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## Social Relations and the option for planned home birth: an institutional ethnographic study

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### ABSTRACT

**Aim:** To reveal, with reference to everyday life, the social relations surrounding women's option for planned home births. **Method:** Institutional Ethnography (IE). **Subjects:** Seventeen women who planned home births and who gave birth at home, assisted by an obstetric physician or nurse, from January 2008 to December 2010. Data collected through semi-structured interviews between October and December 2010. Data treated to thematic analysis, referencing the theory of Dorothy Smith. **Results:** The category 'social relationships and their influence on the option for planned home birth' has emerged. **Discussion:** Thinking about power relations in terms of the option for planned home births means to encourage free choices experienced by women in terms of their distinct and different support networks. **Conclusion:** The empowerment of women in the birth process is essential for maternal-fetal wellbeing.

**Descriptors:** Health Public Policy; Natural Childbirth; Home Childbirth; Obstetrical Nursing.

## INTRODUCTION

The focus of this research is the influence of power relations on women's option for a planned home birth in large urban centers. This is a topic of interest and with a lot of evidence, especially due to the demands of social movements, including the World Health Organization (WHO) and organized sectors. Despite its marginal position in society, the home birth is the scenario resulted in of public policies that favor the performance of obstetric nurses, midwives and doctors who attend planned home births in urban centers<sup>(1)</sup>.

According to the Ministry of Health who has been taking measures to improve the quality of services provided to women in the matter of labor and birth, 98% of births in Brazil occur in hospitals<sup>(2)</sup>. Delivery, according to the hospital model, is, in most cases, based on medicalized care, where there is still frequent use of unnecessary interventions.

Data from the Information System on live births, confirms that in 2010, the prevalence of cesarean sections in Brazil was 52%. In 2009, this rate was 58% in the state of Rio de Janeiro<sup>(3)</sup>, and 99.76% in the municipality of Rio de Janeiro<sup>(4)</sup>. Current thinking in Brazilian society, shared by health professionals, is that home births, even when planned, represent an increased risk of adverse maternal and neonatal outcomes. However, the scientific evidence reports that planned home births for women at low obstetric risk are as safe as the usual hospital births, and should be offered as an option for healthy women who want them<sup>(5-8)</sup>.

For clarification, in this study, we use the term "option" instead of the word "choice." The etymological explanation of these terms is that option is the act, the right or the power of opting, a preference and free choice; while

choice refers to the act or effect of choosing, option, preference, selection<sup>(9)</sup>. Adopting the first term seemed more appropriate, given that its connotation includes the capacity for free choice, a basic condition of the citizenship of women that recognizes their right to choose and is a sign of power and autonomy in opting for a planned delivery.

Empowerment comes from access to information and awareness of our rights as citizens and is related to the exercise of control over our actions. This is what promotes the change from passive attitude to active posture, where the individual is able to know what is best for himself<sup>(10)</sup>.

In Brazilian society, it is neither surprising nor outrageous that women are immersed in a pro cesarean culture and denial of their status as citizens due to the absence of the possibility of an option related to the place of birth. However, in the last ten years, there has been a significant expansion of women's movements and health professionals, who have sought to discuss alternatives to the predominant delivery model in Brazil. The popularization of the Internet has contributed to the growth of this form of social expression, enabling users to find information about birth methods that are different from the hospital model<sup>(11)</sup>.

In this study, we aim to reveal, with reference to daily life, the social relations surrounding women's option for planned home births in a large urban center.

## METHOD

We use the institutional ethnographic study (IE) method proposed by the Canadian sociologist Dorothy Smith, who was influenced by the epistemological positioning developed within feminist studies, including

Garfinkel's ethnomethodology and Marxist materialism<sup>(12)</sup>. The author assumes women are excluded from the decision-making process in society, which is dominated by male thinking.

We chose IE because the places where the home births take place are represented as residencies, and linked to the cultural context and human behavior according to the feminist movement. IE is linked to the rules and social organization of a particular fact or event and is not used to study institutions such as these. It proposes that the sociology is based on the experiences of people, not on a theory, combines theory and method and focuses on the connections between places and situations in daily life or in professional practice.

Social relationships are the central point of analysis in this study, and IE provides a way to explain how the routine established in residencies interacts with the social relations of current broad social and economic processes. Ethnography proposes the study of everyday social life based on its place, so we chose to interview women in the places indicated by them, the home.

We chose the qualitative approach since it allows the development of social relations expressed in the world of meanings and human relations<sup>(13)</sup>.

To select the participants, we initially contacted the professionals who attended home deliveries in the city of Rio de Janeiro, namely, four midwives and two physicians. After the meeting to introduce the research, the professionals requested formal authorization from the women for referral as study participants.

We established contact with 65 women who agreed to participate and who gave birth at home in the period from January 2008 to December 2010. We excluded women where

the deliveries resulted in stillbirths or children with health problems.

To select the eligible women, we performed sweepstakes until we reached data saturation. Thus, the final study sample consisted of seventeen women.

We collected data in the homes of women in the first half of 2011, by semi-structured interviews, recorded on a digital device, and took notes in the field notebook.

We analyzed the content and we transcribed interviews verbatim, which the interviewees validated. Careful reading of the material resulted in the identification of 45 reporting units that underlie the construction of three thematic categories: (i) information: a step for choosing the planned home birth; (ii) social relationships and their influence on the option for planned home birth; (iii) the option for natural childbirth and the non-medicalization.

In this study, we present the results of the category "Social relationships and their influence on the option for planned home birth" through the following subcategories: A different way of looking at my body, life and the world; the relationship with the baby's father; the relationship with family and friends; the relationship with the health system and physicians.

The study was approved by the Ethics Committee in Research at the Anna Nery School of Nursing, Federal University of Rio de Janeiro, under Protocol No. 078/2010, as envisaged in the Resolution of the National Health Council No. 466/12<sup>(15)</sup>.

To ensure anonymity and confidentiality of information, we coded the authorship of the statements alphanumerically (I1... I17).

## RESULTS

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### *A different way of looking at my body, life and the world*

The participants have higher educational levels than average, and mostly contribute to the family budget, and as such stand out from the majority of women in the population of Brazil. They relate to other women in different environments and social networks and some of them declare themselves “different” from their families of origin. They are also recognized as “different” by family and friends.

(...) We already are kind of angry with the way things are. We don't really swallow all this industrialization. (I7)

In the statements below, we can see how the option for home birth is part of a way of seeing life.

(...) And as I've already worked with natural things, natural food, it seemed natural for me to want to give birth at home. (I11)

(...) I have a connection with nature; a thought for the simplest things. And then this thing home birth popped up. (I14)

Among the women who are not part of the previous group with homogeneous characteristics, important aspects and a clearer perception of the identification of the group studied, emerge; these women do not recognize themselves as alternative people:

(...) People took it as a trend: 'she's willing to show off.' Others said that I was a hippie. Heck, I'm no hippie, no way. (I4)

(...) As pessoas encaravam como modismo: 'ela está querendo tirar onda'. Outras diziam que eu era hippie. Caramba, eu não sou hippie de jeito nenhum. (I4)

### *The relationship with the baby's father*

Fourteen women mentioned the fathers' participation in the process of pregnancy and baby care. Four mentioned the father as their birth partner and they talked about the communion of thought and trust between them and their shared idea that as women they have priority because the childbirth occurs in their bodies. The women talk about the construction of the option with the baby's father.

(...) My husband reacted very well; he thinks that, if something is good for me, it's good for him too. (I5)

(...) My husband never, at any moment, came to try to convince me to do otherwise. He says that even today he has a lot to thank me for because it was so magical and he could experience it so closely. (I9)

The following statement, confirms the participation of partners, who understand the role of women in the process:

(...) I never had to convince him of the decision to give birth at home. If you think that's it, then it has to be. (I2)

(...) He stood from the beginning as a collaborator, not responsible for anything. That's why he never questioned or denied this possibility. (I12)

Other testimonies show that the father did not agree with the option for homebirth, but ultimately accepted the woman's decision, which reinforces the idea of women having the power of decision in this matter.

(...) In the end, my husband showed that he was terrified of the home birthing business (...). When I said I don't want it, he freaked out! (...) But I managed to overcome this obstacle. (I12)

(...) The father never wanted labor to happen at home. Until the end, he never supported it. But he agreed that it was my decision. (I8)

Among the women interviewed, eight reported that family and friends expressed concern regarding maternal-fetal health, and some of them said that such an option was insane, and that it would expose them to unnecessary risks. We observe it is common for the circle of people around the women to show love and affection through concern for the health of mother and child. It is still perceived that the usual method and location of birth is the norm, and that any other type of delivery generates questions and confrontation.

(...) And it's not only my husband, but my parents too (...) People were concerned about our welfare; making sure everything came out in a good way, making sure everything went well. (I17)

(...) What happened were repetitions such as: You're crazy, you're putting your baby's life at risk (...) It was always the same, and people regarded it as a trend. (I4)

The central issue identified from the interviews confirms respect and support for the option and recognizes the right of the mother and father to decide where and how they want their baby to be born. They make it clear that, in the relationship with family members, their way of being, despite being different, deserves respect.

(...) Look, my mom and dad are already somewhat familiar with these choices of mine; they accepted it. (I9)

(...) Many people say that I was brave because I am a foreigner, alone, without speaking Portuguese correctly, so how could I give birth at home? And they reacted with much admiration. (I5)

### *The relationship with family and friends*

Eight respondents said they could not tell their family and/or friends that they had opted for home birth. Their choice is not simple and caused great stress in their relationships with family, at work and with friends. Often mothers cannot find another way to tell people, as shown by the following statements:

(...) Well, then we didn't tell anyone, during this whole period, we saw how people are prejudiced, so I kept quiet. And then, we only told them when the baby was born. (I3)

(...) I couldn't tell anyone that I was going to do homebirth; otherwise, I would be in trouble (...) I'd be called irresponsible (...) you know? I could not tell my family that I would give birth at home because I knew my

aunts wouldn't let me be in peace.  
(I2)

After analysis of the testimonials, we realize how important the impact of the negative reaction from the social circle regarding the option for home birth. Therefore, when these women come across other women who have made the same option, they develop a sense of sisterhood that has the power to transform<sup>(17)</sup>.

### *The relationship with the health care system and physicians*

The way health systems are organized, was mentioned by 13 respondents, who reported difficulties during their pregnancy or with a previous birth, in relation to medical professionals, maternity wards and hospitals.

(...) There was a strike during the prenatal period; everything was really bad. (I4)

A strike reinforces insecurity in terms of the discontinuity and decrease in the quality of care.

(...) The service has lost a lot of quality there, and the consultation was awful. I stayed in the office for ten minutes. There were four men to touch my belly to measure the size, you know? I got up and left. (I11)

The mention of men touching women's bellies suggests a matter of privacy invasion and gender issues.

In the following cases, women refer to the professionals involved in their health plans.

(...) Then I found a doctor who did homebirth, but I didn't want a doctor. I think a doctor is meant to come when you need one. Not when you're going to have a baby. (I11)

Although the interviewee has reaffirmed her reasons for choosing the medical professional, she recognizes his limitations to exercise this function, and gives us the impression that she sees childbirth as a natural event that does not require the presence of a physician responsible for pathology:

(...) On Thursday, she (the doctor) called and said that, if I didn't do the cesarean section she was telling me to do, my son was going to be stillborn. I was firm and said that I was no longer her patient. After that I shivered a lot. (I4)

The woman's decision denotes a personal empowerment that allows her to stand up to the professional, say what she wants and how she wants it, despite the fact that the professional raised fears that her child would be stillborn.

Five women opted for homebirths after previous negative experiences in hospital. The following testimony denotes a woman who does not argue about or discuss her treatment, she just watches, and based on what she observes, she makes her decision. The differences in the obstetric care models were observed.

(...) "No, Doctor, I don't want anesthesia, episiotomy; I don't want any of this. And he didn't accept it (...) I know drugs are very bad for the baby. (I7)

(...) The delivery is up to the medical staff. So who had baby in the generation of my mother and my mother in law would go to the hospital. There was no process and participation of the baby's father and mother; there was nothing. (I12)

The following statement illustrates women's view of the experience of childbirth in the hospital and supports having an option.

(...) Because I didn't want any doctor around; I didn't want anyone bothering me. I didn't want light; I knew I was going to scream like hell because I know myself and I knew that they wouldn't let me do it there; they would criticize me. (I15)

## DISCUSSION

For a significant number of the group, the option for natural birth is consistent with their lifestyle, beliefs, and values. The way one lives emerges as a factor when choosing homebirth, as these families are the ones who have other cultural and social values, for example, they are aware of the importance of environmental preservation<sup>(15,16)</sup>. Even in these cases, the patients were subjected to strong social pressure against homebirth.

There are families who opt for the naturalistic model, but they differ in relation to the naturalist movement in the sense of having independence of thought and action. Thus, we highlight important aspects in their values concerning homebirth, established in the humanized vision of the analogy of their relationship with the environment<sup>(8)</sup>.

In general, the option for home birth in a large city, is seen by society as something totally outside normal standards. Power relations<sup>(15)</sup> are affirmed through speech and writing and the dominant thoughts regard hospital births as safer and the norm. However, the women who opt for home births, work through and overcome this common knowledge and find new information, and form new values that contribute to the breakdown of the dominant pattern. Access to information is crucial to choice and from it emerges a new form of consciousness that begins to shape the experience of other women, influence others and marks the woman's identity and, in some cases, that of their families.

The participation of fathers in the process from pregnancy to baby care arises from the statements, and with respect to the option for home birth, some of them gave effective support and emerged as partners in the decision and in the communion of thought. There is a power relationship between the couple, in which the power of the woman's decision prevails. She decides and her husband does not try to convince her otherwise, indicating that the decision has already been made, which indicates support and companionship. Thus, one can infer a social relation around birth, where the highest decision making power belongs to women.

In our patriarchal society, women are not part of the decision-making apparatus. Even in the health field, where they are recognized as having some power, the effective participation in decisions is not a part of their everyday life. In the decision to opt for home birth, there is clearly a new power relationship established by the woman<sup>(15)</sup>.

Decision making by women is not a likely possibility in our society. The possibility of the

female desire to prevail, over the masculine power, indicates an inversion in the usual power relationship. Men are considered strong, and women, fragile. The very process of deciding over her own body requires a personal position of autonomy in relation to the father. However, there is a paradox here, since, in our patriarchal society, the labor division and family care are determined as a female role. Therefore, we cannot say that there is a real gender inversion here but that in the power relationship, as a means of external organization, issues related to health are delegated to women<sup>(15)</sup>.

It seems in the process of making the option significant to the internal and external recognition of women that this decision belongs more to them than to men, due to the fact that it is the woman who experiences the process. One can understand how this self-recognition is part of the process of individuation and empowerment. It is the woman who is informed throughout her pregnancy, and after evaluating all the pros and cons, opts for home birth as an alternative to medicalization and to the reality of hospital births in the great Brazilian urban centers where there is disrespect and lack of warmth<sup>(17)</sup>. We can understand that this woman already had internal resources, and organized forms of consciousness that shaped the option. This study allows us to analyze the social relations and the impact of the option<sup>(15)</sup>.

Faced with a technocratic culture on issues related to labor and delivery, the questions from family and friends start from the premise that the place of delivery is the hospital, and the doctor attends the birth. This expresses the culture and beliefs of a large urban center.

Thus, pro-cesarean culture refers to safety of the family and fear is sustained by a lack of knowledge<sup>(18)</sup>.

After the initial contrary reactions to their option, often made in an aggressive manner, some women decided not to reveal their decision to avoid confrontation, because by opting for home birth, they put themselves in a vulnerable situation, as if they have done something wrong, or illegal.

We observed in this study, how the negative reaction of family and friends affected the women, and the importance of knowing there were other women who shared the same ideals. We identified the phenomenon of a sisterhood among these women, who criticized for their options, ended up forming a union that has the power of social transformation<sup>(15)</sup>.

In the study, the women claimed they were not listened to or respected during antenatal services. Medical records do not reflect the real issues brought by clients, there being no space for how they might feel. The discovery that what women want or negotiate in conventional prenatal care does not occur, as evidenced in late pregnancy, does not provide women with any bargaining power or the ability to impose their own desires. It means that in these cases, male, patriarchal power prevents the manifestation of feminine knowledge.

Thus, the women criticize the fact that their treatment is mostly performed by the male physicians in routine examinations, which reinforces the negative aspects of care provided in hospitals. The feeling of invasion is accentuated in the gender relation, with men looking at their vaginas, touching their bellies and asking intimate questions. For a pregnant woman already weakened by her position, the participation of male physicians was scary.

In major urban centers, in the private sector, the current rate of cesarean deliveries has reached extreme levels<sup>(11)</sup>.



The dominance by men over women is established through fear, and their insecurity concerning labor and birth is heightened by statistics of maternal death<sup>(19)</sup>. In a social circle between the southern area and Barra da Tijuca, neighborhoods of the city of Rio de Janeiro, which is traditionally served by health plans, they require access to professionals who do not perform unnecessary interventions.

The combination of negative experiences, access to information and the fact of being connected to groups of women on the Internet, acts as support for coping with the professionals and when taking a stance. Thus, many women decide the place of delivery and the professional who will assist them in late gestation<sup>(20)</sup>. The size of the belly, the certainty that the baby somehow has to be born, forms a sense of where and with whom she will feel safe to give birth.

In the biomedical model, delivery care is still seen as pathological and requiring treatment. On the other hand, the option for home birth means empowerment for women and for their expectations, in a vision of active participation in their own labor and the birth of their child. The dissatisfaction with the denial of participation of mothers and fathers in the process illustrates a relation of power that the option for homebirth challenges.

There is a difference between the assistance provided by the male physician and that provided by the obstetric/midwife nurse. The woman identifies the male physician as having a lack of respect for the individuality of the patient. Breaking or transforming these power relationships in the medical profession into more egalitarian ones is not feasible for the laboring woman.

The respondents say it is impossible to get respect from doctors at a time when

they may behave in unexpected ways due to neocortical reduction, and they use sounds and screams in animal like ways to maximize their expression, something that is rejected in the hospital environment. The option for the domicile arises then, in part, from the certainty that they will not be in an environment that allows them to experience the process of childbirth without intervention.

The development of social relationships occurs with the clarification of the discourse that recognizes that women not only have knowledge related to the household economy and management, but also scientific and technical knowledge that exceeds their functions as mothers and household caregivers.

This new vision supports women to differentiate the domestic world from the world of intellectual work. In order to make the changes and establish the convergences and divergences between their lifestyle and way of thinking and acting requires political awareness to reach their destiny<sup>(19)</sup>.

Political awareness works to deconstruct the dichotomy between masculine intellectual knowledge and feminine domestic knowledge, characteristics of the patriarchal and dominant philosophy of the male chauvinism ideology, which translates into the popular understanding that men are strong and are the heads of the family and women are fragile and the families' and household caregivers. These dominant practices and knowledge produce exclusion and subordination, which, in this study, were rejected<sup>(20)</sup>.

## CONCLUSION

The experience of home birth, grants women the necessary authority of someone who owns knowledge gained from practice.

This assertion is founded on an analysis of the data using the EI methodological approach that provides a resource of knowledge for people who want to work for a more just society. In all places and in each moment of everyday life, humans participate in social relations without necessarily being aware.

The innovative aspect of this research is the disclosure of the option process for women in the municipality of Rio de Janeiro, Brazil, who have gained, with effort, the right to experience home birth in an environment that offers them security.

The process of opting for home birth starts with access to information. There are distinct areas of information, individual, personal contact and social networking on the internet. There is also diversified and qualified information, originating from the experience of other women, and empirical and scientific knowledge. Women experience an exchange of knowledge and practices. In our study, home birth is an option in pregnancy that is spontaneous, consistent, relevant and timely.

## REFERENCES

1. Feyer ISS, Monticelli M, Volkmer C, Burico RA. Publicações científicas brasileiras de enfermeiras obstétricas sobre o parto domiciliar: revisão sistemática de literatura. *Texto Contexto Enferm.* 2013; 22(1):247-56.
2. Milfont PMS, Silva VM, Chaves DBR, Beltrão BA. Quality of care and satisfaction of women with natural childbirth: exploratory study. *Braz J Nurs.* [cited Jan 01 2013] 2011, 10(3). Available from: <http://www.objnursing.uff.br/index.php/nursing/article/view/3493/1099>
3. Ministério da Saúde (Brasil). Caderno de informação de saúde (Série G. Estatística e informações em Saúde). Brasília, DF: Ministério da Saúde; 2012.
4. Ministério da Saúde(Brasil). Indicadores de

Saúde da cidade do Rio de Janeiro. Rio de Janeiro, RJ: Ministério da Saúde; 2010.

5. Jonge A, Goes VD, Ravelli AC, Amelink-verburg MP, Mol BW, Nijhuis JG, et al. Perinatal mortality and morbidity in a nationwide cohort of 529n688 low-risk planned home and hospital births. *BJOG.* 2009; 116(9): 1177-84.
6. Boucher D, Bennett C, Macfarlin B, Freeze R. Staying home to give birth: why women in the United States choose home birth. *J Midwifery Womens Health.* 2009; 54(2):119-26.
7. Evers AC, Brouwers HA, Hukkelhoven CW, Nikkels PG, Boon J, Hillegersberg J, et al. A perinatal mortality and severe morbidity in low and high risk term pregnancies in the Netherlands: prospective cohort study. *BMJ.* 2010; 341(5639):1-8.
8. Birthplace in England Collaborative Group (England). Perinatal and maternal outcomes by planned place of birth for healthy women with low risk pregnancies: the Birthplace in England national prospective cohort study. *BMJ.* 2011; 24(343):7400-16.
9. Ferreira ABH. Dicionário Aurélio de Língua Portuguesa. 5ª ed. Rio de Janeiro: Editora Positivo; 2011.
10. Malheiros PM, Alves VH, Rangel TSA, Vargens OMC. Parto e nascimento: saberes e práticas humanizadas. *Texto Contexto Enferm.* 2012; 21(2):329-37.
11. 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):1863-76.
12. Vêras RM. Etnografia institucional: conceito, usos e potencialidades em pesquisas no campo da Saúde. *Sau & Transf Soc.* 2011; 1(2): 58-66.
13. Minayo MCS. Pesquisa social: teoria, método e criatividade. 28ª ed. Rio de Janeiro: Vozes; 2010.
14. Conselho Nacional de Saúde (Brasil). Resolução 466 de 12 de dezembro de 2012. *Diário Oficial da União Poder Executivo* 12 dez 2012; seção 1.
15. Smith DE. Institutional ethnography: a sociology for people. Toronto: Altamira Press; 2005.
16. Colacioppo PM, Kiffman M, Riesco MLG, Sch-

- neck C, Osava R. Parto domiciliar planejado: resultados maternos e neonatais. *Rev de Enf Ref.* 2010; 3(2): 81-90.
17. Smith DE. *Institutional ethnography as practice.* Lanham: Rowman & Littlefeild Publishers; 2006.
  18. Lagomarsino BS, Van der Sand ICP, Girardon-Perlini NMO, Linck CL, Ressel LB. A cultura mediando preferências pelo tipo de parto: entrelaçamento de fios pessoais, familiares e sociais. *Rev Min Enferm.* 2013; 17(3): 688-94.
  19. Ministério da Saúde (Brasil). *Atenção a saúde do recém-nascido: guia para os profissionais de saúde – cuidados gerais.* Brasília, DF: Ministério da Saúde; 2011.
  20. Mccourt, C. *Childbirth, midwifery and concepts of time.* [s.l.]:Berghahn Books; 2009.

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