# The use of Bologna Score to assess normal labor care in maternities



O uso do Escore de Bologna na avaliação da assistência a partos normais em maternidades La utilización de la Puntuación de Bolonia para la evaluación del parto normal en maternidade

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#### **ABSTRACT**

**Objective:** To assess care during labor and delivery in habitual risk maternity units in a capital in southern Brazil.

**Method:** It is an evaluation research, retrospective, quantitative, developed in three hospitals. The variables relating to the Bologna Score (presence of a companion, use of partograph, absence of stimulation to labor, delivery in non-supine position; skin-to-skin mother with newborn) were collected in 406 records, tabulated in spreadsheets and submitted to simple frequency analysis. Collection lasted from June to September 2014.

**Results:** The assigned scores range from 0 to 5, according to the performance or not of practical activities. The following scores were obtained: 0 (7%); 1 (44,1%); 2 (40,4%); 3 (12,1%), 4 (2,5%), e 5 (0,2%).

**Conclusion:** In the usual risk maternities evaluated, the labor and birth care provided do not match the standards recommended by the World Health Organisation.

Keywords: Health evaluation. Vaginal delivery. Perinatal mortality. Millennium Development Goals.

#### **RESUMO**

**Objetivo:** Avaliar a assistência ao parto e ao nascimento em maternidades de risco habitual em uma capital do sul do Brasil.

**Método:** Trata-se de uma pesquisa avaliativa, retrospectiva, quantitativa, desenvolvida em três maternidades. As variáveis relativas ao Escore de Bolonha (presença de acompanhante; uso de partograma; ausência de estimulação ao trabalho de parto; parto em posição não supina; contato pele-a-pele da mãe com o recém-nascido) foram coletados em 406 prontuários, tabulados em planilhas eletrônicas e submetidos à análise de frequência simples. A coleta foi realizada de junho a setembro de 2014.

**Resultados:** As pontuações atribuídas variam de 0 a 5, de acordo com a realização ou não da prática. Obtiveram-se pontuações: 0 (7%); 1 (44,1%); 2 (40,4%); 3 (12,1%), 4 (2,5%), e 5 (0,2%).

**Conclusão:** Nas maternidades de risco habitual avaliadas, o atendimento ao parto e ao nascimento não corresponde aos padrões recomendados pela Organização Mundial da Saúde.

Palavras-chave: Avaliação em saúde. Parto normal. Mortalidade perinatal. Objetivos de Desenvolvimento do Milênio.

#### **RESUMEN**

**Objetivo:** Evaluar el trabajo de asistencia al parto y nacimiento en los centros de maternidad de riesgos habituales en una capital del sur de Brasil.

**Métodos:** Se trata de una investigación de evaluación, retrospectiva, cuantitativa, desarrollada en tres centros de maternidad. Los datos relativos al Puntuación de Bolonia fueron recogidos en 406 partes médicos (presencia de compañero, uso de partograma, ausencia de estimulación al trabajo de parto, el parto en posición no supina y el contacto piel a piel entre la madre y el recién nacido). La toma de datos fue realizada desde junio hasta septiembre de 2014.

**Resultados:** Los puntajes asignados que van de 0 a 5, de acuerdo con el cumplimiento o no de la práctica. Se obtienen puntuaciones: 0 (7%); 1 (44,1%); 2 (40,4%); 3 (12,1%), 4 (2,5%), y 5 (0,2%).

**Conclusión:** En los centros de maternidad de riesgos habituales evaluados predominan los nacimientos que no corresponden a los estándares recomendados por la Organización Mundial de la Salud.

Palabras clave: Evaluación en salud. Parto normal. Mortalidad perinatal. Objetivos de Desarrollo del Milenio.

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### INTRODUCTION

Improvements in women's health care pattern are granted when the biologic care pattern, focused on feminine reproductive system, is improved by another [pattern] which also prizes her health determinants, such as epidemiologic, socio-economic and cultural, among others, factors, and which enables a humanized and full care to women, all over her life cycle.

Under this standpoint, the maternal mortality indicator is a *proxy* of quality of life of certain population which is straightly related to early and evitable deaths, which mainly attain women of low-income, therefore, those who have less access to social assets<sup>(1)</sup>.

Maternal death is understood as the death of the woman during the pregnancy, abortion, childbirth, or occurred within up to 42 days after the childbirth or abortion, regardless the localization and pregnancy term. Such death is assigned to causes either related to or worsened by the pregnancy or actions taken in virtue of it<sup>(2)</sup>.

Being a worldwide issue, maternal mortality reduction represents the fifth Millennium Development Goal – MDG<sup>(2)</sup>. Over the last decades, in Brazil, a significant maternal mortality rate was observed, even if other major indicators, such neonatal deceases, show a beyond the expected reduction<sup>(1)</sup>. The Brazilian government goal is to reduce the Maternal Mortality Ratio – MMR by three quarters from 1990 to 2015, to a value equal to or lower than, 35 maternal deceases per 100 thousand born and alive<sup>(2)</sup>.

Being worried with the almost 136 million childbirths recorded worldwide, the World Health Organization has defined a protocol related to the cares to be taken under normal circumstances of birth, highlighting that intra-birth care goals are to reach an adequate and safe care to the mother and the child, intervening the lowest possible<sup>(3-4)</sup>.

In countries like Sweden, which apply such recommendations, most risk childbirths are cared by obstetric nurses. They are properly skilled and trained to assist both the mother and the newborn in low-complexity services, yet referring them whenever necessary<sup>(4)</sup>.

Such protocol is aimed to standardize both the labor and the childbirth worldwide. Therefore, it deals with four procedure categories: A – Useful and that should be stimulated; B – Prejudicial and that should be abandoned; C – Procedures to which the existent knowledge is not enough to approve a clear recommendation and that should be carefully applied, until further studies clarify the matter; and D – Procedures that are frequently misused $^{(3-4)}$ .

The document "Countdown to 2015 decade report (2000–10): taking stock of maternal, newborn, and child sur-

*vival"* describes the needs to generate information that will guide actions and policies aimed to reach the Millennium Goals, and to develop methods aimed to follow the advancement of such actions<sup>(5)</sup>.

It is herein highlighted that the change of several countries' indicators took place by means of a change in the pattern of the obstetric care, taking into account the World Health Organization's recommendations<sup>(5)</sup>. Under this new perspective, the obstetric nurse surfaces as fundamental in the improvement of the care to women during the child-birth and childbirth.

By 2000, as a strategy to evaluate the quality of that care, the World Health Organization had already proposed an indicator named Bologna Score. Gathering World Health Organization's recommendations, the Score is based on the conception that the childbirth is a physiological event of the feminine body. Its purpose is to indicate how the normal childbirth is taken care within certain obstetrics service<sup>(6)</sup>.

Such tool, based on the appropriate use of the technology, assesses behaviors and practices of obstetric services, according to the most recent scientific evidences<sup>(6)</sup>.

Bologna Score consists of five measures: 1) Presence of a companion during the childbirth; 2) Presence of partogram; 3) Absence of labor stimulation (use of ocytocine, external pressure of the uterine fundus, episiotomy) or emergency cesarean section or use of instrumental (use of forceps and/or vacuum extractor); 4) Childbirth in non-supine position; 5) Skin to skin contact of the mother and the newborn (recommendation: 30 minute within the first hour after the birth)<sup>(4,6)</sup>.

Each measure is assigned a score: "1", if present, and "0", if missing. The final result arises from the sum of the score of all measures. Maximum score, "5", corresponds to the effective handling of the childbirth and the "0" score corresponds to a mishandled childbirth. Scores within those limits correspond to the variations in care quality<sup>(4,6)</sup>.

World Health Organization considers the quality of the care provided during the labor and the childbirth adequately assessed when analyzed applying the Bologna Score associated to the "percentage of induced and/or undergone to elective cesarean women" and "percentage of childbirths followed by a health professional". Hence, the quality of childbirth care is considered maximum when associated to low percentages of elective cesareans and/or childbirth inductions, as well as to high percentages of childbirths followed by a health professional and a high Bologna Score<sup>(3-4)</sup>.

Bologna Score is the first tangible attempt to quantify and assess the quality of normal childbirth and childbirth care, and can be the missing tool to efficiently assess and compare the childbirth support process worldwide (6).

In this survey, object of the study are the practices accomplished by childbirth and childbirth services, associated to the regular risk pregnancy condition. The starting point was the assumption that such support demands skills reasoned on evidences, carried out with scientific strictness, for women to receive planned, safe and qualitative assessment and care.

Therefore, the problem issue of this article was stated as follow: Do risk maternity units, from the National Health Service - SUS – in Curitiba meet the Best Practices recommendations in the labor and childbirth support process?

To answer that, the survey was carried out considering reaching the following goal:

To evaluate the normal childbirth care in usual risk maternity units in a capital in Southern Brazil. To do so, one proposed the application of the Bologna Score as procedure method of the assessment.

## **MATERIALS AND METHODS**

It is an evaluative, transversal, retrospective and of quantitative approach survey. The study was carried out in three maternity units, coded as A, B, and C, providing National Health Service (SUS) services pregnant women at risk, bound to the Mãe Curitibana Program, in the city of Curitiba-PR. Women's names were preserved by means of coding.

Identification information and data related to the measures the Bologna Score consists of were gathered from 406 records of puerperal assisted for normal childbirth in the maternity.

According to the total number of normal childbirths occurred in all three maternity units in 2013 (n=6011), and the proportion of care in each one of them (Maternity Unit A, 31.6%; Maternity Unit B, 48.6%; and Maternity Unit C, 19.7%), sampling was calculated taking into account a sampling mistake of 5%, CI 95%, and a 10% adjustment, anticipating possible losses. Hence, one reached a quantity of 406 records to be surveyed, gathering 126, 200 and 80 records from Maternity Unit A, B and C, respectively.

At each maternity unit, the number of records was divided into the number of months in 2013 (as far as Maternity Unit C is concerned, only 10 months were considered because before that, another Management was accountable for it), in order to represent, as much as reliably possible, the services provided in that institution.

Records were randomly selected by the employees of the medical file of each maternity unit and made available to the investigator in a quantity equivalent to twice the daily quantity needed, taking into account the sample completeness of each month (e.g., should 10 records be needed, 20 were provided), thus avoiding any bias in the record selection. Only the records meeting the inclusion criteria were analyzed, until having 10 records per day of data gathering.

Record selection criteria to be researched included the following characteristics: women of any range, whose normal childbirth, with born and alive child, took place at the maternity unit and who, at the immediate post-partum, were addressed to the Joint Room – JR; whose newborns were hospitalized along with then in the JR.

Data related to 2013 records were gathered from June to September 2014 and were organized and ranked in Excel spreadsheets, and underwent frequency analyses afterwards.

The research project was elaborated respecting ethical precepts, according to Health National Council rule No. 466/12<sup>(7)</sup>, approved in May 2014, under CAAE: 25324513.0.0000.0102.

#### RESULTS

Firstly, results are described according to each standard and frequency, by institution, followed by total scores for the three maternity units, arising from the sum of the standards of all of them.

The "presence of a companion" standard failed to be recorded in 83.3% (338) of the records. In the 16.7% records the presence was registered (68), it resulted that in institution A, 98.7% (79) of the records scored 0 and 1.3% (1) of the records that scored 1. At the institution B, 96.8% (122) of the records scored 0 and 3.2% (4) scored 1. At institution C 68.5% (137) of the records no registry of "presence of companion" was recorded (score 0) and 31.5% (63) of them scored 1.

As far as the use of the partogram is concerned, the document was missing in 1.5% (6) out of the 406 records, which scored 0, but was present in 98.5% (400) of them, scoring 1. All records from Institutions A and C were followed by a partogram; hence, both institutions scored 1 in this standard. However, 4.8% (6) records at Institution B scored 0 in meeting such standard, whilst 95.2% (120) of the records scored 1.

The standard "absence of stimuli at labor" failed to be met in 69% (280) of the records. One highlights that, amongst the stimuli to labor the use of ocytocine, analgesia, external pressure of the uterine fundus (Kristeller's Manoeuvre) and episiotomy (vaginal cut aimed to "aid" the fetus

exit) were introduced. However, 31% (126) of the records failed to identify the use of a stimulus over that moment. Hence, maternity units A, B, and C scored 0 in 90% (72), 50% (63), and 72.5% (145) of the records, respectively, as far as this standard is concerned.

In 99% of the records, no registry was identified related to the "non-supine position" standard. Only Institution B showed 3.2% of the records related to this standard, while maternity units A and C showed 100% of absence of records related to labor positions.

Finally, the mother-newborn skin to skin contact during the first hour of live standard failed to be recorded in 75.1% (305) out of the 406 analyzed records. The fulfillment of such standard was scored when the registry was found, without taking into account its duration and the moment it occurred. Maternity units A, B, and C failed to present registries of such contact in 90% (80), 88.9% (112), and 60.5% (121) of the records, respectively, and scored 0 in this standard. Only 10% (8), 11.1% (14), and 39.5% (79) of the records of institutions A, B, and C, respectively, showed records of any contact between the mother and the newborn over the first hour of life. In order to ease the understanding, Bologna Score final scores for all childbirths served in all three maternity units were summarized in Chart 1.

As far as Bologna Score scores is concerned, when counted by institutions, according to the registries of its 80 surveyed records, maternity unit A got finals scores 1 and 2 in 78.7% (63) and 21.3% (17) of the childbirths, respectively. Institution B got finals scores 0, 1 and 2 in 2.4% (3), 43.7% (55), and 44.4% (56) of the childbirths, respectively, amongst the 126 observed records. Still in this institution, final scores of 3 and 5 were found in 8.7% (11) and 0.8%

(1) of the records, respectively. Institution C got final scores of 1, 2, 3, and 4, in the following frequencies: 30.5% (61); 45.5% (91); 19% (38), and 5% (10), respectively, of the 200 analyzed records.

In Chart 2, the joint analysis of the institutions shows the Bologna Score general scores for all 406 childbirths.

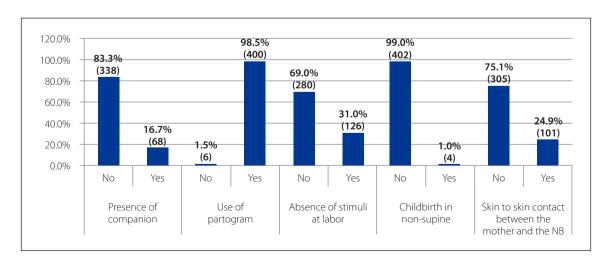
### DISCUSSION

Aimed to assess the perinatal care in usual risk maternity units, Bologna Score was used to estimate the quality of the care during the childbirth, because the World Health Organization considers it is an index that encompasses vital criteria for a qualified perinatal care. Such score is aimed to gather important practices that are widely recommended, in order to evaluate attitudes and practices of certain service in the obstetric care<sup>(4,6)</sup>.

Until 2014, as far as Bologna Score is concerned, only three studies were published, one in Sweden, one in Cambodia, and one Goiânia-BR approaching this method of assessment of the quality of care during the childbirth. One observes that in the international literature there are few studies that used the process indicators to assess the care during the childbirth.

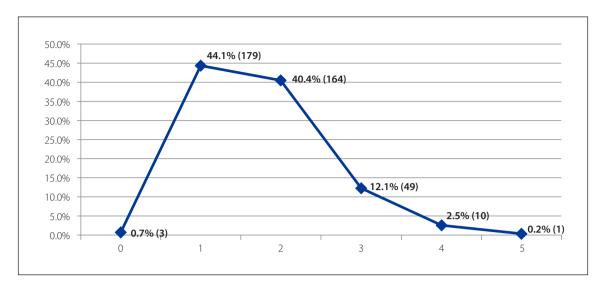
Frequencies found in the set of maternity units to meet each variable or quality standard analyzed were the following: 16.7% for presence of companion, 98.5% for use of partogram, 31% for absence of stimuli during labor, 1% for childbirth in non-supine position, and 24.9% for skin to skin contact between the mother and the baby.

As far as the presence of a companion is concerned, studies reveal that women who receive support during the



**Chart 1** – Bologna Score quality standards, usual risk maternity units, Curitiba-PR, 2013

Source: Survey data, 2013.



**Chart 2** – Bologna Score scores for childbirths in usual risk maternity units, Curitiba-PR, 2013 Source: Survey data, 2013.

labor and the childbirth are more prone to spontaneous and shorter vaginal childbirths, and were less susceptible to analgesia; besides an increasing number of reports that portray dissatisfaction with the birth experience <sup>(8)</sup>.

Hence, the presence of a companion along with the parturient is seen as an effective intervention for a better result to both the mother and the baby, with favorable repercussion to woman's satisfaction<sup>(9)</sup>. This right finds solid ground in Act no. 11.108/05, granting the mother during the labor, childbirth, and puerperium the presence of a companion of her choice, in health services<sup>(10)</sup>.

As far as the partogram is concerned, as process indicator, its use following the labor, may be useful to assess the quality of the support to normal childbirth <sup>(5)</sup>. Contributing to provide a labor overview, the use of the partogram provides the obstetric support professional the means to identify deviations from both the maternal and fetal wellbeing, and from the childbirth evolution<sup>(11)</sup>.

In the labor stimulus, the use of ocytocine during the labor and be undergone an episiotomy were more frequent. The Protocol of Minas Gerais (2011), State of reference in the implementation of the Stork Network [Rede Cegonha] in the country, describes that the use of ocytocine should not be routine, shielding such practice in cases of uterine contractibility dysfunction (12).

In a study carried out with women who gave birth from 1998 to 2008, a significant increase from 36.5% to 45.4%, respectively in the administration of ocytocine, IV, was observed. The administration of such uterotonic was related to the increase of childbirths using instrumentals, use of

episiotomy, analgesia and emergency cesareans. It is herein recommended that an accurate evaluation is carried out about the labor progression, thus granting the cautions and monitored use of ocytocine, aiming to minimize both the maternal and neonatal morbidity<sup>(13)</sup>.

A review of the literature indexed in PubMed and Cochrane evidenced different harms related to the episiotomy. Authors refer that such practice does not anticipate the occurrence of perineal laceration or urinary incontinence; nevertheless, it may result in a perineal trauma, more severe than the not effectuate. The reduction in the rates of its utilization is directly bound to a higher maternal satisfaction and to the pain improvement during the puerperium. Hence, the episiotomy should be carried out in restrict and selective way, because its indiscriminate use demonstrates an interference in the childbirth physiology. The adoption of vertical positions may influence in the reduction of episiotomy rates<sup>(14)</sup>.

The painful sensation women feel during the labor is related to both physiological and psychological factors, and its strength may vary due to individual characteristics. The use of non-supine positions during the labor is related to pain control and reduction. Therefore, vertical positions may favor the pelvis relaxation and reduce the painful sensation during the childbirth. They ease the movement freedom and the hip flexibility (back and forward or circular movement), which aid in the rotation of the fetal presentation, thus easing the labor evolution<sup>(15)</sup>.

The validation of such statements, outcomes of an Italian observational, cohort study, with 255 women, demons-

trates that the adoption of the vertical position may positively influence both the labor and the childbirth. Hence, the maternal pain, number of childbirths with instruments (use of forceps), of cesareans, and the rates of episiotomies may be reduced; and favor the integrity of the perineum and the proper occipital internal rotation of the fetus<sup>(16)</sup>.

Other studies evidenced that the use of the dorsal decubitus was a frequent intervention in most of the support to the childbirth, and accountable for reducing scores related to perinatal support standards. The frequency of that position suggests a regular practice in the service, when professionals fail stimulating the adoption of other positions during the labor and the childbirth<sup>(4,6)</sup>.

As far as the last standard the Bologna Score assesses, the World Health Organization recommends the skin to skin contact soon after the childbirth, in order to prevent the newborn – NB - hypothermia and to favor the bond between the child and the mother. Then, the active NB should be placed in direct contact, over the mother's abdomen or chest, protected with a dry and warmed blanket. Any routine procedures should be postponed so that such contact lasts longer, and such contact should be extended at maximum during the hospitalization<sup>(17)</sup>.

The skin to skin contact between the mother and the baby favors the newborn, the maintenance of the acid-base balance, and the adjustment to the respiratory movement and cry. Such practice also favors the stimulus to the maternal attention, influencing the effective breastfeeding, fundamental to the newborn development<sup>(18)</sup>.

From May 2014, the Ministerial Decree n° 371 has established the guidelines for the full and humanized care of the newborn in the SUS, recommending the professionals who take care of the NB they ensure the skin to skin contact between the mother and child binomial, in an immediate and continuous manner. Such fact favors the professional to take advantage of that moment and stimulate the breastfeeding over the first hour of life, but in case of HIV positive mothers<sup>(19)</sup>.

The low frequencies related to the five quality standards suggest that the institutions failed in following the recommended and based on scientific evidences practices about the care during the labor and the childbirth, related to the Bologna Score on the period of data gathering.

Under this perspective, each quality pattern can be analyzed one by one, in order to understand how institutions deal with such practices in the obstetric routine.

Hence, in the joint analysis of the institutions, a frequency of 0.7% (3) scoring 0; of 44.1% (179) scoring 1; and 40.4% (164) scoring 2 childbirths, was observed. 12.1% (49) childbirths scored 3 and 2.5% (10) childbirths scored 4.

Only 0.2% (1) of registered childbirths reached the maximum score of 5, according to data related to 406 records.

As potential of the institution, a low frequency of childbirths scoring 0 was found, being just 0.7% (3) of the childbirths who failed in carrying out all quality practices, in support to the childbirths, and related to the Bologna Score. Results lower than those found in the study from Cambodia, in which the frequency of childbirths scored 0, were observed in 6% (1) of the sample (20).

However, as fragility of the institutions, registrations demonstrated low frequencies – 12.1% (49); 2.5% (10), and 0.2% (1), related to scores 3, 4, and 5, respectively. Scores from 3 to 5 feature the support that used three or more beneficial practices when as aiding in the childbirth, what demonstrates certain quality in the support provided in the institutions, what was not found in this research.

In a prospective study carried out in Cambodia, with more than 170 women, a score of 5 was not found in any vaginal childbirth. However, scores of 3 and 4 showed positive frequencies, 24.3% and 56.9% respectively, corroborating that in more than 80% of the childbirth supports, three or four of the good practices assessed by the Bologna Score, were respected<sup>(20)</sup>.

In this survey, a different outcome than that found in the study carried out in the maternity units of Goiânia, in which the authors identified that more than 70% of the obstetric supports to childbirths scored  $\leq 1$  was observed, according to the registries found in that study<sup>(4)</sup>. Findings of this research demonstrate that the support to childbirths scoring  $\leq 1$ , were identified in less than a half of the records, 44.8%.

On the other side, the Sweden study, carried out in 36 maternity units, in 2008, validated the proposal of Bologna Score to measure the quality of the support during the labor and the childbirth, and demonstrated the offer of a qualified support in that country. Such event was proven in the findings, and scored 5, in 22.7% of the medical events researched<sup>(6)</sup>. When we compare this survey, the findings prove to be negligible, in that only 0.2% of the 406 records included the registry of the presence of the five quality standards of the score used.

The gap found between the outcomes of both aforesaid studies, is the result of years of delay in investments in childbirth support. The change of the model of support established in current policies, which considers actions based on scientific evidences and respect to the feminine figure, demand investments that go far beyond the financial aspect. The necessary change demands a both educational and financial investment which one cannot offer yet.

It was evidenced that more than 85% of the record registries presented in their support to the childbirth, only

one or two practices recommended by the World Health Organization. It is herein highlighted that one of them was the use of the partogram, present in 98.5% (400) of the records, an instrument that not only monitors the evolution of the labor, but it is also mandatory in institutions providing services to SUS, so that the payment of the service provided can be charged, and which should be enclosed along with the record of each patient.

Taking into account that such standard (use of the partogram) would be present because of a financial need of the service, should it be disregarded, most childbirth occurred in the researched usual risk maternity units would get a final score of 1 or 0.

## **FINAL CONSIDERATIONS**

The use of the Bologna Score made it possible to assess the perinatal care in usual risk maternity units in one capital in Southern Brazil. Results obtained induced the reader to critically reflect about the scenario related to the support provided in 2013.

It was evidenced that the obstetric practice still features a model of care that goes on the opposite way of worldwide and national proposals, as far as the humanized childbirth, respect to the woman and the newborn, is concerned, and according to the recommended standards of quality.

It is highlighted that worldwide and national policies of childbirth support, abet even more the participation of the obstetric nurse as fundamental element in the change of the support model. Despite the use of mild technologies, such as the active auscultation, and that there are other instruments for the childbirth support, the obstetric nurse still has no expressive role in supporting these women. Besides the political incentives, such role is supported by its relevant class entity. In certain health systems, the support to low-risk pregnant women is only provided by the nurse skilled in that area.

It is highlighted the fact that childbirths registered in the surveyed records are, mostly, aided by health professionals and that took place within institutions that are part of the local health system. Still, one sums the ranking of usual risk pregnancies of the registered women.

Findings demystify the idea that the childbirth supported by a health professional, within a hospital environment, determines the quality of the support. Hence, only the presence of a theoretically skilled professional, does not determine a service of quality.

It should be remembered that, currently, quality support is not the support that just ensures the lives of the mother and fetus, but that which is carried out by a professional that understands the labor and childbirth as a physiological moment, only intervening when needed for the process continuity, and ensuring the woman's respect and autonomy.

The survey outcomes, with data of the perinatal care in 2013, indicate that all three maternity units of usual risk, in Curitiba, need put all their efforts in reaching quality standards which follow the care model defended by the Rede Cegonha, and according to international scientific evidences related to the good practices of pre-partum, childbirth, and immediate puerperium good practices.

Such score favors the visualization of strengths and weaknesses, evident in the findings. Services should be encouraged to use the Bologna Score in order to simply and practically estimate the childbirth support process. However, the understanding of all aspects of support only takes place after more meticulous studies that go beyond the World Health Organization recommendations, routines and behaviors inside the services.

It is herein highlighted that the search of the obstetric support quality impacts the improvement in maternal and neonatal morbidity and mortality indicators. Hence, one has an instrument that meets all actions related the obtainment of the millennium goals.

Taking into account the need of parameters showing what is good, the lack of other studies that may bring more comparative standards of assessment was a limitation in this survey.

As a contribution, this survey demonstrated a new possibility to generally assess and follow the actions and practices carried out in institutions of obstetric support. Therefore, it is herein suggested the use of this score in other institutions, in order to evaluate the patter of labor and childbirth support. Hence, one can identify whether the institutions act following the World Health Organization practices, favoring the improvement in the support quality, and proportionally, aiming to reach the Millennium Development Goals.

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