ABSTRACT
Objective: To analyze the association of care practices performed by obstetric professionals with maternal welfare/malaise levels. Method: A quantitative study conducted in a Prepartum/Childbirth/Postpartum Unit of a Teaching Hospital with puerperal women who underwent vaginal births. An association was performed between obstetric practices and maternal welfare/malaise levels. Results: There were 104 puerperal women who participated. Obstetric practices which caused mothers to feel unwell and which obtained statistical significance were: amniotomy (p = 0.018), episiotomy (p = 0.05), adoption of horizontal positions in the expulsive period (p = 0.04), the non-use of non-invasive care technologies (p = 0.029), and non-skin-to-skin contact between mother and child (p = 0.002). For most women, the presence of a companion favored welfare, even though it did not have a statistically significant association. After performing logistic regression, non-performance of amniotomy was the only variable which showed significance in maternal welfare. Conclusion: Humanized obstetric practices have greater potential to promote maternal welfare. The importance of obstetric nurses conducting practices which provide greater welfare to mothers is emphasized.

DESCRIPTORS
Maternal Welfare; Obstetric Nursing; Humanizing Delivery; Maternal-Child Nursing.
INTRODUCTION

Childbirth was previously accompanied by midwives and seen as a natural process, but is now treated as a pathological event with the main objective of reducing maternal and infant mortality rates, and is therefore subject to medical interventions. Such changes culminated in institutionalizing this event, which now has the medical professional as its main figure(1).

This change in scenario was partly responsible for the decrease in maternal and child mortality rates; however, an overevaluation of the technocratic model which favors high technology as a sign of success, but without considering the disadvantages resulting from it, culminated in increasing intervention rates over time such as caesarean sections, and stagnant maternal and child mortality rates(2).

These transformations caused women to lose their autonomy when subjected to institutional rules and medical decisions, and made them take a supporting role in the childbirth scenario. Added to this, the fact of encountering an unknown environment and people generated stress, fear and loneliness for the parturient woman(3-4).

Considering the insufficiency of the current obstetric model in reducing mortality rates, as well as its iatrogenic consequences, intense movements to humanize childbirth and delivery have arisen. With this, the Brazilian Ministry of Health had the initiative to propose policies and programs which value vaginal birth as a natural and physiological event(5).

Despite political advances towards a humanized care model for childbirth in recent years, the obstetric reality demonstrates difficulties in implementing these precepts. Such a situation was evidenced in the multicenter study “Nascer no Brasil: inquérito nacional sobre parto e nascimento”, which now has the medical professional as its main figure(1).

This national study found worrying rates of procedures wisely not recommended for three decades: more than 70% of women are pierced; 37% suffer the Kristeller maneuver; 56% are submitted to episiotomy; 70% are deprived of food during labor; 92% have their births in a lithotomy position; 40% received oxytocin and amniotomy; less than half (46%) have freedom of movement during labor; and only 18% have the continued presence of a companion. The study also showed striking socioeconomic, racial and regional inequalities in childbirth care(5).

In this context, the importance of obstetric nurses (ON) is highlighted as an agent who has contributed to modifying the current model of obstetric care, since their training is oriented towards care and is based on humanization(6). However, there are still numerous barriers to the performance of this professional resulting from the hegemonic care model based on Cartesian and biomedical knowledge(7).

Considering that the changes proposed by the humanized model also aim to achieve maternal satisfaction, the importance of an evaluation of health services by users is emphasized, since only those who use the offered service are able to evaluate it(5). In view of the above, it becomes relevant to identify care practices which interfere with maternal welfare during childbirth in order to enable identifying the necessary attributes for humanized care which generates satisfaction(8).

Despite its importance, there are few studies which have studied and analyzed the welfare of women in the childbirth process. The production with regard to quantitative investigations on the subject are even more scarce, since qualitative approaches predominate because it is a subjective construct (an individual’s perception).

However, the presence of quantitative research on the theme conducted in the city of São Paulo stands out, and revealed concerning information that the majority of the women interviewed (56%) presented malaise during childbirth(9).

Thus, considering the scientific gaps on the subject and the importance of this knowledge to support humanized care during childbirth, the present study aimed to analyze the association of care practices provided by obstetric professionals (doctors and nurses) with the levels of maternal welfare.

METHOD

STUDY DESIGN

This is a study with a quantitative approach and cross-sectional design.

SCENARIO

The study was conducted in a Prepartum/Childbirth/Postpartum (PCP) Unit of a University Hospital located in the capital of Mato Grosso state, Brazil. It is a medium-sized general hospital linked to a public university and maintained by federal resources from the Ministries of Health and Education. It offers care in 32 medical specializations, performs multiprofessional care in nine areas and acts as an internship field for teaching in the health area. It is considered to be a reference hospital for normal and high-risk pregnant women in the city of Cuiabá, in addition to serving women from other 14 cities which make up the Baixada Cuiabana (greater metropolitan area).

The hospital currently has 124 beds, of which 24 are for gynecology/obstetrics services. There is an admission and obstetric screening room, an operative delivery room located in the surgical center, and a PCP Unit with three beds for providing care to the parturient women, where the study was carried out. This sector was opened in September 2014 after the admission of seven obstetric nurses and performs approximately 45 vaginal births per month. The childbirth care is in transition from the traditional to the humanized model.
P

Population

Considering that childbirth care has peculiar variations in each region of the country depending on the technical-political arrangements of each maternity hospital, municipality and Brazilian state, one decided to study the municipality of Cuiabá due to the great representativeness that the maternal and child healthcare network this capital has, as it is located in a metropolitan region with high population density in the state of Mato Grosso (MT).

The study was carried out from June to September 2016 and included 104 puerperal women who underwent vaginal birth.

The inclusion criteria were: having studied in school for more than four years (due to the implemented scale being self-applied); being a puerperal woman of vaginal delivery assisted by a doctor and/or nurse; having no complications during pregnancy and childbirth; having spent at least four hours in the prepartum sector; having a newborn without clinical complications in the Shared Maternity Room (SMR). Women with some cognitive impairment or psychiatric disorder were excluded. These conditions were assessed through the patient’s medical record and the interview conducted prior to applying scale.

Sample definition

Sampling was carried out by convenience, and therefore all puerperal women who met the inclusion criteria of this study were selected in the aforementioned period. The interview was conducted between 24 and 48 hours after delivery, and mostly in the institution’s SMR. The scale is self-administered, and was therefore given to women to read and check the option corresponding to their answer. Some data related to the course of labor/delivery/postpartum were collected through research in medical records.

Data collection

Data collection was carried out by the Master’s degree student responsible for the study and by an undergraduate student with a scholarship from the Scientific Initiation Program (PIBIC), and trained by the doctorate researcher responsible for the main research project.

A meeting was first held with experts in the area of obstetrics and in the area of data collection instrument validation in order to plan the data collection phase and to discuss the proposed instrument for data collection. The data collection instrument was then adjusted to the proposed suggestions after the meeting, and only then was a pilot test carried out with five puerperal women at the beginning of May 2016, in which the same data collection criteria were used and ethical aspects were respected. The instrument was then readjusted according to the perceived needs after the pilot test.

Data were collected by applying two instruments; one consisting of 50 questions related to socioeconomic data, obstetric history, the course of labor, delivery and immediate postpartum, in addition to items related to the newborn. The other instrument applied was the Maternal Welfare Scale in Childbirth Situation 2 (BMSP2), constructed by Chilean researchers and culturally adapted and validated for Brazilian Portuguese in a doctoral thesis.

The BMSP 2 is self-applicable and the instrument is presented as a Likert-type scale, with responses ranging from five (strongly agree) to one (strongly disagree), and having a neutral option (neither agree nor disagree). It has 7 domains distributed in 47 items: quality of the relationship during care (13 items; 13-65 points), self-care and comfort (9 items; 9-45 points), conditions which provide mother and child contact (4 items; 4-20 points), personalization of care (6 items; 6-30 points), continuous family participation (4 items; 4-20 points), timely and respectful care (6 items; 6-30 points), comfortable physical environment (5 items; 5-25 points).

The scores of all items are added for the final result of the scale, corresponding to three levels of welfare: optimal welfare (score > 200); satisfactory welfare (score between 183 and 200) and malaise (score < 183).

Data analysis and processing

The questionnaires were entered into electronic spreadsheets and processed using the EpiInfo program, version 7.0. Fisher’s exact test was used because it is more reliable for studies with small samples, and adopting a significance level of 0.05 (α = 5%) as a statistically significant association.

To obtain the results, an association was performed between the care received (independent variable) – professional who attended the delivery; non-invasive technologies; companion presence; vaginal touches; amniotomy; delivery position; laceration; episiotomy; mother-child skin-to-skin contact; breastfeeding – and “malaise” or “satisfactory welfare/optimal welfare” (dependent variable). Although the scale results in three levels of welfare, those which had the answer “satisfactory welfare” and “optimal welfare” were grouped for the performance of this association, as both are considered satisfactory results.

The response variable for the performance of logistic regression was satisfactory welfare/optimal welfare. Thus, only the associations which obtained p<0.20 were selected. Associations which obtained a value of p<0.05 were considered statistically significant.

Ethical aspects

The research project was submitted to and approved by the Research Ethics Committee of the Hospital Universitário Júlio Muller under Opinion No. 1.571.789/16 and in accordance with Resolution 466 of 2012 of the National Health Council which regulates research involving human beings. A clear and Informed Consent Form (ICF) was read and explained to each participant, which they and the researcher responsible duly signed in two copies; one for the researcher’s file and the other for the puerperal woman.
RESULTS

There were 104 puerperal women who participated in the study. Most were 20 years of age or older; just over two thirds (72.1%) had 10 to 12 years of education (which corresponds to complete or incomplete high school), and 77.9% of them were in a stable relationship or were married. Most women (65.4%) were not employed and the family income in 77.9% of cases was two minimum monthly salaries or less (minimum monthly salary at the time: R$880.00 (BRL)).

Regarding their obstetric history, 66.3% of women had a history of previous births, most of them vaginal (84.1%). The care received on these occasion(s) was reported as satisfactory by 76.9% of them.

Regarding the data related to the current pregnancy, it is noteworthy that 65.4% of these cases were not planned, and 96.2% of the women had prenatal care; however, only 71% reached the total number of consultations recommended by the Ministry of Health, which is six or more. Among the 100 women who had prenatal care, 86% felt satisfied with the care received in the consultations and 68% said they had received information about labor, delivery, postpartum and/or had their questions answered.

A significant number of parturient women (93.3%) had a companion of their choice at the time of delivery, with the presence of the husband/partner (43.9%) and the parturient woman’s mother (27.6%) being more frequent. Those who did not have a companion had reasons for their own choice, or unavailability of someone who could do it. From the total of parturient women participating in the study, 84.6% used some non-invasive care technology. The methods used were: bathing, pilates ball, walking, squatting, massage, foot-bath and sitting on a stool. Among the most accessed were walking, bathing and the ball, used in an associated way in 23.9% of cases.

With regard to interventions, amniotomy was performed in 39.4% of deliveries and episiotomy was performed in 4.8% of the parturient women, 80% of whom were primiparous. For the women who underwent episiotomy, 60% considered the procedure favorable, while 13.5% of the total number of women reported that vaginal exams were performed in an invasive and uncomfortable manner, and without respect for privacy.

Vertical body positions were most assumed in the expulsive period (90.4%), and 5.8% of the 9.6% of births assisted in horizontal positions were in the lithotomy position.

Laceration occurred in 63.5% of the cases, most of them (54.5%) being of the second degree, with a single occurrence classified as degree 4. When asked if the women would opt for normal delivery again in a next pregnancy, 30.8% of them responded negatively.

In relation to newborn care, umbilical cord clamping was opportune in 76% of cases, skin-to-skin contact between mother and child was provided in 70.2%, and there was encouragement for breastfeeding in the first hour of life in 86.5% of the births.

Of the 104 total deliveries, 60 were accompanied by doctors and 36 by obstetric nurses, with 8 assisted by both professionals.

The data in Table 1 show the association between the provided care and the BMSP2.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Scale classification</th>
<th>TOTAL</th>
<th>PR* (95%CI)</th>
<th>p-value Fisher’s Exact test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctor</td>
<td>7</td>
<td>53</td>
<td>60</td>
<td>2.1 (0.46-9.56)</td>
</tr>
<tr>
<td>Nurse</td>
<td>2</td>
<td>34</td>
<td>36</td>
<td>1</td>
</tr>
<tr>
<td>Non-invasive technologies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>4</td>
<td>12</td>
<td>16</td>
<td>4.4 (1.32-14.63)</td>
</tr>
<tr>
<td>Yes</td>
<td>5</td>
<td>83</td>
<td>88</td>
<td>1</td>
</tr>
<tr>
<td>Presence of a companion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>9</td>
<td>88</td>
<td>97</td>
<td>-</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>7</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Vaginal touch discomfort</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>1</td>
<td>13</td>
<td>14</td>
<td>0.8 (0.10-5.94)</td>
</tr>
<tr>
<td>No</td>
<td>8</td>
<td>82</td>
<td>90</td>
<td>1</td>
</tr>
<tr>
<td>Amniotomy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>7</td>
<td>34</td>
<td>41</td>
<td>5.3 (1.17-24.62)</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
<td>61</td>
<td>63</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 1 – Association between variables related to care and the classification of the Maternal Welfare Scale in Childbirth Situation in the Prepartum/Childbirth/Postpartum Unit – Cuiabá, MT, Brazil, 2016.

continue…
The results presented in Table 1 revealed that several practices used in performing childbirth had a statistically significant association with the welfare level of the parturient women. Among these, one highlights the non-invasive technologies, amniotomy, position in the expulsive period, episiotomy and skin-to-skin contact between mother and baby. Non-use of non-invasive care technologies resulted in 4.4 times more chances for women to experience malaise, as well as performing amniotomy and episiotomy, which respectively increased malaise by 5.3 and 5.65 times to parturient women.

The women who assumed horizontal positions in the expulsive period also had more malaise than those who positioned themselves vertically. Women who did not come into immediate contact with their babies were more likely to experience malaise, with a statistically significant difference.

Moreover, although not having a statistically significant association with maternal welfare, the presence of a companion favored satisfactory/optimal welfare for most women. Table 2 presents the logistic regression adjusted by the variable “Satisfactory/optimal welfare”, according to each covariate. The variables “professional”, “presence of a companion”, “discomfort in vaginal touching” and “laceration” were not used in the analysis performed with the model, as their p-value is greater than 0.20.

For women who used some non-invasive technology for pain relief, the chance of achieving greater welfare was 2.819 times greater when compared to those who did not use any. The probability of women not submitted to amniotomy and episiotomy to have greater welfare was 7.315 and 3.004 times higher, respectively. Women who opted for the vertical position in the expulsive period were 3.568 more likely to present positive welfare.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>SE*</th>
<th>Wald test</th>
<th>P-value†</th>
<th>OR‡</th>
<th>OR‡ (95.0% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-2.086</td>
<td>1.555</td>
<td>-1.341</td>
<td>0.179</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of Non-Invasive Technologies</td>
<td>1.036</td>
<td>0.982</td>
<td>1.054</td>
<td>0.291</td>
<td>2.819</td>
<td>0.410</td>
</tr>
<tr>
<td>Non-performance of amniotomy</td>
<td>1.990</td>
<td>1.008</td>
<td>1.974</td>
<td>0.048</td>
<td>7.315</td>
<td>1.014</td>
</tr>
</tbody>
</table>

Table 2 – Variables, coefficients, standard error of the coefficients, Wald test, level of significance (p-value), odds ratio for actions which provide parturient welfare and 95% Confidence Interval (CI) of the adjusted logistic model – Cuiabá, MT, Brazil, 2016.
Table 2 demonstrates that non-performance of amnionomy was the only variable after performing logistic regression which showed significance in maternal welfare (p = 0.048). It is important to note that 73.2% of the total number of women undergoing amnionomy (41 total) were performed by the medical professional. Among these women, 73.2% were 20 years old or more, 80.5% were married or had a stable relationship, the majority (41.5%) had completed high school, 75.6% had an income of at most two minimum monthly salaries and 70.7% had six or more prenatal consultations.

Regarding care provided to the newborn, women who had the opportunity of immediate skin-to-skin contact with their baby and those who were encouraged to breastfeed were 5.293 and 1.072 times more likely to present satisfactory/optimal welfare, respectively.

DISCUSSION

Childbirth is an event which generates different feelings in women from extreme joy, to fear, pain and anxiety. Thus, it is necessary for professionals to be sensitive to accept the needs of parturient women and be able to provide them with comfort, since the medical professional will influence their perceptions about childbirth. One can highlight non-invasive care technologies among frequently studied strategies and used today.

The use of these techniques replace invasive practices such as the use of pharmacological methods and provide a decrease in pain, reduced duration of labor, anxiety and fear, in addition to restoring female protagonism and favoring a satisfactory experience, which positively interferes in the progress of labor.

In this study, it was observed that women who had access to some strategy for pain relief had a higher welfare level. The use of non-invasive care technologies was provided to 76.7% of women monitored by doctors, and 97.2% (p = 0.005) of those monitored by obstetric nurses (ON).

The results of a study corroborating this finding shows that although a large part of the female population is still unaware of non-invasive care technologies, 61% among those who had access to this information were guided by nurses, while 21% by doctors, and 10% by other professionals.

This fact may be related to the fact that ONs develop skills which make them capable of having a comprehensive view of the situation, and thus they seek to make labor as physiological as possible by using technologies which promote safety, comfort and reduced suffering, which provides greater satisfaction for women.

The companion was present in 93.3% of the cases. Although no statistically significant association was identified between their presence and maternal welfare/malaise, studies have shown that the presence of someone familiar during childbirth has several benefits, such as reduced interventions and cesarean sections. Furthermore, the companions can assist the parturient women in the use of non-invasive technologies when properly guided, thus even favoring the work of professionals.

Amnionomy was statistically significant, since women who underwent this procedure were more likely to experience malaise. Data on the socioeconomic profile of parturient women who underwent amnionomy demonstrate that most of them had a higher level of education, were in a stable marital relationship, in addition to having actively participated in prenatal consultations. Such variables may have influenced the perception of satisfactory welfare in this group with regard to amnionomy performance.

It should be noted that the practice of this procedure was adopted in 50% of deliveries attended by doctors, and in 27.8% of those attended by nurses (PR = 1.8; 95% CI = 1-3.22; p = 0.032). Studies reveal that amnionomy is not definitive for reducing labor time, in addition to bringing risks to the baby such as changes in heart rate, increasing the chances of cesarean delivery. Thus, the use of this procedure should be limited to the presence of a clinical indication, as in the case of some dystocia.

Vertical positions were more used by women who had deliveries assisted by ONs when compared to those...
Objetivo: Analisar a associação das práticas assistenciais realizadas por profissionais obstétricos com os níveis de bem-estar/mal-estar materno. **Método:** Estudo quantitativo, realizado em uma Unidade de Pré-Parto/Parto/Pós-parto de um Hospital de Ensino com parturientes de parto normal. Foi realizada associação entre as práticas obstétricas e os níveis de bem-estar/mal-estar materno. **Resultados:** Participaram 104 parturientes. As práticas obstétricas que trouxeram mal-estar as parturientes e que obtiveram significância estatística foram: realização de amniotomia (p=0,018), realização de episiotomia (p=0,05), adoção de posições horizontalizadas no período expulsivo (p=0,04), a não utilização de tecnologias não invasivas de cuidado (p=0,029) e o não contato pele a pele (p=0,002).

CONCLUSÃO

The following obstetric practices which had statistical significance with the maternal welfare levels stand out: the use of non-invasive care technologies; amniotomy and episiotomy; the adoption of horizontal positions in the expulsion period; and skin-to-skin contact between mother and baby. It is concluded that the practices considered important for care humanization and stimulated by the ministerial programs have greater potential to promote maternal welfare, while the invasive practices generated greater malaise in the parturient women.

It is noticed that ON practice has provided better welfare for women and the presence of these professionals in childbirth care is related to a decrease in interventionist practices which cause malaise when exclusively compared to medical care. The results show quality in the Nursing practices and report greater visibility to this professional category which has prioritized humanized and safe care, and to the detriment of predominantly technical practices, which had been well-accepted by women. However, new studies are suggested with more representative samples of the empirical reality and the studied populations in order to verify these data.
Para a maioria das mulheres, a presença de acompanhante favoreceu o bem-estar, mesmo não tendo uma associação significativamente estatística. Após a realização de regressão logística a não realização de amniotomia foi a única variável que se mostrou significância no bem-estar materno. **Conclusão:** Práticas obstétricas humanizadas têm maior potencial de promover bem-estar materno. Nota-se a importância da enfermeira obstétrica na realização de práticas que proporcionam maior bem-estar às parturientes.

**DESCRITORES**

Bem-Estar Materno; Enfermagem Obstétrica; Parto Humanizado; Enfermagem Materno-Infantil.

**RESUMEN**

**Objetivo:** Analizar la asociación de las prácticas asistenciales realizadas por profesionales obstétricos con los niveles de bienestar/malestar materno. **Método:** Estudio cuantitativo, realizado en una Unidad de Preparato/Parto/Posparto de un Hospital de Ensino con mujeres puerperales Fue realizada asociación entre las prácticas obstétricas y los niveles de bienestar/malestar materno. **Resultados:** Participaron 104 mujeres puerperales. Las prácticas obstétricas que han traído malestar para las parturientes y que han tenido significancia estadística fueron: realización de amniotomía (p>0.018), realización de episiotomía (p=0.05), adopción de posiciones horizontales en el periodo expulsivo (p=0.04), la no utilización de las tecnologías no invasivas de cuidado (p=0.029) y el no contacto piel a piel entre madre y hijo (p=0.002). Para la mayoría de las mujeres, la presencia de acompañantes ha favorecido bienestar, mismo sin tener una asociación increíblemente estadística. Después de la realización de la regresión logística no hacer la realización de amniotomía fue la única variable que presentó significancia en el bienestar materno. **Conclusión:** Prácticas obstétricas humanizadas tienen mayor potencial de causar bienestar materno. La enfermera obstétrica en la realización de prácticas que proporcionan mayor bienestar para las mujeres puerperales es de extrema importancia.

**DESCRITORES**

Bienestar Materno; Enfermaría Obstétrica; Parto Humanizado; Enfermería Maternoinfantil.

**REFERENCIAS**


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