

PRENATAL CARE: DIFFICULTIES EXPERIENCED BY NURSES¹

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This study aimed to identify the difficulties nurses experience at the start of their professional life in prenatal care activities. Data were collected through interviews with 25 nurses who accompanied prenatal care in the basic health network of Rio Branco-AC, Brazil and were grouped according to the frequency and level of difficulty they mentioned. We observed that nurses did not demonstrate difficulties in a series of important prenatal care activities at the start of their professional life. However, they reported different levels of difficulties in other activities. Furthermore, the participants pointed out difficulties in activities that require knowledge (knowing) as well as abilities (know-how). This study also indicated flaws in undergraduate formation with respect to prenatal care, involving theoretical aspects as well as exclusively practical activities.

DESCRIPTORS: prenatal care; obstetrical nursing; education, nursing

ATENCIÓN PRENATAL: DIFICULTADES VIVENCIADAS POR LAS ENFERMERAS

La finalidad de este estudio fue identificar las dificultades vividas por las enfermeras en el inicio de su vida profesional, en las actividades relacionadas con la atención prenatal. Los datos fueron recopilados a través de entrevistas con 25 enfermeras que acompañaban el prenatal en la red básica de salud del municipio de Rio Branco-AC, Brasil, y fueron agrupados según la frecuencia y el grado de dificultad mencionado por ellas. Constatamos que las enfermeras no presentaron dificultades en una serie de actividades importantes en la atención prenatal, en el inicio de su vida profesional. Sin embargo, relataron que enfrentaron dificultades en otras. Estas dificultades se mostraron como siendo de diferentes grados. Señalaron dificultades en actividades que exigen conocimientos (saber), y también en actividades que necesitan de habilidades (saber-hacer). El estudio todavía indicó fallas en la formación de pregrado respecto a la atención al prenatal, tanto para aspectos teóricos como para actividades exclusivamente prácticas.

DESCRIPTORES: atención prenatal; enfermería obstétrica; educación en enfermería

ASSISTÊNCIA PRÉ-NATAL: DIFICULTADES VIVENCIADAS PELAS ENFERMEIRAS

Este estudo teve como objetivo identificar as dificuldades vivenciadas pelas enfermeiras, no início de sua vida profissional, nas atividades relacionadas à assistência pré-natal. Os dados foram coletados por meio de entrevistas com 25 enfermeiras que acompanhavam o pré-natal, na rede básica de saúde do município de Rio Branco-AC, e foram agrupados conforme a frequência e o grau de dificuldade referido por elas. Constatamos que as enfermeiras não apresentaram dificuldades em uma série de atividades importantes na assistência pré-natal, no início do exercício profissional. No entanto, relataram que enfrentaram dificuldades em outras. Essas dificuldades eram de diferentes graus. Apontaram dificuldades em atividades que exigem conhecimentos (saber) como também em atividades que necessitam de habilidades (saber-fazer). O estudo apontou ainda falhas na formação da graduação com relação à atenção ao pré-natal, tanto para aspectos teóricos como para atividades exclusivamente práticas.

DESCRIPTORES: cuidado pré-natal; enfermagem obstétrica; educação em enfermagem

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INTRODUCTION

Effective prenatal care plays a fundamental role in the result of the delivery and birth process, as well as in maternal and perinatal morbidity and mortality rates. Achieving effectiveness means that this care should aim to identify factors exposing maternal and fetal health to greater risk of negative results, as well as to know the right time to intervene, avoiding or reducing the noxious consequences of these risks⁽¹⁾.

High-quality prenatal care involves permanent technical training of health teams to solve the most prevailing problems, besides commitment to the needs experienced by the most vulnerable parts of the population⁽²⁾.

The World Health Organization (WHO) estimates that the risk of death due to pregnancy or birth-related causes during a woman's lifecycle amounts to 1/160 pregnancies in Latin America, against 1/2,400 in Europe and 1/5,600 in North America⁽³⁾.

In the search for safe motherhood, international entities have mobilized action strategies in the attempt to achieve safer pregnancies and births for women and their newborns. One of these strategies is the presence of a trained professional for care delivery to all women during the gravid-*puerperal* cycle⁽⁴⁾.

These professionals have been educated, trained and are proficient in the skills needed to handle normal pregnancies, as well as to identify and refer complications, and are responsible for applying them with competence⁽⁵⁾.

Being competent in a specific profession does not only imply having vast and large knowledge. Professionals need to know how to use, integrate or mobilize this knowledge when facing a real situation for action⁽⁶⁾.

Qualified professionals should be capable of covering a range of skills and knowledge, in different forms and contexts, to exercise their professional activity and be acknowledged as competent⁽⁷⁾.

Competence is also defined as individuals' capacity to mobilize all or part of their cognitive and affective resources to cope with a set of complex situations. This requires the precise identification of these resources, of the relations to be established among them and of the nature of "knowing how to mobilize"⁽⁶⁾. Therefore, competencies do not equal knowledge, they are not just know-how or attitude. Instead, being competent means the capacity to mobilize, integrate and orchestrate these resources. Professional competencies are constructed

continuously and while moving from one work situation to another⁽⁸⁾.

According to the Brazilian law that regulates professional nursing practice, nurses can accompany low-risk pregnant women throughout the prenatal period. In many health institutions, in the basic health network and in the Family Health Programs, widely spread across the country, nurses are expected to take charge of prenatal care. Thus, during education, nursing should train the skills needed to achieve proficiency and competency in prenatal care.

Epidemiological evidence shows that the higher the number of professionals qualified for care to women during the gravid-*puerperal* cycle, the lower maternal mortality levels will be⁽⁴⁾.

Prenatal care is the initial sign of the result of the delivery process, which is why high-quality care during pregnancy is fundamental. This requires professionals who are qualified to perform their activities and apt to develop essential competencies. Health educators in general and nursing educators in particular are constantly concerned about founding professional training not only on skills development, but also on competency acquisition to perform the standards established for professional practice. In this sense, we have been questioning whether recently graduated nurses are apt to fully carry out prenatal care for low-risk pregnancies? Does undergraduate education permit skills training to achieve proficiency in prenatal care?

In view of these inquiries, this study aimed to identify the difficulties nurses experience at the start of their professional life in prenatal care activities, as well as to report the motives these nurses indicate for the difficulties they experience.

METHODOLOGY

We carried out a descriptive study with a quantitative approach in Rio Branco (Acre), Brazil. In 2002, the basic health network in this city consisted of 13 Basic Health Units (BHUs), distributed across the city's different neighborhoods. These units offer a multidisciplinary care team. The number of professionals varies from unit to unit. The network also includes 23 Family Health Units.

In the entire basic health network of Rio Branco, nurses accompany pregnant women across the prenatal period. In case of any abnormality, the woman is referred to a physician. After medical

assessment, adequate diagnosis and treatment, a large majority of these women is again referred to the nurses to continue prenatal care. In 2002, 49 nurses offered prenatal care in the city's basic network.

The study population consisted of nurses who delivered prenatal care in public health services in Rio Branco-AC in 2002. The sample was randomly selected and included 25 nurses, 12 in the Family Health Units and 13 in the Basic Health Units, corresponding to at least 50% of the study population.

Data were collected by means of an interview script with open and closed questions. The closed questions were used to characterize the subjects and prenatal care, as well as to report the activities the nurses faced difficulties with when they started to work in prenatal care. The open questions served to describe the motives they mentioned for these difficulties.

We constructed a list of activities and procedures accomplished during prenatal care, from the first until the last visit. For each of these, we asked the nurses to indicate the level of difficulty (Many-M, Moderate-MO or None-N) to perform this activity or procedure at the start of their professional career in prenatal care.

The collected data were analyzed through frequencies and percentages. Data about the motives for difficulties were coded to facilitate analysis.

This study was guided by the ethical precepts of research, guaranteeing autonomy, doing well, doing no harm and social justice. In accordance with the Free and Informed Consent Term, all subjects received the guarantee of anonymity, information secrecy and use of this information for research purposes only.

RESULTS

Characterizing the subjects

The interviewed nurses had between one and 19 years experience in prenatal care (mean 6.4 years). Seventeen of them (68%) had worked in this area for up to six years (Table1).

Table 1 - Distribution of nurses' experience in prenatal care services. Rio Branco-AC, 2002

Prenatal care experience	Nurses (No)	Nurses (%)
1 to 2 years	8	32
3 to 4 years	6	24
5 to 6 years	3	12
7 to 8 years	3	12
9 to 10 years	-	-
> 10 years	5	20

On the average, nurses in the Family Health Units offered between 10 and 80 prenatal visits/month, and were also responsible for other activities besides prenatal care. Six nurses reported between 10 and 20 visits, four between 30 and 40, and two an average of 80 per month.

At the Basic Health Units, nurses worked almost exclusively in prenatal care. They offered a variable number of visits, from 50 to 250 per month, according to the area covered by their unit. Two nurses informed 50 visits, three between 60 and 80, two 100 visits, four 160 and two 250 prenatal visits per month.

Difficulties faced by the nurses in prenatal care

The complexity of prenatal care activities varies. Among the listed activities, we found that a large majority of nurses affirmed no difficulties to perform "Doppler auscultation of fetal heart (92%), home visits (92%), uterine height measurement (84%) and calculation of probable date of delivery (84%)". Table 2 shows the distribution of activities for which at least 50% of the nurses indicated no difficulties at the start of their professional career.

Table 3 lists activities for which at least 50% of the nurses indicated moderate difficulties. It is remarkable that 72% of the interviewees reported moderate difficulty to "identify risk factors" at the start of their professional practice.

Table 2 - Distribution of prenatal care activities of no difficulty according to a majority of nurses. Rio Branco-AC, 2002

Activities	Nurses (No)	Nurses (%)
Doppler auscultation of fetal heart	23	92
Home visit	23	92
Uterine height measurement	21	84
Calculation of probable date of delivery	21	84
Educational practices	20	80
Breastfeeding advice	20	80
Registry of information provided by the pregnant woman	19	76
Advice about the pregnant woman's complaints	19	76
Advice about prenatal hygiene	19	76
Completion of perinatal file and pregnancy card	18	72
Difficulty to communicate with the pregnant woman	16	64
Collection and registry of health history	15	60
Advice about newborn care	15	60
Use of weight and height table	13	52
Advice about sexuality	13	52

Table 3 - Distribution of prenatal care activities of moderate difficulty according to majority of nurses. Rio Branco-AC, 2002

Activities	Nurses (No)	Nurses (%)
Risk factor identification	18	72
Specific gynecological-obstetric physical examination	16	64
Medication the nurse can prescribe	14	56
Advice and preparation for delivery	14	56
Refer in case of risk factor detection	13	52
General physical examination	12	48

Table 4 - Distribution of prenatal care activities causing many difficulties according to majority of nurses. Rio Branco-AC, 2002

Activities	Nurses (Nº)	Nurses (%)
Request and assessment of laboratory tests	7	28
Pap smear collection and result assessment	6	24
Specific gynecological-obstetric physical examination	5	20
Medication the nurse can prescribe	5	20
Auscultation of fetal heart rate/ with Pinard	4	16
Palpation maneuvers	4	16
Risk factor identification	3	12
Refer in case of risk factor detection	3	12
Advice about sexuality	2	8
Educational practices	1	4
Breastfeeding advice	1	4
Use of weight and height table	1	4
Registration of information provided by the pregnant woman	1	4
General physical examination	1	4

Table 4 presents all activities for which the nurses mentioned many difficulties at the start of their professional career. The following deserve special attention: "Request and assessment of laboratory tests - 7 (28%), Pap smear collection and result assessment - 6 (24%), specific gynecological-obstetric physical examination - 5 (20%) and medication the nurse can prescribe - 5 (20%)".

Motives for difficulties faced by nurses

The coding of motives for the difficulties the nurses initially experienced revealed that these were related to: flaws in undergraduate training, absence of service protocol, inexperience of recently graduates and student's lack of interest during undergraduate training (Table 5). "Flaws in undergraduate training" was mentioned most frequently (80%).

Table 5 - Distribution of alleged causes of difficulties to perform prenatal care activities. Rio Branco-AC, 2002

Motives	Nurses (No)	Nurses (%)
Flaws in undergraduate training	20	80
Absence of service protocol	1	4
Inexperience of recently graduates	4	16
Student's lack of interest during undergraduate training	2	8

The interviewed nurses also informed some strategies they used to overcome the difficulties: 68% mentioned going back to study, justifying that they felt the need to study and seek the solution to problems they experienced in technical books and manuals.

Another strategy they mentioned was to seek help from another, more experienced professional: 48% of the interviewed nurses sought help from another nurse, while 20% consulted the physician.

Other nurses (32%) informed that they ended up overcoming the difficulties during daily activities.

DISCUSSION

These results reaffirm the conviction that, although competency is considered a landmark, it is not a final point in professional development. According to specialists, it is acquired together with proficiency, and the expert status is achieved after many years of experience and professional growth⁽⁹⁾.

The interviewed nurses revealed their vast prenatal experience as a result of the number of visits they offer. This highlights the importance of skills development through repetition in professional exercise. In this respect, it is noticeable that, while knowledge about different competencies is acquired during health professionals' education, skills related to essential or critical competencies for care quality are improved and advanced during professional practice⁽⁹⁾.

In the basic health network, the study participants are responsible for prenatal care delivery to the entire service clientele, which entails the need for high-quality prenatal care training.

The implantation of the Family Health Program in Rio Branco, in 1995, led to an increase in the number of nurses responsible for prenatal care. This fact can explain that 68% of the nurses had up to six years experience. In the Family Health Units, the

nurses offered less visits, as they cover a smaller area than the Basic Units.

Identifying the characteristics desirable for high-quality prenatal care is one form of professional competency-based assessment. These characteristics, which represent the knowledge based on professionals' skills and aptitudes to solve problems, analyze situations and communicate, allow for the recognition of competence standards for professional practice⁽¹⁰⁾.

A large majority of the nurses indicated no difficulties related to "Doppler auscultation of fetal heart, home visits, uterine height measurement and calculation of probable date of delivery", revealing that important prenatal care activities were guaranteed in their training process. Auscultation is used to verify the fetus' heartbeat conditions, and measurement is used to identify fetal growth, allowing for the detection of deviations.

Auscultation and measurement are skills (know-how) that require training to achieve proficiency. Skills are constructed through training, with renewed experiences, when students have the opportunity to exercise these activities⁽¹¹⁾.

Home visits should be used to bring pregnant women who do not attend the visits back to prenatal care, as well as to complete the educative work with the pregnant woman and her family group⁽¹²⁾. These require knowledge (knowing), skills (know-how) and attitudes (know-how-to-be). The fact that 92% of the nurses informed no difficulties to perform this activity at the start of their professional career can indicate they learned this during their training.

The nurses' reports showed no difficulties in activities related to demands for health advice and education. Most of them informed that "educational practices, advice about breastfeeding, about sexuality, about newborn care, advice about the pregnant woman's complaints, prenatal hygiene and communicating with the pregnant woman" were performed easily. They did not indicate any difficulties either in terms of making notes, such as "registering of information provided by the pregnant woman and collection of health history, completing the perinatal file and the pregnancy card".

These results show that the development of professional skills to make pregnant women and their families take care of their own health was incorporated, during their undergraduate course. This shows that the educational institutions attend to one of the goals of prenatal care. In the same way, during their

training, the nurses learned the relevance of registering all information related to the evolution of pregnancy.

Activities causing moderate difficulties included "identifying risk factors and referring patients, general and specific gynecological-obstetric physical examination".

One of the main goals of prenatal care is to identify risk factors that can impede the normal evolution of pregnancy and, if necessary, refer the pregnant woman to a more complex care level, thus guaranteeing the early treatment of these abnormal conditions. Although 18 (72%) nurses indicated moderate difficulties to identify risk factors, these difficulties may entail serious consequences, especially for case in which rapid diagnosis and adequate treatment are essential for maternal and fetal health.

General and specific gynecological-obstetric physical examinations are performed to follow the development of pregnancy, identify normal modifications in the mother's organism, give advice in case of complaints and diagnose possible problems. Professionals in prenatal care need to master this knowledge (knowing) to be able to provide safe advice and identify problems.

In case of alterations during pregnancy, identification and referral are some of the essential skills required from prenatal care professionals, in accordance with the essential competencies for basic midwifery practice, elaborated by the International Confederation of Midwives⁽¹³⁾.

The difficulties, even if moderate, to perform physical exams and identify risk factors reinforce the need for educational entities to review teaching strategies for the development of essential midwifery skills.

Most nurses also mentioned moderate difficulties related to the medication they could prescribe in prenatal care. According to the Brazilian Federal Nursing Council (COFEN), nurses can prescribe drugs established by the Public Health Programs and by routines approved in public or private health institutions. Undergraduate nursing course curricula should prepare their students for this reality, since this is a routine activity nowadays⁽¹⁴⁾. On the other hand, health institutions need to elaborate care protocols, especially for drugs prescription related to previously defined programs, to allow professionals to act safely.

Fifty-six percent of the nurses indicated moderate difficulties to "give advice and prepare for delivery". As the nurses did not clarify the nature of difficulties related to advice and preparation for delivery, we suggest further research to identify this. Pregnancy is known as a particular moment to dissolve myths and erroneous views of the parturition process. Delivery is culturally seen as a process that leads to suffering and great pain.

Although the nurses indicated *many difficulties* to perform a large number of activities at the start of their professional career, the percentage of nurses for each identified activity was small. The highest rate was found for "request and assessment of laboratory tests" (28%). This difficulty reflects the absence of care protocols at the study institutions.

Data in Table 4 show that several activities that require skills (know-how), such as "Pap smear collection, general and specific physical exam, auscultation of fetal heart rate with Pinard and palpation maneuvers" were associated with many difficulties.

With respect to "auscultation of fetal heart rate with Pinard", further research is needed to identify if the problem is related to the location of the fetal focus, due to difficulties to carry out palpation maneuvers and, thus, locate the auscultation focus, or to auscultation itself by means of the Pinard stethoscope.

Eighty percent of the participants indicated "flaws in undergraduate training" as a motive for difficulties at the start of their professional career. The nurses informed that some knowledge was not discussed or received little attention during their undergraduate program. They emphasized that the content of the women's health care nursing subject is very large in comparison with the available time. Other justifications for these difficulties included the large number of students for one single supervisor in practice; the lack of stimuli to reflect on the knowledge presented in class; and reduced practice time, resulting in little or no repetition of skills-requiring activities.

These justifications call attention to the need to review the teaching/learning process in the disciplines responsible for prenatal care training, particularly in terms of offering tools the graduates can use in professional activities, allowing them to construct the expected competence. On the other hand, these findings showed that, at the start of their professional career, the nurses adopted a state of

contemplation about their professional practice in order to prepare and then act in accordance with prenatal care competence standards. The ways to overcome their difficulties, such as returning to books, looking for technical manuals and seeking help from other professionals revealed the preparation they submitted themselves to in order to achieve the expected professional performance.

When professionals manage to understand the underpinnings of current practices, this means they achieved the prerequisite for behavior change. Readiness for change involves a continuum of steps, including pre-contemplation, contemplation, preparation, action and maintenance. The contemplation stage is reached when the individual is ready to change behavior⁽⁹⁾.

A study to assess the clinical performance of recent graduates indicated that their activity in clinical practice exceeded expectations, when comparing the competence levels experienced professionals expected from recent graduates with the actually observed levels at the start of professional practice. The authors call attention to the importance of these findings to assess the quality of nursing schools' products when considering the performance of recently graduated students. They also alert to the need for caution with hypothetical estimates about recent graduates' competence⁽¹⁵⁾.

These findings also demonstrate that returning to the training institution to solve the difficulties graduates face is not a practice used by nurses as a strategy to overcome difficulties, nor has it been a space to obtain updated knowledge.

FINAL CONSIDERATIONS

Putting in practice a series of characteristics desirable for high-quality prenatal care did not constitute a source of difficulties for the study participants at the start of their professional career. However, they reported different levels of difficulties in other activities. This indicates the need for further studies to identify their origin and nature.

The nurses pointed out difficulties in activities that require knowledge (knowing) as well as abilities (know-how), revealing flaws in undergraduate formation with respect to prenatal care, involving theoretical aspects as well as exclusively practical activities.

The identified difficulties allow for reflections about the role of the teaching institution in these professionals' training, so as to contribute to better performance at the start of professional life, as well as to achieve satisfaction in terms of knowledge and know-how.

The Brazilian curricular guidelines established a new, competency-based profile for health professionals, including nurses. A competency curriculum for nursing requires integration between theory and practice. Students need to have contact

with real situations from practice since the start of their training, so as to reflect, theorize and develop know-how in different contexts, thus establishing the teaching/learning process.

If nurses want to deliver prenatal care with competence, they need to develop countless skills (know-how) which, in turn, require vast knowledge (knowing) to allow them to assume an attitude (know-how-to-be) when they are faced with risk situations in pregnant women.

REFERENCES

1. Enkin M, Keirse MJNC, Neilson J, Crowther C, Duley L, Hodnett E, et al. Guia para atenção efetiva na gravidez e no parto. Rio de Janeiro (RJ): Guanabara Koogan; 2005.
2. Trevisan MR, De Lorenzi DRS, Araújo NM, Ésber K. Perfil da assistência pré-natal entre usuárias do Sistema Único de Saúde em Caxias do Sul. Rev Bras Ginecol Obstet 2002 junho; 24(5):293-9.
3. World Health Organization. [homepage on the Internet]. Geneva: WHO; [cited 20 March 2004] Abouzahr C, Wardlaw T. Maternal mortality in 2000: estimates developed by WHO, UNICEF and UNFPA. 2003. [5 telas]. Available on: http://www.who.int/reproductive-health/publications/maternal_mortality_2000/maternal_mortality_2000.pdf.
4. MacDonald M, Starrs A. La atención calificada durante el parto. Un cuaderno informativo para salvar la vida de las mujeres y mejorar la salud de los recién nacidos. New York (USA): Family Care Internacional; 2003.
5. World Health Organization. Making pregnancy safer: the critical role of the skilled attendant: a joint statement by WHO, ICM, and FIGO. Geneva: WHO; 2004.
6. Perrenoud P. Ensinar: Agir na urgência, decidir na incerteza. Porto Alegre (RS): Artes Médicas Sul; 2001.
7. Worth-Butler M, Murphy RJL, Fraser DM. Towards an integrated model of competence in midwifery. Midwifery 1994 December; 10(4):225-31.
8. Perrenoud P. Dez novas competências para ensinar. Porto Alegre (RS): Artes Médicas Sul; 2000.
9. Kak N, Burkhalter B, Cooper MA. Measuring the competence of healthcare providers. Operations Res Issue Paper 2001 [serial online] July [cited 10 April 2006]; 2(1):1-28. [12 screens]. Available on: www.qaproject.org/pubs/PDF/competence.pdf
10. Hager P, Gonczí A, Athanason J. Tópicos generales sobre la evaluación de la competencia. Asses Evaluation Higher Educ 1994 junho; 19:327-39.
11. Perrenoud P. Construir as competências desde a escola. Porto Alegre (RS): Artes Médicas Sul; 1999.
12. Schimer J, Parras AP, Leocádio E, Formiga JFN Filho, Fajardo ML, Costa Neto MM, et al. Assistência pré-natal. Manual Técnico. 3rd ed. Brasília (DF): Ministério da Saúde Secretaria de Políticas de Saúde; 2000.
13. Internationalmidwives.org [homepage on the Internet] Manila: International Confederation of Midwives. Competencies; c2005 [update February 22 2005; cited 20 September 2004]. Available from: <http://www.internationalmidwives.org>
14. Conselho Federal de Enfermagem (BR). Resolução COFEN-271. Regulamenta ações do enfermeiro na consulta, prescrição de medicamentos e requisição de exames. Rio de Janeiro (RJ): Conselho Federal de Enfermagem; 2002.
15. O' Connor SE, Pearce J, Smith RL, Voegeli D, Walton P. An evaluation of the clinical performance of newly qualified nurses: a competency based assessment. Nurse Educ Today 2001 April; 21:559-68.