



Evaluation of the quality of pre-natal care offered by the nurse: exploratory research

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ABSTRACT

Objectives: to evaluate the pre-natal care rendered by the nurse; to analyze a nursing consultation as perceived by pregnant women. **Method:** exploratory, descriptive, qualitative research developed at a Family Health Clinic in the Municipality of Rio de Janeiro. A population of the study consisted of 15 pregnant women, using an evaluation framework proposed by Avedis Donabedian. **Results:** the study was aimed at young pregnant women, married, the partner's participation not encouraged by the nurse, but the pre-natal visit assigned a positive score. The pre-natal room counted on the necessary equipment, but the card registration was inadequate. **Conclusion:** greater incentive regarding the partner's presence is required, as well as coherence between the records inserted into the pregnant woman's card and the nurse's evaluation of the care provided.

Descriptors: Pre-natal care, Health evaluation, Nursing care.

INTRODUCTION

Maternal-infant care is a strategy of the Health Ministry aimed at the reduction of possible damages to the mother-child binomial. In this strategy, one of the actions includes the pre-natal care, focused on diseases prevention, health promotion and treatment of problems possibly occurring during the gestational period and that increase the vulnerability of both the pregnant woman and the neonate, intended to reduce maternal and perinatal mortality, particularly due to sensitive and avoidable causes ⁽¹⁾.

Taken as an indicator of social development, the goal of maternal mortality reduction was a theme of the United Nations Organization's agenda, the fifth of the Millennium Development Goals, to be reached by 2015 – a document signed by Brazilian government ⁽²⁾. Despite the efforts for the reduction of the mortality rates, Brazil is still far from reaching this goal, and the goal now is less than 20 maternal deaths per 100 live neonates until 2030⁽³⁾.

A study that analyzed the prevention of maternal mortality during the pre-natal period determined that hypertension diseases, hemorrhages and sepsis were the main causes of direct maternal death, and that adequate and qualified pre-natal care can reduce deaths due to indirect causes in up to 21%, altering and favoring both the mother's and the baby's health⁽⁴⁾.

Good quality, humanized, integral and holistic pre-natal care requires efforts

for the organization and administration of health services, permanent education for the professionals and the use of health technologies for the development of good quality follow-up during the pregnant puerperal period ⁽⁵⁾.

As a member of the health team involved with the prenatal assistance, the nurse has legal support for the integral follow-up of a low risk pregnant, in charge of providing nursing consultations, prescribing nursing assistance, prescribing medicines, and performing health education activities ⁽⁶⁾. Campos *et al.* discuss the importance and effectivity of the nursing consultation as protagonist during the pre-natal period: bringing together technical care, favorable reception, communication and health promotion, the nursing consultation offers integral assistance⁽⁷⁾.

Thus, considering as main goals to evaluate the care offered by the nurse during the pre-natal period of low risk pregnancy, and to analyze how pregnant woman perceive the pre-natal consultation offered by the nurse, the question to be answered in this study was: does the nurse offer good quality in the pre-natal care, based on parameters as recommended by the Ministry of Health?

METHOD

This is a descriptive field investigation with qualitative approach. The research was developed in a Family Health Clinic located in the West Zone of Rio de

Janeiro City, during April and May, 2015. The unit is composed by eight teams from the Family Health Strategy that included medicine doctors, nurses, nursing technician and Community Health Agents (CHA).

The participants were fifteen pregnant women who were registered in the health unit and who did fulfill the inclusion criteria: being over 18 years old, with at least 35 weeks of gestation, carriers of the pregnancy card and having attended to at least six prenatal appointments; and as exclusion criteria, being under 18 years old. In our visits to the health unit were made (two per shift), the approach and the invitation were carried out, and by means of aleatory procedures, the objectives of the research were explained and women were approached and invited to take part in the study.

For data collection, a structured questionnaire, based on the evaluation referential proposed by Donabedian was used, and the teams of the family health unit were identified by the alphabetic characters A, B, C, E, F, G, H. The model proposed for the health evaluation was based on the analysis of structure, process and results⁽⁸⁾. For Donabedian, the study of the patient's satisfaction is the most important purpose of studies on care practices, although it may not be a direct or indirect indicator, but an approximate indication of the quality of the health care provided.

The questionnaire elaborated for the study was structured in two blocks. The first one was aimed obtaining information about

the stage "STRUCTURE", pointing out the items that should be available at the unit's premises. The second bloc was focused on the evaluation of the stage "PROCESS", and involved the items inserted into the pregnant woman's card, such as identification, obstetric history, laboratorial image exams, clinical exams, use of medicines and intercurrentences.

Each item of the questionnaire concerning the stage "STRUCTURE" was assigned two points for YES answers and one point for NO answers; and for the questionnaire concerning the stage "PROCESS", three points were assigned for YES answers, two points for PARTIALLY answers and one point for NO answers. The minimum punctuation in both STRUCTURE and PROCESS dimensions was 36, and the maximum was 92. For data classification in each dimension was used the Categories and Scores Table, proposed in the document "Evaluation Tool for Health Centers and Units", as shown in the Box bellow.

Box 1 – Classification score on the quality of nursing consultations based on Donabedian Dimensions. Rio de Janeiro, RJ, Brazil, 2015

SCORE	PERCENTAGE	CLASSIFICATION
36 to 45.8	00 to 49.9	Insufficient
45,9 to 68.8	50 to 74.9	Precairous
68,9 to 82.7	75 to 89.9	Satisfactory
82.8 to 92	90 to 100	Excellent

Source: Adapted from Vituri. 2013

For data collection provided by the pregnant women as we searched for her perception about the pre-natal consultation and about the nursing consultation, a semi-structured questionnaire was applied, with five open questions. Minayo stands for the field research and semi-structured interviews, a phenomenon that allows for bringing closer to each other the facts as they actually did occur and the reality of the theory about the issue under analysis ⁽⁹⁾. Data were analyzed after the interviews records were transcribed and as findings in the questionnaires became available.

The signature of a Free and Enlightened Consent Term was required, according to Resolution Nr. 466 as of December 12, 2012. The research was authorized by the Ethics and Research Committee of Castelo Branco University under number 005/2015.

RESULTS

The total sample of the study was 15 pregnant women. As to the marital situation, it was observed that nine (60%) were married, while six (40%) declared being single.

As to the incentive by the nurse for the father's participation during the prenatal

consultation, 13% affirmed it did not occur and two (20%) affirmed it did occur. As to occupations, six (40%) referred domestic tasks and nine (40%) informed other non specified activities. The evaluation of materials and equipment was based on 2012 Technical Handbook on Low Risk Pre-

Natal Care ⁽¹⁰⁾ and it was observed that none of the teams counted on Sheron tweezers and Perinatal Filling Cards. It was also observed that there were no gynecological tables in the care room, so that, if necessary, the pregnant woman should be conducted to the "Women Health" room.

Concerning procedures, the pregnant woman's card is a source of registers during the pre-natal consultation and can be used to evaluate the quality of the pre-natal care provided. At this stage, the following information were observed in the card:

1) Socio-demographic data registered: In ten cards (66.66%) all information were registered: name, address, cadaster at the SISPRENATAL, phone number, marital state and schooling; and in five cards (33.33%) information were only partially registered.

2) Starting point of the pre-natal care and bookings: All cards showed more than six consultations already booked, as required by the Health Ministry.

3) Obstetric antecedents: Data such as previous pregnancies, abortions, number of deliveries, breast-feeding, date of the last gestation, neonate weighing less than 2,500g, and neonate with bigger weight were fully registered in 13 cards (86.66%) and partially registered in two cards (13.33%).

4) Immunization: Findings revealed that in ten cards (66.66%) there were vaccines registration and in five cards (33.33) there were no records, suggesting lack of knowledge about the importance of

immunization and prevention of neonatal tetanus ⁽¹⁰⁾.

5) Data on current pregnancy: 100% of the cards analyzed had data on weight, stature, Body Mass Index (BMI), blood pressure, edema, uterine height, fetal presentation, cardio-fetal beats (CFB), date of the last menstruation, probable delivery date (PDD), clinical breast exams, clinical exam and doubts, besides the professional signature, all duly registered.

During the interviews, the pregnant women were asked the following question: "Do

you manage to clear up your doubts during the pre-natal consultation with the nurse? 13 women (86%) answered YES, and two women (13.33) answered NOT

QUITE. The following statements can be highlighted:

I do, perfectly. (E 8)

Not quite, I get more attention from the doctor, not the nurse.(E6)

Not always. (E 10)

It depends on the day, some days consultations go in a hurry, other days there is more attention. (E 4)

Another question evaluated was: "Is there some kind of orientation about gestation and woman's health during the pre-natal consultation with the nurse?" This question was answered YES by 14 women (93.33%) answered YES and two answered NO by two women.

6. Chart of nutritional follow-up filled in: The model proposed is in the basic

attention notebook Nr. 32⁽¹⁰⁾. We observed that none of the interviewees (100% of the pregnant women in the research) had this chart in the card model used in the city of Rio de Janeiro.

7. Chart of uterine curve/gestational age filled in: 14 (93.33%) women did not have the register, and only one (6.66%) did. It should be stressed that all cards did record the value of uterine height.

8. Personal and family antecedents filled in: Information such as twin delivery, diabetes, arterial hypertension, malformation, among others, were registered in all cards.

As to data obtained from laboratorial exams, the record of ABO-Rh type was present in 12 cards (80%) and was absent in three cards (20%). Hemogram and fast glycemia were not registered in four cards (26.66%).

Analyzing the indicator of the Venereal Disease Research Laboratory (VDRL), we observed that records were present in 14 cards (93.33%) and in only one (6.66%) it was not. When checking type 1 urine and urine culture, we observed that records were absent in 14 cards (93.33%) and was present in only one card (6.66). As to the oncotic cytology exam, only two interviewees were referred for this exam (13.3), and were up to date.

The analyses of the questionnaires about observation of the pre-natal room structure covered 16 items, and all teams scored 28 out of the total of 30.

The evaluation of procedures records in the pregnant women's cards involved 20

items and put in evidence both the H team, scoring 39.4 points, and the E team, scoring 51 points out of a maximum of 60 for this variable. The final ranking, aimed at evaluating the quality of the nursing consultation in pre-natal care, indicates the family health teams A, D and H as precarious for the pre-natal assistance, and teams B, C, E, F and G as satisfactory, according to the recommended items. Thus, 37.5% of the

pre-natal nursing offer in those units were considered precarious, and 62.5% were considered satisfactory.

During the interviews, the pregnant women were asked about the pre-natal consultation duration, and the answers showed an average of 15 to 30 minutes. When questioned about their evaluation of the pre-natal consultation offered by the nurse, the answers highlighted the attention they received as a top point, besides the excellency of the service rendered, as stands out in this statement:

"I evaluate it as a good consultation, very enlightening, the nurse is excellent..." (E 8)

Other interviewees remark their preference for the medical consultation as compared with the nurse's, questioning the nurse's technical skills, as emphasized in this statement: "I think it is not correct, because the right thing is (to be offered)? by the doctor, right? Because the doctor will explain about everything, the nurse does not know that much" (E11)

Summing up, most interviewees manifested positive evaluation about the pre-natal consultation offered by the nurse. It's worth stressing the importance of the nurse in providing clear information and in fulfilling the pregnant women's needs in their singularity.

DISCUSSIONS

Besides a precocious start, larger number of consultations and exams, studies show that the participation of the partner during the pre-natal consultation can be more favorable for the attention regarding maternal health. The gestation period is to be lived by the couple, and being close in the pre-natal follow-up allows for the creation of affective feelings and bonds⁽¹¹⁾.

A study carried out with primiparas to evaluate the influence of the partner's participation in the pre-natal period demonstrated that the experience of being accompanied by the partner during the delivery process was considered positive by almost all women in labor, stressing the importance of this companion in that occasion, strengthening the bonds of the couple and with the neonate⁽¹²⁾.

Thus, the lack of incentive by the professional nurse on the partners participation, as demonstrated in this study, becomes a factor of concern, as it can increase the pregnant woman's vulnerability.

Another finding of the study was the lack of vaccine registrations. Studies by Mayor *et al* ⁽¹³⁾ show that approximately 68% of the cards of pregnant women in the

research did not have the register of the immunization status, thus demonstrating that the lack of these registers denotes lack of knowledge about the importance of immunization and prevention of the neonatal tetanus.

Monitoring the vaccines' situation of the pregnant woman is extremely important for the prevention of vaccine-preventable diseases. This action impacts not only the woman's health, but mainly the fetus' health and, later, the neonate's health as well. The DTP vaccine to be administered to the pregnant woman is meant to ensure the reduction of the incidence of whooping cough and the resulting mortality among neonates. This disease is increasingly reported in older children, adolescents and adults, being the transmission more frequent for children, especially those under one year, since they can present atypical reactions, making diagnosis more difficult and enabling the transmission to sucking babies under greater risk of development of complications and death⁽⁴⁾.

Besides the DTP, other vaccines, such as influenza and hepatitis, are also recommended in the Health Ministry calendar to pregnant women, whose right is assured at all basic attention units.

The Handbook on Low Risk Pre-Natal Care⁽¹⁰⁾ also indicates the fast anti-HIV test as one of the exams that must be required in the very first pre-natal consultation. In our research, only 12 (80%) have submitted to it. A study carried out in Pará, where the prevalence of the virus infection was 2.44% of the sample, has evidenced that 95.15% of the pregnant women made

the anti-HIV exam in the first semester of the year, and only 31.71% repeated in the third quarter of the year. These data demonstrate the need for more attention concerning this exam, in order to prevent vertical transmission and to warrant neonate health, possibly by means of precocious interventions for pregnant women, with administration of antiretrovirals (ARV) intended to hinder that transmission, and/or administration of ARV to the neonate⁽¹⁵⁾.

In our study, sorology for toxoplasmosis was registered in the cards of only three (20%) of the interviewees, and 12 (80%) cards had no records. Unlike these findings, Balsells *et al.*⁽¹⁶⁾ observed that this exam was required in consultations for 76.6% of their sample. The exam for the detection of toxoplasmosis is an extremely important component of the "Rede Cegonha": if positive, the pregnant woman must be referred to high risk pre-natal attention. The lack of a diagnosis impacts both the woman's and child's health, and the baby is at risk to be born with congenital toxoplasmosis.

Another point that was analyzed in the study was the average duration of the nursing consultation, since it can be related to the quality of the consultation. The user of health services takes the duration of the consultation as one of the satisfaction parameters.⁽¹⁸⁾ In this study, consultations varied from 15 to 20 minutes. In the pre-natal consultation, it is very important that the nurse develops not only procedures, but also educational orientation as a strategy for the reduction of risk factors and

vulnerabilities ⁽¹⁰⁾. A clear conversation on relevant themes, such as breast-feeding, cares during the pregnancy, ISTs prevention, reduction of risk factors for the prevention of co-morbidities such as hypertension and diabetes, among others, may strengthen the bond of the pregnant woman and the nurse and make possible an increased empowerment and autonomy of this pregnant woman for self-care.

The results of this study that, in most cases, evaluates as satisfactory the nursing consultation, are similar to those found in other studies. However, the need can be noticed for more attention regarding health education questions, more incentive for the partners' presence in the consultations, and more than just technical interventions, thus aiming at the improvement of pregnant women's health.

CONCLUSION

The process of evaluation of the quality of the assistance intends to evaluate the neonates' health, besides listening to complaints, fears and doubts of the pregnant woman and her companion, trying to contemplate the entire bio-psychosocial and spiritual dimension. Adequations must be made to incentive the father's presence during the consultation, making possible the promotion of bonds and a globalized look of the family.

Considering the objectives of this study, one can observe that important exams for the pregnant woman's health were sometimes under-recorded, making health interurrences easier to take place.

Evaluating our study, despite satisfactory performance of the majority of the nurses according to the criteria established, considered as minimal for low complexity care, it was noticed that some gaps should be filled, mainly with respect to uniformity and adequacy of the pregnant woman's card, a fact that may lead to ethical and juridical repercussions and that must be more praised by the professionals.

Although the nurse is a qualified professional, it was evidenced on the part of some of the pregnant women that they were still insecure and suspicious for being attended by this professional. On the other hand, other pregnant women feel at ease, having no complaints about the assistance.

The satisfaction of the pregnant woman is crucial in the evaluation of quality, being absolutely necessary to recognize fragile areas, looking for new dimensions in the process of offering care, in order to warrant quality and excellence in the assistance provided.

REFERENCES

1. Brasil. Ministério da Saúde. Instituto Sírio-Libanês de Ensino e Pesquisa. Protocolos da Atenção Básica: Saúde das Mulheres. Brasília: Ministério da Saúde, 2016.
2. Souza JP. A mortalidade materna e os novos objetivos de desenvolvimento sustentável (2016–2030). *Rev Bras Ginecol Obstet* [Internet]. 2015 [cited 2020 Julho 26]; 37(12):549-51. Available from: <http://www.scielo.br/pdf/rbgo/v37n12/0100-7203-rbgo-37-12-00549.pdf>

3. Fernandes BB, Nunes FBBF, Prudêncio PS, Mamede FV. Pesquisa epidemiológica dos óbitos maternos e o cumprimento do quinto objetivo de desenvolvimento do milênio. *Rev Gaúcha Enferm* [Internet]. 2015 [cited 2020 Julho 26]; 36(esp.): 192-199. Available from: https://www.scielo.br/scielo.php?script=sci_arttext&pid=S1983-14472015000500192&tlng=pt
Doi: <https://doi.org/10.1590/1983-1447.2015.esp.56792>
4. Carvalho ML, Almeida CAL, Marques AKL, Lima FF, Amorim LMM, Souza JML. Prevenção da mortalidade materna no pré-natal: uma revisão integrativa. *Rev Interd* [Internet]. 2015 [cited 2020 Julho 26]; 36(8): 178-184. Available from: <https://revistainterdisciplinar.uninovafapi.edu.br/index.php/revinter/article/view/733>
5. Barros MEO, Lima LHO, Oliveira EKB. Prenatal care in the city of quixadá: a descriptive study. *Online Braz J Nurs* [Internet]. 2012 Aug [cited 2020 Julho 26]; 11(2):319-30. Available from: <http://www.objnursing.uff.br/index.php/nursing/article/view/3782/html>
6. Crislaine SS, Kleyde VS, Valdecyr HA, Bruno Augusto CC, Leila SS. Nurse's performance in prenatal consultation: limits and capabilities. *Rev Pesq Cuidado Fundam Online* [Internet]. 2016 [cited 2020 Julho 26]; 8(2):4087-4098. Available from: <https://www.redalyc.org/articulo.oa?id=505754104031>
7. Campos ML, Veleza AA, Coelho DF, Telo SV. Percepção das gestantes sobre as consultas de pré-natal realizadas pelo enfermeiro na atenção básica. *J Nurs Health* [Internet]. 2016 Dez [cited 2020 Julho 26]; 6(3): 379-390. Doi: <https://dx.doi.org/10.15210/jonah.v6i3.7949>
8. Donabedian A. An introduction to quality assurance in health care. New York: Oxford University Press, 2003.
9. Minayo MCS. O desafio do conhecimento: pesquisa qualitativa em saúde. 3.ed. São Paulo: Hucitec/Rio de Janeiro: Abrasco, 1996.
10. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Atenção ao pré-natal de baixo risco / Ministério da Saúde. Brasília: Editora do Ministério da Saúde, 2012.
11. Cardoso VEPS, Silva Junior AJ, Bonatti AF, Santos GWS, Ribeiro TAN. A participação do parceiro na rotina pré-natal sob a perspectiva da mulher gestante. *Rev Pesq Cuidado Fundam online* [Internet]. 2018 [cited 2020 Julho 26]; 10(3):856-862. Available from: <https://pesquisa.bvsalud.org/portal/resource/pt/biblio-906762>
12. Holanda SM, Castro RCMB, Aquin PS, Pinheiro AKB, Lopes L, Martins ES. Influência da participação do companheiro no pré-natal: satisfação de primíparas quanto ao apoio no parto. *Texto Contexto Enferm* [Internet]. 2018 [cited 2020 Agosto 04]; 27(2). Doi: <https://doi.org/10.1590/0104-070720180003800016>
13. Mayor MSS, Herrera SDSC, Araujo MQ, Santos FM, Arantes RV, Oliveira NA. Avaliação dos indicadores da assistência pré-natal em Unidade de Saúde da Família, em um município da Amazônia Legal. *Rev Cereus* [Internet]. 2018 [cited 2020 Agosto 04]; 10(1):91-100. Available from: <http://ojs.unirg.edu.br/index.php/1/article/view/2079/636>
14. Brasil. Ministério da Saúde. Secretaria de Vigilância em Saúde. Departamento de Vigilância Epidemiológica. Coordenação Geral do Programa Nacional de Imunizações. Informe Técnico para Implantação da Vacina Adsorvida Difteria, Tétano e Coqueluche (Pertussis Acelular) Tipo adulto - dTpa. Brasília, 2014.
15. Araújo EC, MONTE PCB, HABER ANCA. Avaliação do pré-natal quanto à detecção de sífilis e HIV em gestantes atendidas em uma área rural do estado do Pará, Brasil. *Rev Pan-Amaz Saude* [Internet]. 2018 [cited 2020 Agosto 02]; 1(1): 33-39. Available from: http://scielo.iec.gov.br/scielo.php?script=sci_arttext&pid=S2176-62232018000100033&lng=pt&nrm=iso
Doi.org/10.5123/s2176-62232018000100005
16. Balsells MMD, et al. Avaliação do processo na assistência pré-natal de gestantes com risco habitual. *Acta Paul Enferm* [Internet]. 2018 [citado 2020

- Agosto 02]; 31(3): 247-254. Available from: https://www.scielo.br/scielo.php?script=sci_arttext&pid=S0103-21002018000300247&lng=pt&tlng=pt
Doi: <https://doi.org/10.1590/1982-0194201800036>.
17. Brasil. Ministério da Saúde. Secretaria de Vigilância em Saúde. Departamento de Vigilância das Doenças Transmissíveis. Protocolo de Notificação e Investigação: Toxoplasmose gestacional e congênita [Internet]. Brasília: Ministério da Saúde, 2018. Available from: http://bvsmms.saude.gov.br/bvs/publicacoes/protocolo_notificacao_toxoplasmose_gestacional.pdf
18. Livramento DVP, Backes MTS, Damiani PR, Castillo LDR, Backes DS, Simão AMS. Percepções de gestantes acerca do cuidado pré-natal na atenção primária à saúde. Rev Gaúcha Enferm [Internet]. 2019 [cited 2020 Agosto 02];40. available from: https://www.scielo.br/scielo.php?script=sci_arttext&pid=S1983-14472019000100420&tlng=pt
Doi: <https://doi.org/10.1590/1983-1447.2019.20180211>
19. Oliveira IG, Castro LLS, Massena AM, Santos LVF, Sousa LB, Anjos SJSB. Qualidade da consulta de enfermagem na assistência ao pré-natal de risco habitual. Rev Eletrônica Enferm [Internet]. 2017 [cited 2020 Agosto 02]; 19. Available from: <https://www.revistas.ufg.br/fen/article/view/40374>
Doi: <https://doi.org/10.5216/ree.v19.40374>
20. Martins QPM, Ferreira GSM, Araújo AEA, Amancio FMG, Araújo LM, Ferreira FIS. Conhecimentos de gestantes no pré-natal: evidências para o cuidado de enfermagem. Rev Políticas Publ [Internet]. 2015 [cited 2020 Agosto 02]; 14(2): 65-71. Available from: <https://sanare.emnuvens.com.br/sanare/article/view/827>

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