

## Medical education in mother-child healthcare: practice environments, strategies, and challenges

### O ensino médico no cuidado em saúde materno-infantil: ambientes de prática, estratégias e desafios

### La enseñanza médica en el cuidado en salud materno-infantil: ambientes de práctica, estrategias y desafíos

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Lineker Fernandes Dias<sup>1</sup>  
Giovanna Rodrigues da Cunha Naves<sup>2</sup>  
Natalia Madureira Ferreira<sup>3</sup>  
Mariana Côrtes de Freitas<sup>4</sup>  
Ana Flávia Rosa Araújo<sup>5</sup>  
Camila Amaro Guedes Santos<sup>6</sup>

This work aims at reporting the pedagogical strategies used in a medical school, in the subject Collective Health IV, to teach concepts regarding Women's and Children's health, in the Cegonha Network. The teachers of the subject divided the students in small groups, who were placed in practice settings such as: postpartum Joint Accommodations, Human Milk Banks, and other mother-child healthcare services. It was found, in all experiences, that the students brought forth their understanding of the Cegonha Network decree and raised questions about the organization of the service network that was visited. As a result, the pedagogical strategy used allowed for developing the critical knowledge of students. This was especially clear when the undergraduates discussed together whether the directives of the Cegonha Network had been applied in the visited health services.

**Descriptors:** Women's health; Pregnant women; Prenatal care.

O presente trabalho tem como objetivo relatar as estratégias pedagógicas aplicadas em uma escola médica, na disciplina de Saúde Coletiva IV, para ensino de conceitos relativos à Saúde da Mulher e da Criança, na Rede Cegonha. Os docentes da disciplina dividiram os estudantes em pequenos grupos que foram inseridos em cenários de prática como: alojamentos-conjunto pós-parto, Bancos de Leite Humano e demais serviços de cuidado materno-infantil. Percebeu-se, em todas as vivências, que os estudantes expuseram seus entendimentos sobre conceitos relativos à portaria da Rede Cegonha e levantaram questionamentos acerca da organização da rede de serviços visitada. Dessa forma, a estratégia pedagógica aplicada permitiu o desenvolvimento do pensamento crítico dos discentes, particularmente ao se constatar o debate conjunto dos graduandos sobre a aplicação ou não das diretrizes colocadas pela Rede Cegonha nos serviços visitados.

**Descritores:** Saúde da mulher; Gestantes; Cuidado pré-natal.

El presente trabajo tiene como objetivo relatar las estrategias pedagógicas aplicadas en una escuela médica, en la materia Salud Colectiva IV, para enseñanza de conceptos relativos a la Salud de la Mujer y del Niño, en la Rede Cegonha. Los docentes de la materia dividieron los estudiantes en pequeños grupos que fueron insertos en escenarios de práctica como: alojamientos-conjunto pos-parto, Bancos de Leche Humano y demás servicios de cuidado materno-infantil. Se percibió, en todas las vivencias, que los estudiantes expusieron sus entendimientos sobre conceptos relativos a la ordenanza Rede Cegonha y levantaron cuestionamientos acerca de la organización de la red de servicios visitados. De esa forma, la estrategia pedagógica aplicada permitió el desarrollo del pensamiento crítico de los alumnos, particularmente, al ser constatado el debate conjunto de los pos graduandos sobre la aplicación o no de las directrices colocadas por la Rede Cegonha en los servicios visitados.

**Descritores:** Salud de la mujer; Mujeres embarazadas; Atención prenatal.

1. Undergraduate in Medicine at Universidade Federal de Uberlândia, MG, Brazil ORCID: 0000-0002-6256-7139 E-mail: linekeer\_dias@hotmail.com

2. Undergraduate in Medicine at UFU, Uberlândia, MG, Brazil. ORCID: 0000-0003-0670-8811 E-mail: giovannarnaves@hotmail.com

3. MD. Specialist in Family and Community Medicine. Master's in Collective Health, Policies and Management in health. PhD in Collective Health at Universidade de Campinas (UNICAMP). Professor at the Medicine College at Universidade de Campinas (UNICAMP). ORCID: 0000-0003-4953-9261 E-mail: nataliamadureira@ufu.br

4. Undergraduate in Medicine at UFU, Uberlândia, MG, Brazil. ORCID: 0000-0002-8747-8407 E-mail: mcf1297@gmail.com

5. Graduate in Medicine at UFU, Uberlândia, MG, Brazil. ORCID: 0000-0002-4578-4959 E-mail: ana.flavia.rosa@hotmail.com

6. Undergraduate in Medicine at UFU, Uberlândia, MG, Brazil. ORCID: 0000-0003-2617-5848 E-mail: camilaagsantos@yahoo.com.br

## INTRODUCTION

**C**hildbirth is a milestone in the life of any woman, due especially to how it can transform lives. During years, healthcare during childbirth was exclusively carried out by women. It was a natural process, carried out at home by midwives, with the parturient as the subject of the labor. In the beginning of the twentieth century, with the technological changes, labor was increasingly brought to the hospital environment<sup>1</sup>.

The main feature of this change was the medicalization of birth, which objectified parturients, since they no longer had the power to make decisions regarding the actions involving their childbirth. Increased use of technology in childbirth, in this sense, increased the manageability of risks to mother and fetus, but also brought unnecessary technology and interventions to childbirth<sup>1</sup>.

Thus, as a result of current iatrogeny that result from childbirth and labor care medicalization, the need for restructuring this model was made clear. As a result, in the last decades in Brazil, the involvement of Primary Care became increasingly involved in the promotion of the health rights of the female body, especially as a result of policies targeted at mother-infant health<sup>2</sup>.

Considering such initiatives, there are methods for the assistance to be targeted at the duo mother-child, in a humanized way. Therefore, the protocols for Primary Care to women aim to offer low-risk prenatal attention, puerperium, and to promote breastfeeding<sup>3</sup>. To this end, the Childbirth Humanization Program<sup>4</sup> and the Cegonha Network (in which "cegonha" means "stork") aim to offer women humanized attention, and to provide the children with adequate birth and healthy growth<sup>5</sup>.

There have been many government efforts to humanize childbirth and avoid its medicalization, since it brings unnecessary risks to mothers and children. However, a recent study analyzed the childbirth process of more than 48 thousand pregnant women and found that 77% of births were carried out using cesarean sections, and that even in the

Unified Health System (SUS) c-sections represent 54% of childbirths<sup>6</sup>.

The analysis offered by this study indicates that this trend will continue growing in Brazil. For it to change, greater efforts are going to be needed concerning the formation and actions of the professional with regards to assistance and to providing adequate structure for health services to perform humanized childbirths<sup>6</sup>.

To this end, the National Directives for the Syllabi of Medicine Graduation Courses in Brazil prescribe that the student and the alumni of the medicine course must make efforts towards offering humanized care, considering human plurality in all its idiosyncrasies, basing the attention offered in scientific evidence and valuing permanent and continued education. Additionally, the healthcare for parturients must consider the institutional violence to which they are subjected<sup>7</sup>.

In light of the above, this article aims to report the pedagogical strategies applied in a medical school in the subject Collective Health IV. This subject involves teaching concepts regarding Women's and Children's Health. It is addressed in the context of the Cegonha Network, a decree instituted by the Ministry of Health of Brazil.

The strategies have been applied in the Collective Health IV classes, and gave substance to experiences related to the teaching of the therapeutic pathways of parturients, aiming put students into contact with pregnant women, and with professionals who act in services of childbirth humanization, and who offer assistance to parturients and take action to control and manage health problems that may arise from the process of childbirth, as well as provide post-natal care.

## METHOD

This is an experience report on the experiences of medicine students in a medical college, during the first school semester of 2018. The professors of the Collective Health IV series of the institution organized and scheduled visits to a Human Milk Bank, a conversation with doulas, and a visit of 4th

semester undergraduates from the medicine course to the Joint Accommodations of the teaching hospital of the university (UFU).

The teaching methodology chosen to carry out the pedagogical experiences was the Team-Based Learning (ABE)<sup>8</sup>. This method follows the definition of the didactic material to be discussed, especially considering texts and scientific articles, based on pre- and post-natal care; formation and teamwork of students; co-responsibility and engagement of participants in the teaching-learning process. This was executed through the participation of the entire group in the delivery of final papers, after the experiences and lectures. They had to apply the knowledge about the Cegonha Network in discussions in the classroom regarding the themes related to prenatal and puerperium.

Additionally, in all these stages, issues about the experiences were raised, considering stages as proposed by the Arch of Maguerez<sup>9</sup>: observing the reality or problem; identifying key features of the experiences; theorizing, through the elaboration of reports; and hypotheses of solution and application to practical reality, included in the reports delivered by the students.

The teaching institution where these experiences took place is a Federal University which has a teaching-hospital, a tertiary healthcare institution. The referral of women to this health service takes place as follows: low-risk pregnant women, from the neighborhood of the institution, are routinely referred to the institution. Women from other parts of the city, that is, from other neighborhoods than the one of the hospital, are referred to the institution when classified as high-risk pregnancies during their prenatal.

The experience considered here discusses the pedagogical experiences of students and professors of the fourth semester, in the modality participant observer. After which their impressions and memories was written down and brought together, specifically in the topics method and results.

The search for a theoretical reference to anchor the discussion here was carried out

through the MEDLine, PUBMed, and Bireme databanks, and studies that are related to the subject were chosen.

## RESULTS

The first experience organized in the semester aimed to offer the undergraduates of the fourth semester of the Medicine course the opportunity to watch an exhibition on the theme "*The Role of the Doula in Prenatal Care*". The lecture was focused on the demystification of natural childbirth as a labor practice that brings pain and, therefore, is eschewed by some women.

In addition, the conversation in the exhibition also identified information o the features of humanized childbirth, including protocols based on physical evidence and multi-professional approaches that are important in this context. The participation, presence, and functions attributed to the doulas were highlighted, in addition to the participation of the family, mentioned as a support network for the women at this moment.

The second experience tried to offer the students the opportunity to meet the history and objectives of the Global Network of Human Milk, which has a working office in the teaching-hospital of the university. They learned about the process from the moment of donation to the final destiny of pasteurized milk.

The first stage of this was a reconnaissance of the physical area in which the Human Milk Bank (HMB) worked within the grounds of the tertiary teaching hospital. There, one can find the "*Breastfeeding Call Center*" service, and a room for milking and guidance, in which women who are having trouble lactating are welcomed, and where the mothers of children who are hospitalized in the teaching hospital can extract their milk.

The third pedagogical experience in the school semester was a technical visit to the Joint Accommodations in the same hospital. The experience was associated to the theme "*Women and Children Healthcare Network*" and aimed to visit the Joint Accommodations, so students could understand how the line of

care is articulated to involve women in their puerperium.

The technical visit allowed students to visualize the resources available within the physical space of the hospital to house pregnant women after birth. Additionally, students could identify the position of beds, the space between them, the privacy of the rooms, as well as other aspects such as the lighting of the space and the dynamics of the multi-professional team, whose members often walked around to care for these women.

This visit also tried to offer students a glimpse of the mother-child bond in the postpartum, so that they could notice the potential of this space for the creation of affection.

## **DISCUSSION**

Initially, it was relevant to understand the benefits of the use of active methodologies as pedagogical strategies to be applied during the graduation in medicine. To this end, students must be understood as subjects with the creative and reflexive potential of analyzing and transforming the reality in which they are. In addition, they must realize that, as they do that, they will, in the future, be publishers of the pedagogical experiences with which they came in contact during graduation<sup>9</sup>.

Therefore, they will act to positively change the health settings they will come in contact with. As a result, in this context, the professor should be a facilitator in the teaching-learning process, enabling the student to assume an investigative and active posture, as they are placed in a collective reality of healthcare<sup>9</sup>.

The visit to health services that offer mother-child care is on par with this paradigm, as it opens up a space in which the undergraduates can understand the importance of prenatal and post-natal assistance in a dynamic and participative way. It brings them into spaces of healthcare, away from the traditional formation context of direct instruction that usually is carried out inside classrooms.

It is possible to infer that this pedagogical practice will contribute to form

health professionals who are more engaged in the objective of changing the reality in which they will be inserted, since they exercise creativity and reflected on the issues during their formation, and that in itself is another reason to perform these activities.

A research reported on the experience which put medicine undergraduates in contact with health professionals, as well as the population which is referred to the health services in which the students are<sup>10</sup>. One of the benefits that can be gained from that experience is the greater contact with the local population, which broadens the perspective of the students regarding the plurality of patients who receive care in the Healthcare Networks. That aids in the creation of a broader and respectful view regarding the diversity and differences of the patients who receive care in health services<sup>10</sup>.

The experience reported here corroborates said inference, since the undergraduates had contact with women from various ethnies, races, and social classes. Therefore, the teaching-learning strategy reported here offers the same benefits. It contributes to give the students, for their professional activities, a more inclusive perspective that is more respectful to human differences.

Dynamic pedagogical strategies, such as raising questions, are effective to help the student consolidating concepts. Teaching spaces that offer autonomy and interaction of the student with the content studied are valid as effective forms of learning, being validated even by the undergraduates themselves<sup>11</sup>.

In the experience discussed in this work, the visit to services of women's and children's healthcare showed an increase in the knowledge. That was especially clear in the analysis, at the end of the semester, of the critical-reflexive portfolios of the undergraduates. Some of them valued the situations experienced, judging them as positive for their learning.

Critical thinking about health can be understood as the ability of the student of assuming an active posture in the processes of decision making, active problem resolution, also improving their capacity of analyzing the

conditions of care of patients, and how to potentialize these conditions<sup>12</sup>.

It was possible to see that the students involved in the experience formed critical thoughts, especially in the excerpts from the portfolio in which they analyzed the therapeutic pathways of the parturients; in the questions raised during the experiences by the mini-groups, about the activities developed by the services; and in the delivery of final reports, considering which directives of the Cegonha Network were aligned with the activities experienced in practice.

Bringing students to settings of practice contributes for them to practice their theoretical knowledge, in order to experience the reality of health services, bringing improvements to healthcare<sup>13</sup>. At first, the students were found to not know how the guidance for mothers with problems breastfeeding took place in the Human Milk Bank (HMB). As a result, they could reflect, as future health professionals, on how to contribute to an improvement in the care for lactating women. This conduct is very positive in the therapeutic pathway of the parturients, since the HMBs and the Family Health Units often do not interact in an effective way.

According to Article 2 of Decree N. 2068 from October 21, 2016, "the Joint Accommodations are the place in which the woman and the healthy newborn stay together, at all times, from immediately after birth until discharge"<sup>14</sup>.

Integral health care for women and newborns is known to strengthen the affective link between the triad father-mother-son. It favors the effective establishment of exclusive breastfeeding, offers the observation of health of the child, favoring communication with competent professionals in case of abnormalities, and reduces the risk of healthcare-service-related infections<sup>15</sup>.

The experience in the Joint Accommodations of the teaching hospital enabled the undergraduates to form a critical perspective regarding the implementation of a model of women's and children's healthcare, as prescribed by the Cegonha Network. Such a model highlights the importance of childbirth, labor, growth, and of the growth and

development of both newborn and lactating mother. These conditions demonstrate the welcoming and resolve of the Healthcare Network with regards to Mother and Child health, and identify, as a result, a diminution in mother and child health.

## **CONCLUSION**

The alignment of pedagogical strategies with active teaching-learning methodologies has provided results that reiterate the importance of these techniques for the formation of critical thinking among undergraduates.

To this end, the experiences reported made it possible to value the learning process, to put the students in contact with theoretical concepts learned in class, to form an active posture for problem solving, and to offer critical analyses of the health services offered to the population.

The experience also allowed for students to acquire knowledge on the care and responsibility of the work of doulas, in addition to explaining to them how they can guide parturients who are having trouble in the breastfeeding process, as well as teaching them the role of the joint accommodations in the investigation of the therapeutic pathway of parturients. As a result, abilities such as empathy and social responsibility in mother-child health care were developed with the undergraduates.

Among the limitations of this study, the fact that it was a local experience stands out, coupled with the fact that it did not take place within the context of Primary Health Care, but within a tertiary level hospital. However, the investigation tried to overcome these limitations by choosing to direct students to the observation of low-risk pregnant women and parturients, and by teaching them, preferably, knowledge about the therapeutic pathway and healthcare of women with this type of pregnancy.

The reported pedagogical actions show how the recognition of the value of active methodologies in medical schools, among its many benefits, encourages the creative and reflexive role of the student in the transformation of the environment of collective healthcare.

In addition, the need for further scientific investigations based on pedagogical strategies in the mother-child healthcare context stands out, especially with regards to teaching the directives of the Cegonha Network, the decree instituted by the Ministry of Health.

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#### CONTRIBUTIONS

**Natalia Madureira Ferreira, Lineker Fernandes Dias, Ana Flávia Rosa Araújo and Mariana Côrtes de Freitas** took part in the creation, writing, and review. **Camila Amaro Guedes Santos and Giovanna Rodrigues da Cunha Naves** took part in the writing and review.

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