

## Humanized care in high-risk prenatal care: nurses' perceptions\*

Assistência humanizada no pré-natal de alto risco: percepções de enfermeiros

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### ABSTRACT

**Objective:** to unveil nurses' perceptions about humanized care in high-risk prenatal care. **Methods:** a qualitative study, with six nurses who worked in high-risk prenatal care. Data collection took place using semi-structured interviews. To analyze the results, the content analysis technique was used. **Results:** the adoption of humanized care consisted of actions related to user embracement, personalized care, dialogue with pregnant women and the establishment of a trustful relationship. The main humanization practices were guided visits to maternity hospitals; creating educational groups; the use of non-pharmacological methods for pain relief during labor; and encouraging companion support. **Conclusion:** participating nurses understood the humanization concept and associated humanization practices to the embracement of pregnant women, guided visits, personalized care, guidance on the use of non-pharmacological methods and the promotion of connections with pregnant women.

**Descriptors:** Pregnancy, High-Risk; Obstetric Nursing; Prenatal Care; Qualitative Research.

### RESUMO

**Objetivo:** desvelar as percepções de enfermeiros sobre assistência humanizada, no pré-natal de alto risco. **Métodos:** pesquisa qualitativa, com seis enfermeiros que atuavam no pré-natal de alto risco. Para coleta de dados, recorreu-se à entrevista semiestruturada. Na análise dos resultados, utilizou-se da técnica de análise de conteúdo. **Resultados:** a humanização do cuidado consistiu de ações relacionadas ao acolhimento, atendimento individualizado, comunicação com gestantes e estabelecimento de relação de confiança. As principais práticas de humanização foram as visitas guiadas nas maternidades; a realização de grupos educacionais; o uso de métodos não farmacológicos para alívio da dor, no trabalho de parto; e o incentivo à atuação de acompanhante. **Conclusão:** os enfermeiros participantes compreenderam o conceito de humanização e atribuíram as práticas de humanização ao acolhimento da gestante, visitas guiadas, atendimento individualizado, orientação sobre uso dos métodos não farmacológicos e promoção de vínculo com as gestantes. **Descritores:** Gravidez de Alto Risco; Enfermagem Obstétrica; Cuidado Pré-Natal; Pesquisa Qualitativa.

## Introduction

Prenatal care plays an important role in reducing risks, preventing diseases, promoting health and decreasing maternal and child deaths<sup>(1)</sup>. In the international and national standards, high-risk prenatal care contributes to the reduction of morbidity and must be performed by a multidisciplinary team<sup>(1-2)</sup>.

The monitoring in high-risk prenatal care must be performed by nurses, who are part of the multidisciplinary team, aiming to develop actions to prevent and treat the morbidities that affect the mother and the fetus, besides guiding normal labor, breastfeeding and puerperium<sup>(2)</sup>. Thus, worth stressing the nursing consultation and the promotion of a safe and trustful environment during preconception, prenatal, intrapartum, and postnatal care, contributing to improving the mother's and the fetus' health and well-being<sup>(2-3)</sup>.

The nurses' role in multi-professional health work consists, among other actions, of psychosocial and nutritional evaluation, health education, perinatal counseling, support in service management and decision-making<sup>(4)</sup>. Among the health education actions carried out by nurses, it is worth emphasizing the guidelines on the pregnancy physiological changes, the use of non-pharmacological methods for pain relief in childbirth, fetal growth and development and breastfeeding<sup>(5-6)</sup>. The mentioned practices contribute to the women's learning about risk factors, pregnancy complications, maternal and neonatal well-being, which reduce the fear of childbirth<sup>(7)</sup> and helps the active participation of women in the care, enabling satisfaction with the caring and recognition of the nursing teamwork<sup>(8)</sup>.

In the meantime, it can be observed that nurses' performance is still focused on interventionist practices, filled by disputes between health professionals, regarding the sector and the work overload<sup>(2,8)</sup>. Studies point that nurses face adversities at work, such as the lack of time and the lack of professionals to provide quality care, poor physical facilities, scarcity of educational activities and the absence of pregnant

women to accept the guidelines, as well as their failure to attend the service<sup>(2,9)</sup>. On the other hand, there is a learning gap concerning the nurses' training for humanized prenatal care<sup>(9)</sup>.

Indeed, it is relevant to understand the strategies of understanding comprehensive care for pregnant women and the nurses' role in teamwork, from primary to tertiary care. There is a demand to expand the production of knowledge and promote nursing care actions to high-risk pregnant women<sup>(4)</sup>, however, there is a consensus that the professional must develop skills in management, care and educational actions to provide this assistance<sup>(2)</sup>. In this context, when considering that obstetric nurses play a major role in the process of implanting the humanized model in high-risk prenatal care, it was questioned: how does the practice of obstetric nurses in humanized care take place in high-risk prenatal care? Thus, the objective was to unveil nurses' perceptions of humanized care in high-risk prenatal care.

## Methods

A qualitative study was carried out in two public maternity hospitals that provide high-risk prenatal care, one located in the Southeast Region of Brazil (A) and the other in the Northeast Region of Brazil (B). Both are nationally recognized for complying with public policies for the humanization of prenatal care, labor, delivery and postpartum<sup>(10)</sup>, developing learning activities, researching and assistance, and host university students for internships and academic activities.

Six nurses who worked in a high-risk prenatal clinic (three from Maternity A and three from B) participated in this study. The selection of participants followed the convenience sampling criterion, which is based on the choice of all individuals who may have the necessary information to provide an answer or to propose the discussion of the expected objectives, to ensure the qualitative analysis in-depth<sup>(11)</sup>. The study included nurses who worked in high-risk prenatal care in both institutions. As exclusion criteria, nurses

who were on vacation, leave and graduated for less than six months were selected.

Before starting the interviews, the acculturation phase took place, so that the researchers could be adapted and incorporated into the two services. Participants were previously contacted, the objectives and the voluntary participation of the research were explained, and then, after prior authorization to join the study, the participant was asked to sign the Informed Consent Form. The nurses working in the institutions proposing the study agreed to participate in the study and the semi-structured interviews were conducted, individually, in a private room in the maternity hospitals, free of noise, between November and December of 2016, lasting for an average of 60 minutes.

Initially, the sociodemographic data collection form was filled out. Then, to acquaint the interviewees to the main research theme, a semi-structured interview was carried out, using the thematic script that started with a broad research question: In your opinion, what are the humanization actions in prenatal assistance? The extent of the script presented specific questions directed to nurses who worked in prenatal care, such as: the concept of prenatal care humanization; humanization actions in the care of pregnant women; recommendation and use of non-pharmacological methods by nurses in pregnancy; difficulties, easiness and suggestions of nurses to carry out humanization practices; training of professionals to carry out humanization practices in prenatal care; institutional support, physical structure and articulation among professionals; and services to benefit the achievement of humanization practices by nurses.

It is noteworthy that the interview script was planned under the recommendations of the Humanization Program for Prenatal and Birth and Rede Ce-gonha<sup>(12-13)</sup>, and that the questions and answers could be complemented to provide clarity and depth to the relevant aspects of the research<sup>(11)</sup>.

The interviews were recorded and conducted by one of the authors, a nurse with experience in humanized prenatal care and childbirth and who was

not part of any of the services. Subsequently, the interviews were transcribed and revised, after a second listening, to grant reliability of the statements<sup>(11)</sup>.

The data were submitted to content analysis which consisted of prior examination, material exploration and treatment of the results<sup>(14)</sup>. Initially, the interviews were read several times by the first author, the point in which the relevant topics were identified and grouped in a thematic framework, organized based on the main modules of the study object. In the second moment of the analysis, recurring ideas, similar experiences, and patterns of behavior were assembled. The main themes identified were related to the nurses' perceptions about the implementation of humanization activities in the surveyed maternity hospitals, which resulted in the nurses' perceptions about humanized care in high-risk prenatal care.

The data were analyzed by an obstetric nurse author, with experience in assisting women in labor and delivery, confirmed by the other authors, and interpreted based on the recommendations of Brazil's Ministry of Health<sup>(12-13)</sup>.

The interviewees' anonymity was granted, using the identification of the statements, with the number and region where the participant worked. The study was approved by the Research Ethics Committee, according to an opinion No. 923,073/2014 and Presentation Certificate for Ethical Appreciation no. 38100614.0.000000.5404. Participants voluntarily accepted to be part of the study and signed the Informed Consent Form before the interviews.

## Results

As for the participants' characteristics, it was observed that the age ranged from 35 to 55 years old, three were mixed race and three white, in total, were married. Regarding religion, four of the participants were Catholics, one Protestant and one Spiritualistic. Time since graduation ranged from 13 to 33 years, had been working from five to 30 years of prenatal care activities, worked 30 hours per week and took

training, qualification, or specialization courses after graduation. They reported that the motivation to work in the area emerged during graduation. Two nurses from Maternity A held management positions in the service.

### **Nurses' perceptions of humanized care in high-risk prenatal care**

Nurses from both institutions reported that the concept of humanized prenatal care included several activities by professionals, such as embracement of the pregnant woman by the nursing team, personalized care and encouraging connection between the pregnant woman and the professional: *The first thing is to embrace the pregnant woman, explain well how the institution works, welcome her so there is a connection between you [the professional] and this pregnant woman* (Nur. 1 A). *It's about making the pregnant woman empower herself of that knowledge, to be independent to choose what she wants, finding what is best for her, and she can see in this professional, a link, a relationship, be comfortable* (Nur. 3 B).

They reported that humanized prenatal care was organized based on educational actions in groups, including encouraging the presence of the companion of choice for pregnant women, breastfeeding and guidance on the use of non-pharmacological methods for pain relief during childbirth, such as shower bath massage, walking, and the importance of keeping the upright positions during labor and delivery: *We focus on the signs and symptoms of labor, body changes during pregnancy, and what her body will show you [pregnant woman], what she should bring when she comes to prenatal consultation and the importance of a loved person in labor* (Nur. 1 A).

They stated that the techniques used to monitor labor were carried out along with other professionals: *Physiological changes in pregnancy, fertilization, physical activity during pregnancy, baby care, labor and delivery, food, rights and legislation of the pregnant woman, use of the ball, squat exercises, all fours position, walking, shower and relief massages* (Nur. 1 B).

The participants mentioned the visits guided by nurses in the emergency room, delivery room and in the joint accommodation, as well as the articulation

with the other health professionals: doctors, physiotherapists, psychologists and social workers, to carry out the educational groups' actions and comprehensive care: *We made visits to the hospital, showing where they will enter, the obstetric center and the joint accommodation* (Nur. 1 A). *We take a guided tour with the patients, so that they have contact with the teams, with the unit, so that it is not something strange for them* (Nur. 3 B).

Nurses at Maternity A reported directing the visit around with the pregnant woman, providing information individually or in groups and discussing different themes, according to gestational age. Besides, they referred to the importance of active listening, privacy respect, explaining technical terms and providing information on signs of labor and accommodation: *In the post-consultation appointment, then we talk about the signs and symptoms of labor, how she will arrive, where she will arrive, what she will hear, we will give a kind of a summary of the labor group, but it is more summarized and more individualized* (Nur. 3 A).

The participants of Maternity B reported that the patients were informed about the educational activities carried out during the prenatal period and the activity of the outpatient clinic when they were embraced. They reported about the need of nurses' training to enable pregnant women to have autonomy during labor and the relevance of the holistic care principles and referral to a multidisciplinary team, when necessary: *Humanization is very incorporated in the assistance and management areas, through training and team meetings* (Nur. 2 B). Nurses who performed management tasks reported that women in prenatal care were invited to visit the emergency, delivery and a joint accommodation at the beginning of the third trimester, and supported the implementation of strategies to humanize prenatal care: *We also show them everything the institution can offer and outside the institution* (Nur. 3 B).

The participants made some reference to humanization practices according to the current rules of prenatal care of Brazil's Ministry of Health, which aim to stimulate the mother's preparation since prenatal care for the experience of childbirth and breastfeeding. When mentioning what the facilities are, they re-

ported about multi-professional teamwork, adequate physical structure, and management support: *The cooperation of some nursing professionals and other categories makes it easier in terms of group care...* (Nur. 3 A). *We have a very good physical structure, we have television, we have the ball to demonstrate non-pharmacological methods, we have materials, videos...* (Nur. 2 B).

Regarding the adversities, they mentioned that the small number of nurses to meet the excessive demand of pregnant women compromised the quality and organization of services, as it was not possible to explore relevant information at that time: *The main adversity is the excessive number of clients that ends up reducing a little the quality of our service* (Nur. 3 A).

The suggestions mentioned by the nurses at the two institutions were to improve the communication between professionals and pregnant women, early approach of pregnant women for prenatal care, the arrangement of educational material on all subjects and ensure access to maternity at the time of delivery, so as not to compromise the proposed care since prenatal. They stressed carrying out strategies to make easier the access to maternity at the time of delivery, so that the care provided during prenatal consultation appointments and prenatal training was not compromised: *We need to ensure that the pregnant women who had the prenatal care here will have a bed for delivery* (Nur 3 B). *Create a complete labor brochure to support patients who do not have access to information* (Nur 1 A).

At Maternity B, the participants explained that the implementation of humanized assistance and the training of health professionals were developed based on the recommendations of the programs of prenatal assistance and humanization of birth, from Brazil's Ministry of Health: *We have this requirement to keep all our protocols up to date, all of our practices must be registered and guided by the protocol* (Nur. 1 A). Also, they highlighted the factors that favored the implementation of activities, including the involvement of nurses with the tasks, multidisciplinary care, motivation, and teamwork. As for the disadvantages of implementing humanized care, a nurse mentioned the model of biomedical care incorporated in the mindset of pregnant women, which

leads them to seek prenatal services only for medical consultation appointments: *Here the team is very motivated. And so... it is a team that is really into this idea. "Let's do this!" "Let's do it!" And soon they are putting into practice* (Nur. 2 B). *This model of biomedical assistance is really incorporated in people's minds; they just want to come here for medical appointments* (Nur. 1 B).

Two of the participants in Maternity A mentioned that they were not aware of the institution's internal policy on the humanization of prenatal care, and one of them referred to the most recent recommendations on humanization proposed by the current Brazilian Ministry of Health's policy. One nurse mentioned that, because the service was linked to learning, the attendance of the teacher supported the clarification of doubts and the implementation of new humanization actions: *The institution is linked to the Baby-friendly Hospital and, in this part of breastfeeding, it comprises all the training of the professionals, it has the whole sequence, each one with his/her own sector* (Nur.2 A). *We have the support from the service coordination team, from other teams and other professionals* (Nur. 3 A).

## Discussion

The fact that the study was carried out only with nurses, and not with all the professionals that make up the multi-professional team, was considered a limitation. However, the scientific contributions of the present study that can impact the process of training nurses are highlighted, in the implementation of multidisciplinary actions based on public policies, appreciation of obstetric nurses in high-risk prenatal care assistance and improving work processes and institutional protocols. Thus, this study suggests attending research that investigates the management of this care, the safety of pregnant women in the maternity environment, permanent training and the nurses working.

The findings of this investigation showed that the ability of the interviewed nurses about the humanization assistance to women during prenatal care was up to date with the main recommendations proposed by the current guidelines of Brazil's Ministry of

Health, which recommend humanization actions from prenatal to the childbirth<sup>(8)</sup>. It became evident that the humanization practices carried out by the participants of this study confirm the results of another study, by proving that adequate prenatal care embraces health promotion actions, disease prevention, early detection and treatment of complications and preparation for birthing<sup>(15)</sup>.

It was evident that the adequate physical structure of the two maternities surveyed gave support to achieve humanization practices, however, it is necessary to invest in professional training to perform humanized prenatal care. Studies report that one of the challenges to having qualified prenatal care is the training of nursing professionals to care for women in the puerperal and pregnancy cycle, the promotion of quality of care and user satisfaction<sup>(15-16)</sup>.

The humanization practices mentioned in this study constitute as favorable ones proven in other studies and confirm findings from a previous study, by pointing out that the role of nurses as an active element in the health team is increasingly expanding the prenatal care, by hosting the pregnant woman and the companion in a comfortable way, to have suitable dialogue, during the prenatal consultation appointment, to benefit the connection between the professional and the pregnant woman and provide a better humanized care<sup>(16)</sup>.

The literature, however, points that the practice of nurses in prenatal care is still fragmented, with support for interventionist actions, with weakness in professionals training and little recognition of the profession, making it necessary to expand the debate on the topic, to promote changes in nursing teaching and practice<sup>(8)</sup>. The humanization exercises mentioned in this study are confirmed by other researches<sup>(6,17)</sup>.

Health education in prenatal care enables the preparation of women for pregnancy and childbirth, besides increasing pregnant women's adherence. However, women still face difficulties regarding access to prenatal care, the shortage of professionals to compo-

se the multidisciplinary team and a lack of institutional structure<sup>(18)</sup>.

This study showed that part of the interviewees was unaware of the institutional policy for the humanization of prenatal care. It is reported that the minimum content of humanization of prenatal care is not being carried out satisfactorily in several regions of Brazil and that humanization remains a government policy far from becoming effective, due to the lack of knowledge of health professionals on this subject<sup>(17)</sup>.

The suggestions reported by the participants to improve prenatal care confirm the results of another study, by indicating that the disconnection between prenatal care and childbirth triggers an intensive search for hospital bed, making it necessary to speed up the care during the services, improve the information provided, ensure follow-up at delivery and strengthen the active listening and the pregnant woman's confidence<sup>(19)</sup>. It is also mentioned that health education rates are low<sup>(18)</sup> and the organization of health services does not always allow to act based on the logic of a progressive assistance network.

Concerning the demand for specific training on the humanization of prenatal care in the investigated maternities, it is highlighted that the multidisciplinary approach to prenatal care can improve the understanding of pregnant women about the issues discussed during the consultation appointment, and promote significant learning among people involved<sup>(20)</sup>.

## Conclusion

The participants attributed the concept of humanization of high-risk prenatal assistance care to the hosting of the pregnant woman, to personalized care and the encouragement of connections between pregnant women and professionals. Humanization practices were aimed at hosting pregnant women, guided visits by nurses, training pregnant women, personalized care, guidance on the use of non-pharmacological methods for pain relief during labor, and promoting

connections with pregnant women. These practices are based on the current guidelines of Brazil's Ministry of Health. It was found that the multi-professional teamwork, the appropriate physical structure, and management support are factors that contribute to the implementation of humanization practices. The investigated nurses pointed to the importance of training and the adequate staffing of professionals.

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## Contribution

Jorge HMF contributed to the conception, design, analysis, and interpretation of data, writing of the article, critical review of the intellectual content and in the final approval of the version to be published. Silva RM collaborated with data analysis, article writing and critical review of intellectual content. Makuch MY collaborated with writing the article, critical review of the intellectual content and final approval of the version to be published.

## References

- Garcia EM, Martinelli KG, Gama SGN, Oliveira AE, Esposti CDD, Santos Neto ET. Gestational risk and social inequalities: a possible relationship? *Ciênc Saúde Coletiva*. 2019; 24(12):4633-42. doi: <https://doi.org/10.1590/1413-812320182412.31422017>
- Ferreira Junior AR, Oliveira Filho JT, Albuquerque RAS, Siqueira DD, Rocha FA, Rodrigues MESH. O enfermeiro no pré-natal de alto risco: papel profissional. *Rev Baiana Saúde Pública*. 2017; 41(3):650-67. doi: <https://doi.org/10.22278/2318-2660.2017.v41.n3.a2524>
- Holness N. High-risk pregnancy. *Nurs Clin North Am*. 2018; 53(2):241-51. doi: <http://dx.doi.org/10.1016/j.cnur.2018.01.010>
- Rodrigues ARM, Rodrigues DP, Viana AB, Cabral LS, Silveira MAM. Nursing care in high-risk pregnancies: an integrative review. *Online Braz J Nurs*. 2016; 15(3):472-83. doi: <http://www.objnursing.uff.br/index.php/nursing/article/view/5434>
- Phillippi JC, Holley SL, Payne K, Schorn MN, Karp SM. Facilitators of prenatal care in an exemplar urban clinic. *Women Birth*. 2016; 29(2):160-7. doi: <https://doi.org/10.1016/j.wombi.2015.09.007>
- Karabulut Ö, Potur DC, Merih YD, Mutlu SC, Demirci N. Does antenatal education reduce fear of childbirth? *Int Nurs Rev*. 2016; 63(1):60-7. doi: <https://doi.org/10.1111/inr.12223>
- Heaman MI, Sword W, Elliott L, Moffatt M, Helewa ME, Morris H, et al. Barriers and facilitators related to use of prenatal care by inner-city women: perceptions of health care providers. *BMC Pregnancy Childbirth*. 2015; 15(2):1-13. doi: <https://doi.org/10.1186/s12884-015-0431-5>
- Mendes RB, Santos MJ, Prado DS, Gurgel RQ, Bezerra FD, Gurgel RQ. Evaluation of the quality of prenatal care based on the recommendations Prenatal and Birth Humanization Program. *Ciênc Saúde Coletiva*. 2020; 25(3):793-804. doi: <https://doi.org/10.1590/1413-81232020253.13182018>
- Jorge HMF, Makuch MY. Nursing training and practice on humanization actions in monitoring the delivery in Brazil. *Int Arch Med*. 2016; 9(212):1-12. doi: <https://doi.org/10.3823/2083>
- Maternidade-Escola Assis Chateabriand. Missão, visão e valores [Internet]. 2015 [cited Feb 10, 2020]. Available from: <http://www2.ebserh.gov.br/web/meac-ufc/missao-visao-e-valores>
- Patton MQ. Qualitative research & evaluation methods: integrating theory and practice. Newbury Park, CA: Sage Publications; 2016.
- Ministério da Saúde (BR). Humanização do parto: humanização no pré-natal e nascimento [Internet]. 2002 [cited Apr 13, 2020]. Available from: <http://bvsms.saude.gov.br/bvs/publicacoes/parto.pdf>
- Ministério da Saúde (BR). Portaria nº 1.459 de 24 de junho de 2011. Institui, no âmbito do Sistema Único de Saúde (SUS), a Rede Cegonha [Internet]. 2011 [cited Apr 13, 2020]. Available from: [https://bvsms.saude.gov.br/bvs/saudelegis/gm/2011/prt1459\\_24\\_06\\_2011.html](https://bvsms.saude.gov.br/bvs/saudelegis/gm/2011/prt1459_24_06_2011.html)

14. Bardin L. *Análise de conteúdo*. São Paulo: Edições 70; 2016.
15. Gilmer C, Buchan JL, Letourneau N, Bennett CT, Shanker SG, Fenwick A, et al. Parent education interventions designed to support the transition to parenthood: a realist review. *Int J Nurs Stud*. 2016; 59:118-33. doi: <https://doi.org/10.1016/j.ijnurstu.2016.03.015>
16. Barreto CN, Wilhelm LA, Silva SCD, Alves CN, Cremonese L, Ressel LB. The Unified Health System that works: actions of humanization of prenatal care. *Rev Gaúcha Enferm*. 2015; 36(spe):168-76. doi: <https://doi.org/10.1590/1983-1447.2015.esp.56769>
17. Silva AA, Jardim MJA, Rios CTF, Fonseca LMB, Coimbra LC. Prenatal care of habitual- risk pregnant women: potentialities and weaknesses. *Rev Enferm UFSM*. 2019; 9(15):1-19. doi: <https://doi.org/10.5902/2179769232336>
18. Chen J, Huang J, Ooi S, Lin L, Chen C, Liu YS, et al. Effect of flexible patterns of health education on enhancing the compliance of pregnant women from Tibet, China. *Medicine (Baltimore)*. 2020; 99(1):e18447. doi: <https://doi.org/10.1097/MD.00000000000018447>
19. Villamil L, Mercedes M, Botero A, Pilar M, Guzmán C, Inés C. Humanized pregnancy care: the look of pregnant women who go to a hospital health unit. *Enferm Actual Costa Rica*. 2020; (38):180-95. doi: <http://dx.doi.org/10.15517/revenf.v0i38.38376>
20. Gadelha IP, Diniz FF, Aquino PS, Silva DM, Balsells MMD, Pinheiro AKB. Social determinants of health of high-risk pregnant women during prenatal follow-up. *Rev Rene*. 2020; 21:e42198. doi: <https://doi.org/10.15253/2175-6783.20202142198>



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