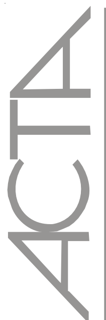

Humanization and equity in labor care in a Southern Brazilian city*

Humanização e eqüidade na atenção ao parto em município da região Sul do Brasil

Humanização e eqüidade na atenção ao parto em município da região Sul do Brasil

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ABSTRACT

Objectives: To identify the factors associated to the quality of care and possible predisposition to inequities in labor care, as of social-demographic and obstetrical characteristics of women cared for in two hospitals associated to the Single Health System in the city of Maringá-Paraná. **Methods:** Cross-sectional study, performed by researching hospital handbooks and by interviewing 569 women in labor. Seven quality indicators classified the assistance into excellent, good, fair and insufficient. The Chi-square test was used to establish the association among variables. **Results:** The women were young, had fixed partners, full high school education, no paying jobs and a low socioeconomic level. Inequality in care was stressed by the differentiated offer in procedures that qualify care, determined by individual, contextual factors and, in particular, related to assistance practices. **Conclusion:** Three characteristics made up the profile of the parturients who benefitted from the most qualified healthcare: being under 19 years of age, having full high school education and having had no previous caesarian section.
Keywords: Health services evaluation; Equity in health; Humanizing delivery; Health care (Public Health)

RESUMO

Objetivos: Identificar fatores associados à qualidade da atenção e possíveis predisponentes de iniqüidades no cuidado ao parto, a partir das características sócio-demográficas e obstétricas de mulheres atendidas em dois hospitais vinculados ao Sistema Único de Saúde no município de Maringá-Paraná. **Métodos:** Estudo transversal, conduzido mediante pesquisa em prontuário hospitalar e entrevistas com 569 puérperas. Sete indicadores de qualidade classificaram a assistência em excelente, boa, regular e insatisfatória. Utilizou-se o teste Qui-quadrado para estabelecer associação entre variáveis. **Resultados:** As mulheres eram jovens, com companheiro fixo, ensino médio completo, sem atividade econômica remunerada e de baixo nível sócio-econômico. A iniqüidade no cuidado foi marcada pela oferta desigual dos procedimentos que qualificam a atenção, determinada por fatores individuais, contextuais e, especialmente, relacionada às práticas assistenciais. **Conclusão:** Três características compuseram o perfil da parturiente que se beneficiou de atenção mais qualificada: ter menos de 19 anos, ensino médio completo e não ter antecedentes de cesariana.
Descritores: Avaliação de serviços de saúde; Eqüidade em saúde; Parto humanizado; Atenção à saúde

RESUMEN

Objetivos: Identificar los factores asociados a la calidad de la atención y posibles predisponentes de inequidades en el cuidado del parto, a partir de las características socio-demográficas y obstétricas de mujeres atendidas en dos hospitales vinculados al Sistema Único de Salud en el municipio de Maringá-Paraná. **Métodos:** Se trata de un estudio transversal, efectuado mediante una investigación en la historia clínica hospitalaria y entrevistas a 569 puérperas. Siete indicadores de calidad clasificaron la asistencia como excelente, buena, regular e insatisfactoria. Se utilizo el test Chi-cuadrado para establecer la asociación entre variables. **Resultados:** Las mujeres eran jóvenes, con pareja fija, con secundaria completa, sin actividad económica remunerada y de bajo nivel socio económico. La inequidad en el cuidado fue marcada por la oferta desigual de los procedimientos que calificaban la atención, determinada por factores individuales, contextuales y, especialmente, relacionada a las prácticas asistenciales. **Conclusión:** El perfil de la parturienta, que se benefició de la atención más calificada, estuvo compuesta por tres características: tener menos de 19 años, secundaria completa y no tener antecedentes de cesárea.
Descriptores: Evaluación de servicios de salud; Equidad en la salud; Parto humanizado; Atención a la salud

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INTRODUCTION

According to some studies[1-2], one of the most stressing characteristics of the Brazilian social policies – among them, the healthcare policy – has been to privilege the most favored social groups in detriment to the segments of highest social vulnerability. This assertion is reminiscent of the "inverse care law", a phenomenon that is practically universal, described by Hart[3] for three decades: those who need the least healthcare use the services more, and more effectively, than those with the greatest need.

The results obtained during pregnancy, in labor and at delivery are not influenced only by the organization and practices of the healthcare services, but they are associated to socioeconomic and demographic factors, such as education, work and income, marital status, age and, race – that is, they also reflect the power of social health determinants[4].

Social health determinants are conditions in which people live and work, which have a direct impact on health and structure other health determinants[5]. Inequities in health among groups and individuals, i.e., the health inequalities, which, in addition to being systematic and relevant, are also avoidable, unfair and unnecessary, constitute one of the most significant traits of the situation of health in Brazil[6].

Regarding to obstetric care, this assertion can be exemplified in the study[7] where the authors divide the Brazilian women into two large groups: the first, made up by those among the 30% richest women, who have some kind of private health insurance, and the second group, made up by the 70% poorest women, who depend on the Single Health System - *Sistema Único de Saúde (SUS)*. In Brazil, the authors affirm, white middle-class women, cared for by private services, tend to receive the so-called "upper cut" – Caesarean section, while black and poor women who resort to the SUS tend to receive the "lower cut" – the episiotomy.

Equity is a principle of social justice, which reflects the existence of societal stratification based on social relations, the determinants of the processes through which people obtain uneven access to material resources and to social products that result from the use of these resources[8]. The author notes that, in the case of the Brazilian Constitution, equity was taken as equality in access to health care services, in which individuals bearers of the same health problem, independently of their social and economic condition, must have the same opportunity to use healthcare services and receive adequate medical care, based on their healthcare needs. In another work, the authors[9] infer that equity constitutes a magnitude of the performance of the healthcare systems, associated to the offer. They explain that equity in the use of healthcare services is influenced by the type of necessity of each population group and by several other factors, internal and external to the sector, related to both the service offer and the preferences and possibilities of the users.

Therefore, equity, taken in the context of labor and delivery assistance, also leads to the offer of healthcare, which must be based on respect for the rights of the users and the exercise of Medicine based on scientific evidence, as alleged by the humanistic paradigm of labor and delivery care[10].

The challenge to incorporate equity in the evaluative research and the scarcity of information about the quality of labor assistance through the SUS in the city of Maringá-Paraná motivated this study, whose purpose was to describe the social-demographic and obstetrical characteristics of women cared for in two hospitals connected with the SUS in the city of Maringá-Paraná-Brazil, as well as identifying factors associated with the quality of care and the possible predisposition to inequities in delivery care.

METHODS

This is a trans-sectional designed study, led in accordance with data collected from hospital guidelines and interviews with women in labor who had either vaginal or caesarean section deliveries in the two reference hospitals for delivery through SUS in the city of Maringá-Paraná-Brazil, from 03/01/2005 to 02/28/2006. Hospital 1 is characterized as a public, school hospital, which has won the title Baby-Friendly Hospital Initiative in 2003 and is a reference center in care for high-risk pregnant women of Northwestern Paraná, and also to low- and high-risk pregnant women cared for at four basic health care facilities of the city. Hospital 2, accredited by SUS, is a general, charitable, non-profitable hospital, and is a reference for general healthcare to low and high-risk pregnant women at 19 basic healthcare facilities in the city.

To obtain the sample, a survey of the number of SUS labors was performed from March/2004 to February/2005, by looking at the data included in both hospitals' live births log books. This procedure allowed us to predict the size of the sample, calculated with a 95% confidence interval and maximum error of 5%. A sample was estimated for each hospital, stratified by delivery type and month, which totaled 569 women, being 259 in hospital 1 (136 caesarian section deliveries and 123 vaginal deliveries) and 310 in hospital 2 (160 caesarian section deliveries and 150 vaginal deliveries).

Five interviewers applied the questionnaire in the rooming-in care of each hospital, between the first and third puerperum day, after the term of consent was read and signed. The first part of the questionnaire aimed at the apprehension of demographic, social and reproductive history information, included in the hospital

records. The second part covered questions that pointed at the existence of humanized practices in the assistance to childbirth and during labor, whose answers were collected with the structured interview technique. In the course of the field work, 37 women drawn as research subjects were not interviewed for the following reasons: delivering outside the hospital (2), occurrence of fetal death (3), refusal to participate in the research (9) and mothers under 18 years of age without a companion who would authorize the interview (23).

Seven indicators of quality processes were used to assist humanized labor, with four being related to labor and three to delivery) (Chart 1). The selection of these indicators was based on Category A of the WHO Recommendations on the appropriate technology for labor and delivery, which has 22 practices rated as clearly useful and that must be encouraged in obstetric attention[10].

A score scale was used to establish the quality criteria in birth assistance, with a variation of 0 to 4 points, according to the adequacy in the performance of each indicator of quality process. For indicator three, the total score was determined by the sum of the scores of each item. All the scores were considered in the analysis of the quality of healthcare in each hospital, and the individual sum in each item was calculated, varying from zero to 16. Therefore, four levels of quality were established, according to the added scales of classification: Unsatisfactory: 0 to 4 points; Fair: 5 to 8 points; Good: 9 to 12 points; Excellent: 13 to 16 points.

The data were entered into an MS Access database and analyzed with MS Excel and Statistical 6.0. The *T-Student* test was applied to check for differences between the populations of the two hospitals. The association among the social characteristics, demographic characteristics, the reproductive history and the indicators of labor care quality were investigated with the Chi-square test for association between two variables. The 5% level of significance was adopted.

The research was approved by the Ethics Committee in Research of The State University of Maringá (PR) and The State University of Campinas (SP).

RESULTS

Demographic, social characterization and reproductive history

In Table 1, it is observed that most women (69%) were in the age group between 20 and 35 years old. The age average was 25 years (standard deviation of 6.4), varying from 12 to 46. 176 women (31%) were in the extreme age groups of the reproductive period, with 138 (24.3%) adolescents and 38 (6.7%) in the upper extreme of the reproductive period.

In the distribution of the women according to their origin, it was observed that most of them (76.4%) lived in Maringá city. However, when the origin per hospital was checked, hospital 2 presented the highest proportion of women residing in Maringá (99%).

Most women (74.8%) had a partner, bound by marriage or consensually; 23.7% were single, 1.1% divorced/separated and 0.4% were widows.

As for their education, 28.8% of the women attended elementary school, 65.9% attended full high school, 4.4% attended had college education and 0.9% was illiterate.

Chart 1 - Indicators and scores of the quality process in humanized labor assistance

Indicators	Scores
1. Supplying all information and explanations that women requested regarding labor.	- Yes: 2 - In part: 1 - No: 0
2. Presence of a companion during labor.	- More than half the time of labor: 2 - Half the time of labor or less: 1 - No: 0
3. Use of non-invasive and non-pharmacological methods for labor pain relief: massage, showers, music and breathing exercises.	- Use of four methods: 4 - Use of three methods: 3 - Use of two methods: 2 - Use of one of the methods: 1 - No method: 0
4. Offer of liquids through the mouth during labor.	- Yes: 2 - No: 0
5. Supplying all information and explanations that women requested in childbirth.	- Yes: 2 - In part: 1 - No: 0
6. Presence of a companion during childbirth.	- Yes: 2 - No: 0
7. Skin to skin contact between mother and child in the delivery room	- Skin to skin contact between mother and child for thirty minutes or more: 2 - Skin to skin contact between mother and child for less than thirty minutes: 1 - Presentation/Non-presentation: 0

Associations were found between education and origin (p < 0.001) –as far as the parturients residing in Maringá were concerned, they had an average 8.8 years of education, as opposed to those coming from other towns, whose average was 7.5 years. All women with college education lived in Maringá.

More than half the women (62.9%) were unemployed, with 58.5% being housewives. Among those employed, the main jobs were maids and cleaning services, seamstresses, clerks and production clerks.

With regard to reproductive history, 60.1% of the women were multiparous, with 46.4% having one living child; 31.3% with two and 22.3% had three or more living children. 24.0% of the women with previous or more caesarean sections were reported. Considering that 46.4% of the women were primiparous and 24.3% were adolescents, the need for effective actions by the healthcare team in the period of labor and puerperium is highlighted to reduce the frequency of the surgical labor, avoid complications and provide a positive birth experience. 16.3% of abortions were found as a result of the pregnancy.

When comparing the reproductive history of the women seen at the two hospitals, they presented similar characteristics regarding the number of pregnancies (p: 0.052), previous vaginal deliveries (p: 0.10) and caesarean sections (p: 0.25) and number of abortions (p: 0.6). However, regarding social-demographic characteristics, women that did not live in the city of Maringá were younger, had lower education, unemployed, had more pregnancies and live children.

As for the gestational age, most women (81.5%) had full-term parturition; 16.7% corresponded to the pre-term condition and 1.8% were classified as post-term. The length of the pregnancy until labor varied from 25 to 42 weeks, with an average of 39.1 weeks of pregnancy (standard deviation of 1.08). The rate of caesarean section was of 51% in hospital 1 and 52% in hospital 1.

Factors associated to the quality of childbirth assistance

In the general classification, 52.7% of the women received care considered as fair ; 28.9% good, 17.4% unsatisfactory and 1.0% excellent. In the general score average, hospital 1 presented a higher average (7.2) than hospital 2 (6.7). Both had their performance classified as fair.

As seen in Table 2, variable parturient age presented a

Table 1 – Demographic and social characterization of women taken care of in two hospitals connected with SUS Maringá-PR, March/2005 to February/2006

Variables	Hospital 1		Hospital 2		Total	
	N	%	N	%	N	%
Age (years)						
12-19	79	30.5	59	19.0	138	24.3
20-25	68	26.3	117	37.7	185	32.5
26-30	61	23.6	65	21.0	126	22.1
31-35	36	13.9	46	14.8	82	14.4
Over 35	15	5.8	23	7.4	38	6.7
Origin						
Maringá	128	49.4	307	99.0	435	76.4
Other cities	131	50.6	3	1.0	134	23.6
Marital Status						
With a companion	200	77.2	226	72.9	426	74.8
Without a companion	59	22.8	84	27.1	143	25.2
Education						
None	1	0.4	4	1.3	5	0.9
1-3 years	7	2.7	13	4.2	20	3.5
4-7 years	86	33.2	58	18.7	144	25.3
8-11 years	154	59.5	221	71.3	375	65.9
12 and more	11	4.2	14	4.5	25	4.4
Occupation						
Housewife	172	66.4	161	51.9	333	58.5
Student	9	3.5	16	5.2	25	4.4
Housemaid	20	7.7	30	9.7	50	8.8
Seamstress	14	5.4	10	3.2	24	4.2
Clerk	5	1.9	10	3.2	15	2.6
Production Clerk	3	1.2	11	3.5	14	2.5
Other activities	36	13.9	72	23.3	108	19.0
Total	**259**	**45.5**	**310**	**55.5**	**569**	**100.0**

statistically significant association with the quality of labor care. It was observed that the younger the parturient, the better the quality of the assistance received. Among the sociodemographic variables, age was the only one presenting statistically significant associations with the type of labor (p<0.0001). A higher frequency of the vaginal labor was found among adolescent parturients (32.3%), when compared with the group of women over 35 years old (2.9%).

Although statistically significant associations were not observed between the variable education with the type of labor, associations were observed with the quality of the attention (p: 0.001), which was proportional to the women's education, that is, the more education, the better the healthcare quality received. This variable was observed to be associated with the indicators: receiving information about labor (p: 0.01), and during labor (p: 0.001) and in the prolonged skin to skin contact with the newborn in the delivery room (p: 0.003).

Association was observed between previous caesarian sections and quality of labor assistance (p < 0.001). The care for parturients without previous caesarian sections was more frequently rated as good and excellent (41.6%), as opposed to the women with three or more caesarian sections, who had the highest rates of unsatisfactory (28.5%) and fair care (68.7%).

Associations were registered between previous vaginal labor and caesarian sections and the occurrence of vaginal labor (p<0.001), being that women with one to three previous vaginal deliveries and no caesarian sections were submitted to vaginal labor more often. Associations were also observed between previous caesarian sections with non-pharmacological methods for pain relief (p < 0.001) and the offer of liquids through the mouth (p < 0.001). Parturients without a history of previous caesarian sections were the ones who received, most frequently (49%), from 2 to 4 non-pharmacological methods for pain relief and liquids through the mouth during labor (60.8%). Multiparous women, with previous vaginal delivery (4 to 5 parturitions) also received, more frequently, liquids through the mouth (67.7%). The association between receiving liquids through the mouth and the occurrence of vaginal delivery was observed in both hospitals (p < 0.001).

DISCUSSION

The sample of women interviewed was representative of the population for the period of the study. They were typically young, low social-economic level women, with similar profiles, as expected for the users of SUS services.

Regarding education, the data reflect the conclusions obtained in nationwide research, which records the occurrence of the phenomenon of improvements in the education of mothers of women as of the 1990s.[11] Mixed-ethnicity women were observed to have the lowest level of education, as well as those who were unemployed.

A few distinguished characteristics were observed among the women seen at the two hospitals, as a result of their origin, which can guide the actions of the multiprofessional team to individualized attention during delivery. The women coming from other cities (hospital 1) were younger, with little education, unemployed, with a higher number of pregnancies and living children. Therefore, they are the ones with the highest social and reproductive risk. In addition, they arrived alone at the hospital or, when accompanied, their companions remained there for a short period of time. This information suggests that this group of women may demand more attention from the health team because they remain alone for longer during labor. In this situation, emotional support during labor could also have reached

Table 2 – Variables associated to the quality of labor assistance to women cared for in two hospitals connected to the SUS in Maringá – PR. March / 2005 to February / 2006.

Variables	Good/Excellent		Fair		Unsatisfactory		P Value
	N	%	N	%	N	%	
Age							0.009
12 to 19 years	54	39.2	66	47.8	18	13.0	
20 to 25 years	62	33.5	95	51.4	28	15.1	
26 to 30 years	33	26.2	68	54.0	25	19.8	
31 to 35 years	16	19.5	45	54.9	21	25.6	
Over 35 years	5	13.2	26	68.4	7	18.4	
Education							0.001
0 to 7 years of education	36	21.3	91	53.8	42	24.9	
8 to 15 years of education	134	33.5	209	52.3	57	14.2	
Previous caesarean sections							<0.0001
None	102	41.6	109	44.5	34	13.9	
1 to 3	67	22.1	177	58.4	59	19.5	
More than 3	1	4.8	14	66.7	6	28.5	

by means of birth partners, which constitutes an especially useful recommendation, for hospital 1. The family planning education actions for this group of women must be one of the healthcare priorities, including orientation on contraception in puerperium and/or referral to reference services, since they have the highest number of children and the lowest educational level.

An important observation in this study was the occurrence of disparities in more qualified access to labor, influenced by individual and contextual factors, but especially related to assistance practices, that is, uneven offer of reportedly useful practices that may improve quality of assistance and contribute to the evolution of vaginal evolution.

If the existence of a formal system of hospital reference to labor in the city constitutes an important organizing element of assistance, indicating progress in healthcare quality due to guaranteeing hospital beds, it can show a situation of inequity determined by contextual factors (institutional and political standards), since it denies two rights of the parturient: the right to choose the location and the physician who will assist her during labor.

Regarding individual factors, the variables age and education were seen to be associated with the quality of labor care, since adolescents and parturients with high school education obtained better quality care. The younger the parturient, the higher the possibility to receive non-pharmacological methods of pain relief and the longer the skin to skin contact of the mother with the newborn in the delivery room. This fact can be explained, among other reasons, by the perception of the healthcare professionals about the vulnerability of the adolescents and the knowledge of biological and social risks, which makes this age group deserve special attention from the healthcare services. Another reason can be attributed to the legal aspects involved in the attention to this age group, which warrants them specific protection measures, including the presence of a companion during labor and delivery[12-13].

Education was associated with the indicators "receiving information on labor and delivery and skin to skin contact with the newborn in the delivery room". The parturients with incomplete elementary education received less information on labor and delivery and had less skin-to-skin contact with the newborn in the delivery room when compared to women with high school and college education.

These data agree with literature, which mentions that education has the potential to qualify the care provided by the healthcare professional[14-15]. Literacy makes the individual more sensitive to healthcare education actions and it is possible that the increasing educational levels work as protecting factors due to the assimilation of information about different healthcare alternatives available, having her demands met resulting in a higher level of autonomy. These assertions are applicable to the labor and delivery scenario, since the educational practice makes it possible for the woman to understand her transformations, to prepare herself for labor and puerperium and to be proactive, capable of facing stressful situations and deciding about her health[16].

Regarding interpersonal aspects[17], it is worth noting the uneven relations of power between physicians and clients, when they consider that women with lower education are incapable of understanding information and, therefore, the attempts at explanation would be a waste of time. On the other hand, women with less education are frequently those who mostly ignore their own rights, and therefore, those who less claim them.

On this theme, one author[18] complements that the discussion on the models of labor care and on its excessive medication seems to be an issue only for women of higher economic and cultural levels. In a research performed at a public maternity hospital in Rio de Janeiro, the concept of humanization of labor care was unknown to the women interviewed.

Therefore, the worst quality of care received among the less educated can be seen as an expression of the dissimilarity of the treatment offered by the healthcare services to those groups that are less socially favored. If, in the case of adolescents, the healthcare quality could be justified by their condition of vulnerability, in the case of women with the highest education, possibly, it is related to claiming for their rights, demanding more individualized care from the healthcare team. As such, they became parturients who demanded better performance from the healthcare team.

Another relevant piece of information refers to the association observed between reproductive background and type of labor, which points at the importance of the decision about the type of labor, based on obstetric background and previous caesarian section as risk factor for the new caesarian section. A study[19], performed in two maternity hospitals in agreement with the SUS in Rio de Janeiro, registered that the multiparous women whose last delivery was a caesarian section had a higher chance of caesarian section than the multiparous women whose last delivery was vaginal. Therefore, the information obtained in the study corroborates the ideas of the author[19], that the high ratio of caesarian sections in Brazil is the reflection of three factors: characteristics of the women, practices of the obstetricians and organization of the obstetrics practice. Cragin's statement "once caesarian section, always caesarian section", in 1916, is still a rule[20].

FINAL CONSIDERATIONS

Three characteristics stand out in the composition of the profile of the parturient who benefitted from the most qualified labor care by the SUS in the city of Maringá: being younger than 19 years old, having high school education and

having no history of caesarian sections. On the other hand, being over 35 years old, multigesta: multiparous, having low education and previous caesarian sections are possible predisposing factors to iniquities in assistance to labor.

Assuming that both hospitals had a population with similar characteristics, it is suggested that the assistance practices were the determining factors for the healthcare quality, that is, the healthcare professional is largely responsible for defining the healthcare practices, and, especially, the type of labor. Therefore, one must invest in sensitivity and permanent education of the healthcare team for the implementation of the humanization practices recommended by the WHO. The importance of the educational practice performed since the pre-natal period is highlighted, which can confer a higher level of autonomy to the parturient and the claim of her sexual and reproductive rights in labor and delivery.

There must be room to highlight the reflections of an author[21], who describes the need of considering cultural differences, emotions and the distinct desires of the women during healthcare. Otherwise, humanizing measures may result in merely isolated technical procedures, producing effects as deleterious as the technocratic treatment that one intends to fight against. Routines, when made flexible, may warrant what may be the great contribution of the ideals of labor humanization in the field of reproductive health, namely: respect for the women's rights over their own body and the right to the difference.

It should be noted, as one of the study limitations, the exclusion of the variable race as analytical category. Considering the importance of this variable in the studies about gender and equity and the difficulties to obtain reliable data related to racial classification from the women cared for at the two hospitals, mostly due to their classification bias, a few tasks and challenges are reserved for future investigations about the theme. When one admits the redundant nature of the term race, one must discuss its concept, the importance of the classification being self-declared and the sensitivity of managers and technicians in collecting information from the healthcare services. Therefore, it is recommended that studies covering the racial theme and equity in healthcare be performed in the city of Maringá, as well as the incorporation of equity in the evaluation of health care programs. It is also suggested that methods of multivariate analysis be used in order to integrate and hierarchize the effects of the different socio-economic, demographic and reproductive effects as determinants of the dissimilarities in health.

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