life were associated with woman's report of OV and composed the multivariate logistic regression models. (Tables 1 and 2).

After the intermediate step of the logistic regression analysis, the following variables were selected for the general multivariate model: Model 1 - Marital status, income, birth position, Kristeller; skin-to-skin contact; Model 2 - Marital status, income, skin-to-skin contact immediately. All the variables of the intermediate models were independently associated to the report of obstetric violence in each model ($p < 0.05$). (Table 3). The final model 1 and 2 presented good adjustment ($p = 0.59$ and $p = 0.76$) and explained 34% and 11% of the variability in the OV report, respectively. (Negelkerke's pseudo-R2 value)

Among the 64 participants who described their experience, 44 (69%) of the answers entered into only one category of OV; 14 (22%) in two categories, and six (9%) in three or more categories. There were 103 OV situations reported, that is, each report addressed more than one category of disrespect and abuse (Table 4).

The most prevalent category of OV (36.9%) was the imposition of non-consensual interventions; interventions based on reported partial or distorted information. The category of undignified healthcare and verbal abuse was reported in 34 (33%) of the situations, physical abuse was pointed out 14 (13.5%) times and abandonment, neglect or refusal of care in 11 (10.6%); the non-confidential or non-private care categories and discrimination based on certain attributes were identified in 3 reports (3%) each. The category detention in the services was not mentioned in the reports of the participants.

In Chart 1 fragments of the selected reports are presented as an illustration of the situations experienced by women

Table 1. Characteristics of pregnant women that visited the Senses of Birth Exhibition and reported obstetric violence. Brazil, 2015-2017

Characteristic	Obstetric Violence		p-value	Total (N=530)* n(%)
	Yes (N=70)* n(%)	No (N=460)* n(%)		
Age				
≤19	2 (2.9)	29 (6.4)	**	31 (5.9)
20-34	59 (84.3)	347 (76.3)	0.136	406 (77.3)
≥35	9 (12.9)	79 (17.4)		88 (16.8)
Skin color				
Black	44 (62.9)	230 (50.1)	0.047	274 (51.8)
Other	3 (4.3)	8 (1.7)	0.165	11 (2.1)
White	23 (32.9)	221 (48.1)		244 (46.1)
Marital status				
Single/separated	19 (27.1)	63 (13.7)	0.004	82 (15.5)
Married/stable union	51 (72.9)	397 (86.3)		448(84.5)
Schooling[3]				
Elementary /High school	12 (17.1)	106 (23.5)	0.240	118 (22.6)
Graduate school or +	58 (82.9)	346 (76.5)		404 (77.4)
Family income [1]				
< 2 MW	14 (23.0)	84 (19.4)	0.509	98 (19.8)
2 a <5 MW	25 (41.0)	136 (31.3)	0.132	161 (32.5)
5 a 10MW	17 (27.9)	112 (25.8)	0.731	129 (26.1)
≥10 MW	5 (8.2)	102 (23.5)		107 (21.6)
Health Insurance				
No	21 (30.0)	91 (19.8)	0.052	112 (21.2)
Yes	49 (70.0)	368 (80.2)		417 (78.8)
Place of birth				
Public(SUS)	32 (45.7)	160 (34.9)	0.078	192 (36.3)
Home	1 (1.4)	23 (5.0)	**	24 (4.5)
Private (SS)	37 (52.9)	276 (60.1)		313 (59.2)
Type of birth				
Cesarean	39 (55.7)	206 (44.8)	0.087	245 (46.2)
Vaginal/Forceps vacuum extractor	31 (44.3)	254 (55.2)		285 (53.8)
Satisfaction in childbirth				
Terrible/bad/indifferent	55 (78.6)	63 (13.7)	<0.001	118 (22.3)
Good/Excellent	15 (21.4)	397 (86.3)		412 (77.7)

* The category "Do not know" for obstetric violence was considered as missing for Odds Ratio calculation. Totals vary according to missing data.[1] Minimum wage in 2015: R$788,00; [2] Women that had a normal birth; [3] Full or incomplete grade (in progress).** X^2 not possible to calculate due to the low number.

Discussion

This study focused on the topic of obstetric violence based on the perception about the experience of childbirth reported by the pregnant women who visited the Senses of Birth. The population of this study was predominantly women of high educational level and income and with access to supplementary health. Possibly express a group of women informed and interested in preparing for the normal birth experience. In fact, the prevalence of cesarean section in this population was 46.2%, which, although high, is lower than the country rate in 2014, of 56.9%[11]. It was observed that 12.6% of the women reported OV, similar to what was verified in a national study conducted in 2010 that interviewed 2,365 Brazilian women in 176 Brazilian municipali-

Table 2. Health care markers and knowledge about obstetric violence (OV) among pregnant women before and after participating at Senses of Birth Exhibit (SOB) versus report of obstetric violence during childbirth. Brazil, 2015-2017.

Characteristics	Obstetric Violence		p-value	Total (N=530)* n(%)
	Yes (N=70)* n(%)	No (N=460)* n(%)		
Knowledge about obstetric violence before participating at SOB				
None/poor/faire	40 (58.0)	230 (50.7)	0.258	270 (51.6)
Good/Very good	29 (42.0)	224 (49.3)		253 (48.4)
Knowledge about obstetric violence after participating at SOB				
None/poor/faire	6 (8.8)	58 (12.7)	0.366	64 (12.2)
Good/Very good	62 (91.2)	400 (87.3)		462 (87.8)
Position in childbirth[1]				
Supine/lithotomic	25 (83.3)	105 (42.0)	<0.001	130 (46.4)
Non supine	5 (16.7)	145 (58.0)		150 (53.6)
Kristeller[1]				
Yes	17 (56.7)	50 (19.8)	<0.001	67 (23.7)
Don´t know	0 (0.0)	1 (0.4)	**	1 (0.4)
No	13 (43.3)	202 (79.8)		215 (76.0)
Episiotomy[1]				
Yes	17 (54.8)	69 (27.4)	0.002	86 (30.4)
Don´t know	1 (3.2)	3 (1.2)	**	4 (1.4)
No	13 (41.9)	180 (71.4)		193 (68.2)
Informed Episiotomy[1]				
No	11 (57.9)	25 (30.5)	0.025	36 (35.6)
Don´t know	1 (5.3)	4 (4.9)	**	5 (5.0)
Yes	7 (36.8)	53 (64.6)		60 (59.4)
Non-pharmacological methods for pain relief[2]				
No	10 (20.4)	55 (17.2)	0.582	65 (17.6)
Yes	39 (79.6)	265 (82.8)		304 (82.4)
Companion during childbirth				
No	17 (25.4)	59 (13.3)	0.009	76 (14.8)
Yes	50 (74.6)	386 (86.7)		436 (85.2)
Immediate skin to skin contact				
No	37 (54.4)	119 (26.3)	<0.001	156 (29.9)
Yes	31 (45.6)	334 (73.7)		365 (70.1)
Skin to skin contact in the first hour				
No	37 (55.2)	184 (40.9)	0.027	221 (42.7)
Yes	30 (44.8)	266 (59.1)		296 (57.3)

* The category "Do not know" for obstetric violence was considered as missing for Odds Ratio calculation. Totals vary according to missing data [1] Women that reported having a vaginal birth [2] Women that reported having a vaginal birth a cesarean during labor.

** X^2 calculation was not possible due to the low number.

ties[9].With 542 interviewees about institutional violence in childbirth care, 12% answered affirmatively, that is, they spontaneously identified this situation. The proportion of affirmative responses increased to 25% when different forms of abuse and mistreatment were reported that women acknowledged to have suffered but did not report as OV[9]. Similarly, in this study it was frequent the situation of women submitted to procedures selected as health care markers of violence in childbirth who did not identify these practices as OV. Thus, they reported experiencing OV: only 25 (21.7%) of the 115 women who underwent Kristeller's maneuver during childbirth;

Table 3. Multivariate logistic regression analysis on obstetric violence report. Senses of Birth, 2015-2017.

Characteristics	Model 1[1] (n=252)*			Model 2[2](n=487)**		
	OR	IC 95%	Wald (p-value)	OR	IC 95%	Wald (p-value)
Marital Status						
Single/separated	3.00	1.06-8.56	4.25(0.039)	2.06	1.05-4.08	4.36(0.037)
Married/stable union	1.00			1.00		
Family income[3]						
< 2 MW	1.76	0.15 – 21.10	0.20 (0.654)	2.81	0.95 – 8.33	3.46(0.063)
2 a <5 MW	9.29	1.02 – 84.76	3.90 (0.048)	3.11	1.12 – 8.59	4.77(0.029)
5 a 10 MW	6.20	0.61- 62.95	2.38 (0.123)	2.98	1.05 – 8.50	4.18(0.041)
≥10 MW	1.00			1.00		
Position in birth						
Supine/lithotomic	3.89	1.13 – 13.38	4.64(0.031)	-	-	-
Non supine	1.00			-		
Kristeller						
Yes	2.85	1.01 – 8.02	3.95 (0.047)	-	-	-
No	1.00			-		
Immediate skin to skin contact						
No	4.02	1.39-11.66	6.56(0.010)	3.19	1.82-5.59	16.47(<0.001)
Yes	1.00			1.00		

[1] Women that had vaginal birth /vaginal with forceps. [2] All interviewed women [3] Minimum Wage 2015: R$788,00
*Hosmer-Lemeshow Test : X^2=33.46; df= 36; p-value= 0.590. Pseudo R^2 de Neghelkerke Test =0.344
** Hosmer-Lemeshow Test : X^2=6.60; df= 10; p-value= 0.752; . Pseudo R^2 de Neghelkerke Test= 0.111.

Table 4. Distribution of obstetric violence reports according to the disrespect and abuse during labor and childbirth classification[24]. Senses of Birth Exhibition. Brazil, 2015-2017

Categories of Obstetric Violence	N	%
1. Imposition of not allowed interventions; interventions based on partial or distorted information.	38	36.9
2. Undignified care and verbal abuse	34	33.0
3. Physical abuse	14	13.6
4. Abandonment, neglect or refuse to assist/ health care	11	10.7
5. Non-confidential or non-privative care	3	2.9
6. Discrimination based on certain attributes	3	2.9
7. Detention in health facility	0	0
Total	103	100.0

29 (17.8%) among the 163 women who gave birth in a lithotomy position; 29 (29.0%) of the 100 women who had an episiotomy; 11 (16.7%) of the 66 who did not use non-pharmacological methods during childbirth; 4 (23.5%) among the 17 women who were unaccompanied during admission to labor; 37 (22.0%) among the 168 women who did not have immediate skin-to-skin contact with their child and only 37 (16.7%) of the 221 women who did not stay with their child within the first hour of life. Thus, we can say that the prevalence of 12.6% of OV was underestimated, reflecting the lack of knowledge and disinformation of women about the recommendations for care in childbirth and birth, abusive practices and without scientific support used frequently.

The difficulty of recognizing the experience of OV is complex and influenced by several factors, similar to situations of domestic violence. There is a distance between recognizing the aggression suffered and naming it as violence or mistreatment[25]. Recognition of the right of women to informed choice and refusal and non-acceptance of non-consensual interventions is recent and is not yet part of the culture of professionals or women. In addition to adequate information, the hierarquical power relationship between professionals and women in childbirth care interferes in their autonomy and the preservation of cor-

Chart 1. Fragments of reports on obstetric violence according to categories of disrespect and abuse during childbirth[24] among pregnant women who visited the Senses of Birth Exhibition.
Brazil, 2015-2017.

Disrespect and abuse categories	Fragments of women's reports on obstetric violence
Imposition of not allowed interventions; interventions based on partial or distorted information.	"They wanted to tie my arms." "I did not want to have an episiotomy. I was not informed that the procedure would be done. During the delivery I asked for a shot of anesthesia. Only after I realized they had cut me." "Oh, the only thing I did not like was that they went up on my belly without warning"; "... my husband was forced to sign an authorization to use the forceps." "(The doctor) had committed to forward my birth plan to the Caesarean staff but he did not." "With 6 cm of dilation they laid me down and wanted me to keep lied down. I had to fight to get squatting because my daughter was not fit yet. In a certain way, it was not normal for me, because they did a lot of things that I did not want to happen "; "I had the cut on the perineum and a nurse pressed my belly";
Undignified care and verbal abuse	"I felt raped, I actually felt assaulted"; "The obstetrician who operated on me has already entered the delivery room saying, 'Let's get this over. I need to run today.' The anesthesiologist stayed on the phone all the time talking to the credit operator"; "We are treated mechanically, when we ask something, the professionals do not answer clearly to our questioning"; "I noticed a certain rush of the professionals who were taking care of me because it was sunday night. They were a bit inattentive because there was a classic football game and it was being televised. " "... The doctor spoke very rudely, 'I know it hurts, you do not have to scream.' I felt extremely attacked"; "The medical surgeon was gross in the way of talking";
Physical abuse	"... all the time doing the vaginal exam and forcing it". "... it had the vaginal examen, unnecessary, it seems that it is forced. And I felt too exposed"; "I had lots of pains later in the belly because they pressed down my belly to help the baby be born"; "I felt mutilated when they did the episiotomy on me"
Abandonment, neglect or refusal to assist / health care	"After delivery I was left in a chair, as soon as the anesthesia passed. Almost an entire afternoon sitting in the chair. The nurses would not come and help me." "They left me in the corridor screaming for a long time. This made me very sad"; "I arrived in the maternity ward already in labor and had no assistance, I delivered alone and my mother had to run after a doctor to help"
Cuidado não confidencial ou não privativo	"After being taken out of the surgical area, they did the touch exam in the corridor without any privacy"; "I stayed in a room with more than 6 pregnant women, divided by curtains. I heard them screaming in pain and it made me more nervous, there was nothing that could distract me!"
Non-confidential or non-privative care	"I was very mistreated at the hospital. Once I was 23 weeks they thought that I had tried abortion and they mistreated me for it"; "There was differentiated attention for a patient known to the physician, she entered after me and left earlier to the cesarean section";

poral and psychological integrity, for the decision and informed choices[18].

Participation in the Senses of Birth exhibition contributed to the increase in pregnant women's knowledge about OV, which increased from 48.4% before the visit to 87.8% after the visit, pointing to a convergent effect with the objectives of the exhibition to improve information for pregnant women. It was also important to change from 42.0% (before exposure) to 91.2% (after exposure) of pregnant women with good / very good knowledge of obstetric violence among women who reported obstetric violence. However, although 87.8% stated that they had good or very good knowledge about OV after the visit to the Senses of the Birth, it was still low their recognition of health care practices not recommended as obstetric violence.

In general, the population of this study had more satisfaction with the childbirth experience

(77.0%) than that of the women born in the Born in Brazil Survey[11,26]. In the national survey with puerperal women, 7.8% of the women who did not have a companion during childbirth reported verbal, psychological or physical violence[26]. The population of women visiting the Senses of Birth seems to reflect a group with greater interest and better preparation for childbirth. Also, the visit to the exhibition seems to have contributed to the increase of knowledge and empowerment of women with regard to the recommended health care practices in childbirth.

The report of obstetric violence was associated with obsolete care practices. The high proportion of women submitted to lithotomic position at delivery, Kristeller's maneuver, episiotomy, not consented episiotomy, and separation of the baby after birth reveals the persistence of questionable practices in childbirth care. The lithotomic position at delivery, 46.4% of women who had vaginal delivery, is an emblematic example, since it displaces the woman's role in childbirth and interferes determinately in the physiology of normal delivery. Clinical practice are distanced from scientific evidence, lack of transparency and decision making concentrated in professionals and institutionsfavors the normalization of non-recommended procedures.

The current frequent separation of mother and baby after childbirth, 29.9% immediately after childbirth and 42.7% in the first hour of life, is also remarkable. In addition to the perspective of the woman's right to stay with her child after birth, from the baby's point of view the separation of her mother is a neglected aspect in Brazil, considering the benefits of mother-baby attachment for the child's health promotion, neurodevelopment - affective with the mother and promotion of breastfeeding. Obsolete institutional norms still use the hospitalization of infants in places such as "normal babies nurseries", violating the scientific knowledge, the current legislation for the maternity-hospitals, and the patient safety standards in obstetric and neonatal care of the Ministry of Health and Children's Rights Child[27-31].

There was an independent association between marital status (single / separated women) and family income with the perception of obstetric violence. The OV report was 2.0 to 3.0 times higher among single / separated women, considering the total group of women and those who had vaginal delivery, respectively. For women with income between 2 and 5 minimum wages, there was a 9.3- fold higher OV between those who had vaginal delivery and 3.0 times higher when all women were considered, compared to the women with income above 10 minimum wages. Brazilian studies have demonstrated discrimination in childbirth care for the poorest women and also for black women, such as pilgrimage in search for hospital admission at the time of delivery and less use of analgesia for childbirth[32,33]. Possibly sub-dimensioning of OV by the poorest women in this study (< 2 minimum wages of family income), is due to the greater difficulty of information about not recommended practices in childbirth care, as well as on rights in health care, as verified in a previous study[9].

The broad confidence intervals for the odds ratio values of the family income variable in Model 1 probably derived from the small number in each stratum. In regard to the categories of OV or abuse and mistreatment used in this study, there was no objective of hierarchy or representation of greater or lesser magnitude in relation to the other. Its use allowed the organization and analysis of the different situations, which proved to be explanatory, contributing to the discussions. In this study, a third of complaints of OV were related to the imposition of non-consented or accepted interventions from manipulated information for women. Another third referred to unworthy care and verbal abuse. In the national OV study in 2010, there was a predominance of the category of physical violence (17%), highlighting the complaint of pain with vaginal examination and lack of access to pain relief methods; the second largest complaint was related to the feeling of abandonment and neglect (14%) followed by verbal violence (12%)[9]. There is a gap in Brazilian obstetric health care scenario to meet women's desires and use of best practices recommended by scientific knowledge in order to achieve greater satisfaction and participation in decisions about the process of giving birth and interferences in their bodies.

There is a controversy about the use of OV terminology: although it covers all professionals involved in the care of women in childbirth, it is argued in favor of the use of the term institutional violence, increasing responsibilities for the event. On the other hand, the term violence in childbirth or OV stands out in the speeches and perceptions of women; it has popularized, and has been widely used by social movements and networks, gaining prominence and frequency in the media. It has been institutionally incorporated as in the case of the Observatory of Obstetric Violence in Brazil of the Federal University of Rio Grande do Sul[34] and "Call 180" of the Special Secretariat for

Women[35], translating the violence of the contemporary system of care in childbirth. Important in this approach is to broaden the recognition of violence, to promote the necessary changes with an emphasis on women-centered care, to ensure access to good practices and respect for their rights of autonomy and decision-making.

The subjective measure of perception about the experience of violence can be considered a limitation that only captures the non-directed perception and does not consider other variables that could increase the power of explanation. The study by D'orsi et al.[26] used explanatory variables such as waiting time, respect, privacy, clarity in explanations, time available to ask questions and participation in decisions, which could bring more elements to support women's recognition of violence in childbirth and birth.

Strategies such as the Senses of Birth can broaden and improve the dissemination of the theme and empowerment of women and society. It stands as an opportunity to disseminate adequate information on delivery and birth care and social mobilization for the promotion of normal birth and the rights of women and children to qualified and evidence-based care.

Conclusion

Obstetric violence is a situation of great relevance in women's and children's health and influences culture and perceptions about childbirth. However, spontaneous report of OV by only 12.6% of the women demonstrates that there is a lack of information and underestimation of the problem. The OV report was associated with obsolete health care practices and was higher among lower income population. It affects women in a differentiated way within Brazilian society, which reflects inequities in healthcare of childbirth. Participating in the Senses of Birth exhibition increased pregnant women knowledge about OV. Social mobilization initiatives such as this can contribute to increase awareness about the problem and support the dissemination of good practices in childbirth to reduce unnecessary interventions, excess caesarean sections and preventable mortality. It may also contribute to improve the experience of women in childbirth. Other complementary analytical and qualitative studies may deepen the understanding of the problem.

Colaborations

S Lansky and AAL Friche conceived the data, designed, analized and interpreted data. KV Souza, ERM Peixoto, CSG Diniz, NF Vieira and RO Cunha analized and interpreted data. BJ Oliveira conceived the study and interpreted the data. All authors wrote and revised the manuscript.

References

1. D'Oliveira AFPL, Diniz CSG, Schraiber LB. Violence against women in health-care institutions: an emerging problem. *Lancet* 2002; 359(11):1681-1685.
2. Rattner D. Humanização na atenção a nascimentos e partos: ponderações sobre políticas públicas. *Interface (Botucatu)* [periódico na internet]. 2009 [acessado em 2017 Mar 15]; 13(supl 1):[cerca de 10p.]. Disponível em: http://dx.doi.org/10.1590/S1414-32832009000500027.
3. Bowser D, Hill K. Exploring evidence for disrespect and abuse in facility-based childbirth: report of a landscape analysis. *USAID-TRAction Project Harvard School of Public Health* [periódico na Internet]. 2010 set [acessado 2017 Mar 17]; [cerca de 57p.]. Disponível em: http://www.tractionproject.org/sites/default/files/Respectful_Care_at_Birth_9-20-101_Final.pdf
4. Diniz SG, Salgado HO, Andrezzo HFA, Carvalho PGC, Carvalho PCA, Aguiar CA, Niy DY. Violência obstétrica como questão para a saúde pública no Brasil: origens, definições, tipologia, impactos sobre a saúde materna, e propostas para sua prevenção. *Journal of Human Growth and Development* [periódico na internet]. 2015 [acessado 2017 Mar 12]; 25(3):[cerca de 8 p.]. Disponível em: http://pepsic.bvsalud.org/pdf/rbcdh/v25n3/pt_19.pdf
5. Organização Mundial da Saúde (OMS). *Prevenção e eliminação de abusos, desrespeito e maus-tratos durante o parto em instituições de saúde.* Genebra: Departamento de Saúde Reprodutiva e Pesquisa/OMS; 2014.
6. Bohren M, Hunter EC, Munther-Kaas HM, Souza JP, Vogel JP, Gulmezoglu AM. Facilitators and barriers to facility-based delivery in low- and middle-income countries: A systematic review of qualitative evidence. *Reprod Health* [periódico na internet]. 2014 [acessado 2017 Mar 14]: [cerca de 17p.]. Disponível em: https://reproductive-health-journal.biomedcentral.com/articles/10.1186/1742-4755-11-71
7. Souza KJ, Rattner D, Gubert MB. Institutional violence and quality of service in obstetrics are associated with postpartum depression. *Rev Saude Publica.* 2017; 51:69.
8. Diniz CSG, D`Oliveira AF. Gender violence and reproductive health. *Int J Gynaecol Obstet* 1998; 63(Supl. 10):33-42.
9. Hotimsky SN, Rattner D, Venancio SO, Bogus CM, Miranda MM. O parto como eu vejo ou como eu desejo... Expectativas de gestantes usuárias do SUS a cerca do parto e da assistência obstétrica. *Cad Saude Publica* [periódico na internet]. 2002 [acessado 2017 Mar 14]: [cerca de 9 p.]. Disponível em: http://www.scielo.br/pdf/csp/v18n5/11003.pdf
10. Venturi G, Godinho T. *Mulheres brasileiras e gênero nos espaços público e privado: uma década de mudanças na opinião pública.* São Paulo: Editora Fundação Perseu Abramo, SESC-SP; 2013
11. Leal MC, Pereira APE, Domingues RMSM, Theme Filha MM, Dias MAB, Nakamura-Pereira M, Bastos MH, Gama SGN. Intervenções obstétricas durante o trabalho de parto e parto em mulheres brasileiras de risco habitual. *Cad Saude Publica* 2014; 30(Supl. 1):17-32.

12. Brasil. Ministério da Saúde (MS). *DATASUS*. [Internet]. [acessado 2017 Ago 31]: Disponível em: http://tabnet.datasus.gov.br/cgi/tabcgi.exe?sinasc/cnv/nvuf.def.
13. Souza JP, Pileggi-Castro C. Sobre o parto e o nascer: a importância da prevenção quaternária. *Cad Saude Publica* [periódico na internet]. 2014 [acessado 2017 Mar 11]; 30(Supl. 1):[cerca de 3p.]. Disponível em: http://www.scielo.br/pdf/csp/v30s1/0102-311X-csp-30-s1-0011.pdf
14. Esteves-Pereira AP, Deneux-Tharaux C, Nakamura-Pereira M, Saucedo M, Bouvier-Colle MH, Leal MC. Caesarean Delivery and Postpartum Maternal Mortality: A Population-Based Case Control Study in Brazil. *PLoS ONE* 2016; 11(4):e0153396.
15. World Health Organization (WHO). *Appropriate technology for birth*. Genebra: Lancet, WHO; 1985.
16. Brasil. Ministério da Saúde (MS). *Diretrizes nacionais de assistência ao parto normal: versão resumida.* Brasília: CONITEC, MS; 2017
17. Brasil. Portaria Nº 353, de 14 de fevereiro de 2017. Aprova as Diretrizes Nacionais de Assistência ao Parto Normal. *Diário Oficial da União* 2017; 14 fev.
18. Diniz S, D'Oliveira AFP, Lansky S. Equity and women's health services for contraception, abortion and childbirth in Brazil. *Reprod. Health Matters* 2012; 20(40):94-10.
19. Goretti A, Cascão A, Trindade, Rabello DN, Porto D, Oliveira H, Taniguchi M. Mortalidade infantil e na infância: perfil e evolução no período 1990-2014. In: *Saúde Brasil 2015/2016: uma análise da situação de saúde e da epidemia pelo vírus Zika e por outras doenças transmitidas pelo "Aedes aegypti*" [acessado 2017 Ago 05]; Disponível em: http://portalarquivos.saude.gov.br/images/pdf/2017/maio/12/2017-0135-vers-eletronica-final.pdf
20. Victora CG, Aquino EML, Leal MC, Monteiro CA, Barros FC, Szwarcwald CL. Maternal and child health in Brazil: progress and challenges. *Lancet* 2011; 377(9780):1863-1876.
21. Lansky S, Friche AAL, Silva AAM, Campos D, Bittencourt DAS, Carvalho ML, Frias PG, Cavalcante RS, Cunha AJLA. Pesquisa Nascer no Brasil: perfil da mortalidade neonatal e avaliação da assistência à gestante e ao recém-nascido. *Cad. Saude Publica* [periódico na internet]. 2014 [acessado 2017 Mar 05]; 30 (Supl.):[cerca de 16p.]. Disponível em: http://www.scielo.br/pdf/csp/v30s1/0102-311X-csp-30-s1-0192.pdf
22. Szwarcwald CL, Escalante JJC, Rabello Neto DL, Souza Junior PRB, Victora CG. Estimação da razão de mortalidade materna no Brasil, 2008-2011. *Cad Saude Publica* 2014; 30(Supl. 1); 71-83.
23. Brasil. Ministério da Saúde (MS). *Sentidos do nascer: percepções sobre o parto e nascimento*. [Internet] 2015. [acessado 2017 agos 11]: Disponível em: http://www.sentidosdonascer.org/blog/2016/03/catalogo-da-exposicao/
24. Tesser CD, Knobel R, Andrezzo HFA, Diniz SG. Violência obstétrica e prevenção quaternária: o que é e o que fazer? *Rev. Bras. Med. Fam Comunidade* 2015; 10(35):1-12.
25. Schraiber l, D'Oliveira AFP, Hanada H, Figueiredo WCM, Kiss l, Durand. J, Pinho A. Violência vivida: a dor que não tem nome. *Interface (Botucatu)* 2003; 6(10):41-54.
26. D'Orsi E, Brüggemann OM, Diniz CSG, Aguiar JM, Gusman CR, Torres JA, Ângulo- Tuesta A, Rattner D, Domingues RMSM. Desigualdades sociais e satisfação das mulheres com o atendimento ao parto no Brasil: estudo nacional de base hospitalar. *Cad Saude Publica* [periódico na internet]. 2014 [acessado 2017 Mar 11]; 30 (Supl. 1):[cerca de 3p.]. Disponível em: http://www.scielo.br/pdf/csp/v30s1/0102-311X-csp-30-s1-0154.pdf
27. Moreira MEL, Gama SGN, Pereira AP, Silva AAM, Lansky S, Pinheiro RS, Gonçalves AC, Leal MC. Práticas de atenção hospitalares ao recém-nascido saudável no Brasil. *Cad Saude Publica* [periódico na internet]. 2014 [acessado 2017 Mar 14]; 30 (supl 1):[cerca de 12p.]. Disponível em: http://www.scielo.br/pdf/csp/v30s1/0102-311X-csp-30-s1-0128.pdf
28. Brasil. Ministério da Saúde (MS). *Resolução da Diretoria Colegiada - RDC Nº 36 de 03 de Junho de 2008 - Dispõe sobre Regulamento Técnico para Funcionamento dos Serviços de Atenção Obstétrica e Neonatal.* Brasília: Anvisa; 2008.
29. Brasil. Lei nº 8069 de 13 de julho de 1990. Dispõe sobre o Estatuto da Criança e do Adolescente. *Diário Oficial da União* 1990; 16 jul.
30. Agência Nacional de Vigilância Sanitária (Anvisa). *Serviços de atenção materna e neonatal: segurança e qualidade.* Brasília: Anvisa; 2014.
31. Brasil. Ministério da Saúde (MS). Portaria nº 2.068, de 21 de outubro de 2016. Institui diretrizes para a organização da atenção integral e humanizada à mulher e ao recém-nascido no Alojamento Conjunto. *Diário Oficial da União* 2016; 24 out.
32. Leal MC, Gama SGN; Cunha CB. Desigualdades raciais, sociodemográficas e na assistência ao pré-natal e ao parto, 1999-2001. *Rev Saude Publica* 2005; 39(1):100-107.
33. Domingues RM, Dias MA, Schilithz AO, Leal MD. Factors associated with maternal near miss in childbirth and the postpartum period: findings from the birth in Brazil National Survey, 2011–2012. *Reproductive Health* 2016; 13(Supl. 3):115.
34. Observatório da Violência Obstétrica no Brasil. Universidade Federal do Rio Grande do Sul. [acessado 2017 Mar 11]; Disponível em https://www.observatoriovobrasil.com.br/blank-2
35. Brasil. *Ligue 180. Central de Atendimento à Mulher*. [acessado 2017 Mar 11]; Disponível em: http://www.spm.gov.br/assuntos/violencia/ligue-180-central-de-atendimento-a-mulher

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