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## Low light in delivery room: obstetric nursing's experiences



*Baixa luminosidade em sala de parto: vivências de enfermeiras obstétricas*

*Baja luminosidad en la sala de parto: vivencias de enfermeras obstétricas*

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### ABSTRACT

**Objective:** To understand the experiences of obstetric nurses accomplishing the delivery under a low light environment.

**Methods:** Qualitative, exploratory and descriptive study. An interview was carried with eight obstetrical nurses at a municipal hospital in São Paulo between December 2015 and March 2016. Data was analyzed using content thematic analysis proposed by Bardin.

**Results:** Three themes were studied: 1- Benefits attributed to low light in the delivery room; 2- Difficulties attributed to low light in the delivery room and 3- Effects of low light on the performance of the professional.

**Conclusions:** Low light may facilitate the delivery and increase attention to the moment experienced by the woman and her baby, providing autonomy for the woman and humanized care on the part of the team. The sector's work dynamics and the lack of familiarity with the method have emerged as difficulties, on the part of some professionals and parturients.

**Keywords:** Lighting. Obstetric nursing. Perception. Health personnel. Qualitative research.

### RESUMO

**Objetivo:** Compreender as vivências de enfermeiras obstétricas que atenderam ao parto em ambiente com baixa luminosidade.

**Métodos:** Estudo qualitativo, exploratório e descritivo. Realizou-se entrevista com oito enfermeiras obstétricas, em um hospital municipal de São Paulo, entre dezembro de 2015 e março de 2016. Os dados foram analisados por análise temática de conteúdo proposta por Bardin.

**Resultados:** Foram apreendidas três temáticas: 1- Benefícios atribuídos à baixa luminosidade em sala de parto; 2- Dificuldades atribuídas à baixa luminosidade em sala de parto e 3- Efeitos da baixa luminosidade sobre a atuação do profissional.

**Conclusões:** A baixa luminosidade pode tornar o parto mais tranquilo e aumentar a atenção ao momento vivido pela mulher e seu bebê, proporcionando autonomia para a mulher e atendimento humanizado por parte da equipe. Surgiram como dificuldades, a dinâmica de trabalho do setor e a falta de familiaridade com o método, por parte de alguns profissionais e parturientes.

**Palavras-chave:** Iluminação. Enfermagem obstétrica. Percepção. Pessoal de saúde. Pesquisa qualitativa.

### RESUMEN

**Objetivo:** Comprender las vivencias de enfermeras obstétricas que atendieron al parto en ambiente con baja luminosidad.

**Métodos:** Estudio cualitativo, exploratorio y descriptivo. Se entrevistaron ocho enfermeras obstétricas en un hospital municipal de San Pablo, entre diciembre de 2015 y marzo de 2016. Se realizó un análisis temático de contenido propuesto por Bardin.

**Resultados:** Se revelaron tres temáticas: 1- Beneficios atribuidos a la baja luminosidad en la sala de parto; 2- Dificultades atribuidas a la baja luminosidad en la sala de parto y 3- Efectos de la baja luminosidad sobre la actuación del profesional.

**Conclusiones:** La baja luminosidad puede hacer el parto más tranquilo y aumentar la atención al momento vivido por la mujer y su bebé, proporcionando autonomía a la mujer y atención humanizada por parte del equipo. Surgieron como dificultades la dinámica de trabajo del sector y la falta de familiaridad con el método por parte de algunos profesionales y algunas parturientas.

**Palabras clave:** Iluminación. Enfermería obstétrica. Percepción. Personal de salud. Investigación cualitativa.

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## INTRODUCTION

The interest of women, health professionals and the Brazilian government itself in obstetric care has intensified over the years, mainly to the effect of promoting a more humanized care at the time of labor and delivery, aiming at an individualized care and without unnecessary interventions<sup>(1)</sup>.

The environment where labor and delivery occurs is important for the parturient, because some factors, such as lack of privacy, excessive interventions, including excessive light, may influence negatively the parturition process, as they activate the neocortex of the woman, the brain's region in charge of reasoning. Childbirth is an instinctive process where the primitive part of the brain is more activated, therefore, promoting an environment of comfort and privacy can be important because it respects childbirth's physiology<sup>(2)</sup>. The decrease in brightness is one of the strategies used to modify the delivery care environment.

In the history of hospital lighting, from the antiquity to the present day, the structure of health facilities and the ways for illuminating these rooms have been evolving. From dark constructions with thick walls or lit with oil-burning torches to constructions that have sophisticated ventilation and lighting systems that help to promote the comfort and safety of the patients and the professionals<sup>(3)</sup>. In the nineteenth century, Florence Nightingale, the pioneer nurse of many English military hospital projects, known as the lady of the lamp, commented in her book *Notes on Nursing*, 1859, on the importance of an airy, clean and well-lit environment<sup>(4)</sup>.

The history on lighting during the delivery is relatively recent, since that until the 1850s, childbirth used to occur in a domestic and family environment, usually attended by midwives. With the advent of institutionalization and consequent medicalization of childbirth care, it began to be treated in a public environment, such as hospitals and maternities, and to suffer more and more interventions<sup>(5)</sup>. Childbirth environment has undergone changes such as excessive light, excessive noise, changes in temperature and now has an infrastructure that undermines women's privacy<sup>(6-7)</sup>.

The technical parameters used in Brazil for lighting in hospital environments are based on the recommendations of the Brazilian Association of Technical Standards - ABNT contained in NBR ISO/ICE 8.995-1 - Lighting of work environments. The recommendation for inserting visual comfort is that very high luminances and very high light contrasts are avoided as they can cause visual fatigue<sup>(8-9)</sup>. Light level is measured in lux (lx) by means of a luxmeter and brings as parameters for delivery rooms the illuminance going from

150 to 300 lx<sup>(8)</sup>. Even so, delivery rooms are often over illuminated by means of light bulbs and surgical lights.

The basic function of light is to provide visibility, but it also contributes to creating the character of the rooms, influencing the well-being feeling<sup>(10-13)</sup>. Although lighting can enhance a feeling of security, it can also induce fatigue, vision distortion, reduced productivity, fatigue, altered circadian cycle, and stress on the visual system<sup>(8)</sup>.

Using lighting in order to change the ways of birth care was demonstrated in the 1970s by Frederick Leboyer, a renowned French obstetrician who disclosed on more serene birth related methods with less stress for both mother and baby. For Leboyer, low lighting can sharpen our sensitivity, influence the prevention of ocular lesions in the baby and avoid stressful effects for the newborn who has just had his first eye contact with light<sup>(10)</sup>. The low light associated with other factors, such as early skin-to-skin contact and late cord clamping is a childbirth care method that has become known as "Leboyer Delivery".

Currently, studies on ambience are already generating positive results in the context of the humanization for hospital care and some healthcare facilities are seeking to promote environmental comfort in its various aspects: visual, hygrothermal, acoustic, light-related, olfactory and ergonomic<sup>(8)</sup>. However, the right to choose the environment to give birth seems to be restricted to the wealthier classes of our society<sup>(11)</sup>. Parturients and professionals, however, seek more and more satisfaction at the time of childbirth, respect and autonomy are desired by both and many end up opting for home made delivery for greater decision-making and choice power<sup>(12)</sup>.

Believing that there is a need for further clarifications regarding a more welcoming delivery environment and that low light can be a feasible and simple way of modifying the environment and can provide a different perception on the delivery experience for both the mother binomial-baby as well as for the healthcare team, considering the paucity of studies on lighting in the delivery room and considering the study of Silva<sup>(7)</sup>, which approached the influence of low light on parturients, this study aims to understand the perceptions of obstetric nurses caring for the delivery under a low light environment and becomes a contribution to knowledge in the childbirth humanization area.

## METHOD

A qualitative, exploratory and descriptive study, carried out in a municipal tertiary referral hospital, located at the eastern zone of São Paulo. The obstetric center of this hospital is managed by an SHO - Social Health Organization

and accomplishes, on average, 350 deliveries per month. In this obstetrical center, obstetrical nurses are responsible for attending normal risk childbirth.

All the obstetrical nurses taking care of one or more deliveries under low light were invited as volunteers for another study, which aimed to register and identify the emotional expressions of the parturients manifested during the expulsive period under the environmental light influence<sup>(7)</sup>. Eight participants were part of the final sample. These professionals attended the births in the same place and under the same conditions, as following: with the usual lights in the delivery room being extinguished, and just one auxiliary spotlight being directed at the perineum of the parturient allowed for homogenizing the sample.

One participant has been excluded from the study because she was dismissed from her job in the healthcare facility where data was collected and resided in another municipality, with no time availability for the interview.

Data collection was done through an open interview. These interviews were carried out between December 2015 and March 2016, in a room in the hospital itself, which provided the participants with privacy. All the obstetrical nurses who fitted the inclusion criteria were invited and were previously clarified on the research.

After accepting the invitation, an individual meeting with each one of the participants was appointed and, after signing the Free and Informed Consent Term, an interview was carried out and recorded on a portable audio recorder, where the following guiding question, previously pre-tested, was launched: "How was your experience of attending a low light birth?" Once the question has been placed, the participants had free time to respond. When the answers were short or the participant showed shyness or fear to speak, the researcher repeated the information on the research confidentiality and stimulated the answers using the following phrase: "Is there anything else that pops into your mind about your low light care that you'd like to talk about?" Then the interviews were transcribed in full.

In order to conduct the study, as a whole, the decalogue described by Minayo for qualitative research was used as a methodological guide<sup>(13)</sup> and the *Consolidated criteria for reporting qualitative research*<sup>(14)</sup>. For analyzing the study's data the content analysis technique, thematic category, described by Bardin<sup>(15)</sup>, was used. It is a set of techniques for analyzing the communications in order to obtain indicators that allow for knowledge inference regarding the conditions for production/reception of messages through systematic procedures and objectives of description for the content in these messages. This analysis is organized in

three chronological poles: pre-analysis; material exploitation of result treatment; inference and interpretation<sup>(15)</sup>.

Three topics were learned during the reading of the material collected during the interviews: 1- Benefits attributed to low light in the delivery room; 2- Difficulties attributed to low light in the delivery room and 3- Effects of low light on the professional's performance.

This study was extracted from the results of a master's thesis<sup>(16)</sup> and it respected the formal requirements contained in the national and international standards regulating research involving human beings<sup>(17)</sup>. Therefore, an authorization was requested from the participating hospital and submitted to the Research Ethics Committee of the Municipal Health Secretariat of São Paulo in - CEP/SMS. The project was approved by the hospital and by the CEP/SMS under the CAAE number 46281115.6.0000.0086. In order to ensure secrecy and confidentiality for the reports, star codenames were assigned to the participants.

## ■ RESULTS

### Profile of study subjects

The sample group was constituted according to the pre-established criteria, that is, obstetric nurses who attended the delivery under a low light environment. Thus, this study had eight participants, seven females and one male. As the majority is female, we will use the term "obstetric nurses" in reference to the sample of this study.

All the participants live in the metropolitan area of São Paulo and work in the obstetric center of the hospital where data from this study was collected. The ages of the participants ranged from 32 to 60 (thirty-two to sixty years old), and the mean age was 42 years old. The experience time in obstetrics varied between 8 and 37 years, an in average 14 years, and all the participants have already worked in other sectors of the maternal-infant area and in other specialties.

### Benefits attributed to low light in the delivery room;

Beneficial effects of delivery care under a low light environment were perceived by all the study's participants. They contemplate the parturient, the newborn, the companion and the professional who attends the delivery. The following were cited as benefits: tranquility at the time of childbirth, providing a reduction of unnecessary interventions and generating an increase in attention to the moment lived by the woman. Thus, the sensitivity of the

professional providing care to the delivery allowed the participants in this study to also perceive the tenderness of this form of care.

For the baby:

[...] it was super cramped, I think it's more comfortable for the baby, it's a smoother transition for the baby [...] it was a more humanized childbirth (Betelgeuse).

For the binomial:

[...] it was nice because it is something that really relaxes, it seems that it relaxes the mother, relaxes everyone in the room and it is a very cool, very beautiful thing (Aldebaran).

[...] when the baby was born, what I noticed is that the mother remained calm! The baby and the mother remained calm (Antares).

For the parturient:

[...] but I think it's a lot, which is pretty cool, well, it is well worth because the patient gets calmer (Sirius).

[...] one has the impression that the patient feels calmer. I feel it, I had this impression (Rigel).

For the environment:

[...] it makes the climate, right? Thus, it does not leave such an environment like this "Oh, it goes, the baby going to be born, force!" (Sirius).

[...] I think, really, that it calms the environment (Vega).

[...] I am calming down myself in a penumbra environment. I think the team is more silent, it respects the patient more (Canopus).

For the companion:

[...] it seems that the companion also manages to be calmer (Sirius).

[...] mom feels calm... The companion also feels calm... So this is what satisfies, if they're okay, we are fine too (Betelgeuse).

In the low light environment, participants realized that the focus of attention tended to leave out bureaucracy and routine, such as filling in forms and conversations among the healthcare professionals and turns toward the woman in labor and to the delivery time. They also point out that the parturient seems to perceive her own delivery better:

[...] they behave as if they focus on that own moment and partially turn off from everything that is going on around them. It benefits me as a midwife. I think that we manage to focus and make things happen better (Canopus).

[...] I felt like this: it becomes a closer environment to the baby and the mother, without spotlight, without anything to disturb, to which you do not have to pay attention (Aldebaran).

[...] It seems like things fit together. She really... She sees the baby, it feels like the baby feels her presence too (Aldebaran).

[...] she manages to follow exactly what has to be done, the guidelines, right? (Sirius).

[...] it is good for the professional too because the professional needs to be more attentive, right?! And then they lose that focus of having to run around performing a role, they focus more on that moment of the delivery, because as we have to use the other senses, then I think that attention improves at the time of the procedure (Vega).

Attending delivery under low light ambience, even though it happened within midwifery, therefore an in-hospital environment, was compared to home delivery, for the promotion of respect, autonomy and individualized care.

[...] it's like she's at her home, for example, right?! She wants to stay in her room, she does not want to hear anything, she just wants to feel, right?! It seems like this favors her more. The mom feels the things, right? And we stand in the background, she is who... She does it all (Aldebaran).

[...] it was calmer, it was delightful, you know? So much of home, it was a very pleasant thing that happened, that's what I understood [...] that coziness. Everyone! It looked like a small house, everybody united without light [laughs] (Antares).

The reduction in interventions was also mentioned among the perceived benefits:

[...] it is limited, suddenly, to make an episiotomy, depressing a perineum... Thus, I believe it makes you to have different behaviors [...] you're not touching, you're not pushing, you're waiting. And this makes the delivery a little different [...] you are simply caring, you are following, evolving, you are allowing, you are allowing the baby to be born (Rigel).

## Difficulties attributed to low light in the delivery room

The difficulties attributed to the low light in the delivery room were related to the work routine, to the infrastructure of the obstetrical center, to the interventions of other professionals, to the lack of preparation of the parturient and to the fact that the method is considered a novelty, which can generate some insecurity and anxiety in the professional that takes care of the delivery. Thus, two subcategories emerged from the discourses regarding the perception of the difficulties attributed to low light in the delivery room: difficulties perceived in relation to the environment and to healthcare professionals and difficulties perceived related to the parturient.

Two study's participants who had experience in care at the Normal Delivery Center pointed out difficulties related to the obstetric center environment.

*[...] because the way to be of the OC (obstetric center), sometimes, it is already a difficulty for us who want to do something. When we are in an NDC (normal delivery center) it is easier for us, right?! Having other postures, let's say in that sense, light, music or something like that, right?! (Sirius).*

*I think the dynamics of the site upsets you (Canopus).*

The lack of time to inform the parturient about the way of conducting the labor was cited, as well as for forming a trust bond due to the work routine and the infrastructure that make it difficult to individualize care.

*[...] I also sometimes feel embarrassed to carry out the delivery in the penumbra because sometimes you do not have enough time to prepare them (the pregnant women) for that and I think they are already so unprepared that sometimes turning off the light is the less important, compared to what you would have to do for guiding her on everything (Canopus).*

The professional resistance during low light birth care was mentioned in the participant reports, and it was associated with the gynecologist-obstetrician and neonatologist medical professionals and also with the nursing team.

*[...] in fact, the obstacle is to beat the team, right?! That is not accustomed to this type of delivery, here in the hospital it was a new experience, so the doctors who are from*

*the municipality and the old guys think that one should not invent anything, that might complicate [...] of course they do not always follow, right?! They follow some deliveries, but if they visualize this kind of delivery or any other form of position... This is where they will be questioning [...] this is something new for them (doctors). They still have not adapted to this coming trend and it's coming to stay, understand? So, it's so every day, each one battling a little to try to offer a more natural, more humanized delivery (Betelgeuse).*

*[...] we sometimes have a bit of difficulty, I do not remember if that was the case, but sometimes the neo (neonatologist) when he/she arrives wants to turn on the light, right?! [laughs] (Sirius).*

*[...] and even for such issues as a neonatologist, this is bothering... (Canopus).*

*[...] but I also understand some complaints: "Ah, but I can not write" (laughs), the techniques, through all the roles they have to do, that they have to fill... So, sometimes, I think this will make it difficult. It was not supposed to be a hindrance because it was for them to have more time, so they could write it down later, right?! Because the priority is the delivery (Canopus).*

Preparing the parturient for the delivery was also found in the speeches:

*[...] I do not act in the penumbra, right?! Why it is not every patient that we can reassure until the moment of delivery (Vega).*

*[...] I think it could be better worked up, even for the pregnant woman herself when coming, she will not come with that expectation or in anxiety (Capella).*

*[...] there are some women who scream more, there are some who do so, right?! [laughs] (Canopus).*

*[...] mother was afraid the baby would fall to the ground. They even said, "Will my son fall down? Hold him." So, thus, I felt this, this feeling of concern of the mother, really (Capella).*

It was noticed that when the parturient is able to have a relationship of trust with the professional caring for her, she ends up following the guidelines, facilitating the care and her own parturitive process.

[...] I think that when the patient is well-informed and she feels secure about the professional performing the procedure, she trusts him/her and I think that the delivery occurs in the best form, like that (Vega).

## Effects of low light on the performance of the professional

Obstetric nurses talked about the sensations they had when performing the delivery in low light. Thus, some stressed out that they did not feel difficulty to provide care in this way and affirmed that they believed in this practice as a new, more humanized proposal to care for the delivery.

[...] I do not think I have the slightest difficulty. I enjoyed doing it, I did it more than once, I intend to continue [...] this technique is differentiated and humanized to attend the delivery. So when I came in here I had a vision, and then I was doing deliveries like everyone else, without much discretion. And then when a different and more humanized way for the delivery began to be practiced, I tried to get more involved with that part (Vega).

[...] I managed to convey that tranquility (Canopus).

[...] look, the first thing I felt: union. It seems that the lack of light has brought us closer. So, like something warm, that's what gave me the impression. I even remembered the time when I lived there (laughs, gesturing at the distance of the place) [...] and had no light. And when there was no light at night, everyone was so close, as well as cozy, as if protecting themselves (Antares).

Some speeches, however, showed lack of familiarity with the method, which seems to have generated fear.

[...] because there was really a penumbra, now I realized the anxiety of the mother [...] now to my side so I found it calm [...] I think, that while it's cool, they also have that curiosity to see, right?! To know soon how the baby is, is the baby alive, has the baby cried... So the dark makes a lot less sure, right? (Capella).

[...] it's kind of different because it's not our custom, right? So it is natural that everything that escapes our custom you find a little strange in the first instance [...] at first moment, I had the feeling that something might be out of control... (Rígel).

[...] although it was the first time I was managing a delivery without light, I was a little scared anyway, that maybe other things would appear (Antares).

[...] sometimes it's not something you have, which is common, right?! You hardly hear each other, right?! We have even heard music: "Oh, there's music at delivery, such..." Which is a more common thing, right?! Quoted, right?! Now I'm making delivery in the dark, in penumbra... [...] there are two ways, at the same time that can sometimes relax... "Oh...that is more comfort, more cozy", I realized that they are afraid... Fear of something happening, fear of... Oh... you know, like this? Fear of the uncertain, it is not uncertain, fear of... Do not know what will happen, if something goes wrong, then that this is a justification, an example. You know, if it happens ... Or with the baby or with her... Something like this, like this... (Capella).

Some of the participants, in fact, reported that they started to attend with an expectation that something might go wrong or get out of control and seem to have been surprised to see that the delivery took place in a quiet manner.

[...] in fact, people may even think it will get in the way in something, even more so as I work at night shift, which we will not see something, but it was super calm. [...] sometimes it is a bit of even prejudice, to try the new... From overcoming the barriers and offering to the mother, to the binomial, well, a more peaceful and humanized experience (Betelgeuse).

[...] I think everything that is new, we have a little "fingers" to do [...] at first moment, the impression you have is that you have a chance to get something wrongly done, you know? (laughs) But then you see that everything is very different, mainly because the patient is calm (Rígel).

[...] I was worried if something had not gone well, if there had been lacerations and if "Wow, will I see that well?" Although the focus was centered there, then I calmed down and everything came quietly (Antares).

## DISCUSSION

Tranquility, referred by the participants, during low light delivery care, is strongly related to humanized care precepts, where it is recommended to ensure that the healthcare team performs procedures that are proven to

be beneficial to the woman and the baby, avoiding unnecessary interventions and preserving the privacy and autonomy of these subjects. To have humanization, there must be a commitment with the ambience, improvement in work and care conditions<sup>(1,5)</sup>.

Artificial light brightness in hospitals can excite woman's cerebral cortex in labor, creating a sensation of lack of privacy. This can directly interfere with the parturition process and the delivery care mode. During labor, there is a time when the woman behaves as if she were on "another planet". This change in her consciousness level may be interpreted as a reduction in the neocortical activity. It can be said that when a woman is in labor, the most active part of her body is her primitive brain, the brain's structures that we share with other mammals being responsible for instinctive activities<sup>(2)</sup>. Lighting reduction can be used in the attempt to bring this feeling of privacy, of not being observed, which can result in greater autonomy and body perception, as was mentioned by the interviewees, who perceived this more autonomous behavior on the part of the woman.

The studied site routine often does not favor such autonomy and privacy. It is a routine similar to the routines of several other obstetric centers in São Paulo and Brazil. During labor, the woman remains in the preterm room, where beds are separated by curtains and the parturients and companions divide the room, which can sometimes hamper care's individuality, especially in moments of vaginal examination touch or perineal evaluation. As the delivery moment approaches, the woman is transferred to the delivery room, which is a few meters away.

Workflow and ambience, in fact, make a difference and are essential to the provided quality of care<sup>(6)</sup>. Environments poorly suited to the parturition process and the lack of respect for privacy and autonomy are common complaints from women in relation to the professionals and healthcare institutions attending the delivery<sup>(18)</sup>. Conventional obstetrical centers are related to insalubrity, lack of privacy and attention, and are aggravated by the excessive accomplishment of unnecessary procedures, such as protracted fasts, amniotomies, and episiotomies, indiscriminately using synthetic oxytocin, and restricting the space for the movement of women. In the Normal Delivery Center environments, alternative delivery methods are more promoted and facilitated, and humanized behaviors such as free feeding, choice of delivery position, skin-to-skin contact with the baby, and presence of companions are more respected<sup>(1,19)</sup>.

In addition to the infrastructure of the delivery room, preparation of the parturient for the delivery moment was

also mentioned by the interviewees. They have reported the fear that some women have shown regarding the low light delivery method, pointing out the humanized care importance, which must be initiated since pregnancy has been revealed, continuing with a well-executed prenatal care so that the woman may come well-informed to the healthcare facility. In this way, the woman will be aware of the various possibilities for delivery care, based on the good obstetrical practices, according to her preferences and in an individualized way and instead of fearing the method, she will choose among several possible methods<sup>(5)</sup>.

Preparing the professional accomplishing the delivery is also fundamental. It is important for them to feel and demonstrate safety while providing care to the delivery, otherwise, they will find it difficult to gain the trust of the woman and her companion. For the success of the care, especially when it involves an alternative care method, such as using low light, care to aquatic delivery, alternative positions of the woman in the delivery, it is necessary that the professional and the woman are confident in this method. In this way, the professional should seek to be familiarized with innovative techniques and that are based on scientific evidence in order to improve their working mode<sup>(5,20)</sup>.

Some nurses perceived low light in the delivery room as darkness, as a challenge to their practice and they demonstrated fear, but also surprise and joy, to later on, seeing that the delivery had happened serenely and even with a decrease in possible interventions. Low light in the delivery room can be generated in a way that provides comfort for the mother and visibility for the professional. One may use the auxiliary light bulb on the perineum and, when realizing that the baby is about to be born, redirecting it to the side, so that one has vision of the delivery, however, without a strong illuminance on the newborn. Or still, using other types of auxiliary lighting. In 1978, the obstetrician and gynecologist Alvin Pettle published an article describing the technique used to attend a Leboyer-style delivery and to train the nurses to attend in this way. He used the light from the negatoscope, an apparatus used to view x-ray exams, leaving all other lights off<sup>(20)</sup>. In the same way, other options can be found, such as leaving the room light off and the bathroom light on, using a lampshade, an auxiliary light bulb, etc. The important thing is that light is generated where care may be offered with comfort and safety for the woman and for the professional.

Low light delivery is not a delivery in the dark but rather an attempt to promote an environment of comfort and respect for the woman's individuality and desires. The professional should clarify the woman's doubts previously and explain the advantages and disadvantages of the care



method used. If even after the clarifications and directions, the woman does not feel at ease, new options must be offered to her, until some option expresses her will. Therefore, reducing the light in the delivery room is an alternative care method and not an imposition. Alternative methods should endorse the humanized delivery model.

The culture of the biomedical model is still very present in health facilities attending deliveries, especially in conventional obstetric centers. Many professionals have undergone a technocratic training and resist updating their technical-scientific knowledge and adherence to less interventionist models. Therefore, it is essential to invest in training the future professionals, in order to destabilize the sovereignty of this model, as well as to concentrate efforts in continuing education activities with the professionals in exercise, in order to strengthen the public health policies for protecting the delivery and birth<sup>(5)</sup>.

We hope that this study may come to contribute to the knowledge and the dissemination of new care methods, according to the obstetric care humanized model, inspiring the professionals to broaden their vision on the alternative care forms, respecting the autonomy and desires of the parturient.

### Limitations of the study

Although this study has been rigorously conducted and provides important insights on the models of delivery care in public healthcare facilities in São Paulo, there are some limitations and this should be recognized. The study was conducted at the institution where the participants work at the moment, so they may have avoided real reports for fear of negative repercussion or having reported what they think right, instead of their opinion. However, all participants were well-informed about the confidentiality of their responses. Another factor is that all the participants are obstetrical nurses and there were no interviewees from another professional category. However, in the hospital setting of the study, normal obstetrical nurses are responsible for caring for normal normal-risk delivery, and these professionals attended all normal deliveries under low light at the facility.

### CONCLUSION

In this study, the approach of obstetrical nurses on low light delivery has generated three themes: 1- Benefits attributed to low light in the delivery room; 2- Difficulties attributed to low light in the delivery room 3- Effects of low light on the performance of the professional

As benefits, the obstetric nurses perceived the tranquility of the environment and the attention of the professionals more focused on the moment lived by the woman with her baby. The participants had the opportunity to experience the positive aspects of low light in the delivery room, verifying that the perception of this type of care tended to be more positive as the more opportunities they had to work in these conditions. This denotes the potential to become a current practice in care, which would benefit all involved parties.

The great demand for practical and bureaucratic services, as well as the physical structure of the study site, were identified as obstacles to this form of care. The participants also pointed out that, sometimes, the professionals themselves do not commit themselves to becoming aware of and adhering to different care methods, being themselves obstacles in the humanizing care process. More studies on the childbirth environment are needed in order to offer more comfortable and respectful options for the women.

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