#### **Brief report**



# The Quality of Intrapartum Care Questionnaire Based on the WHO Recommendations

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#### Abstract

Childbirth is a unique experience for a woman's life and for this reason, it is necessary to ensure the right conditions to have a positive childbirth experience. Thus, the World Health Organization has developed recommendations aimed at promoting normal childbirth and better care of the mother and fetus without unnecessary interventions. This study presents a questionnaire that measures the quality of intrapartum care according to the WHO interventions. The questionnaire was constructed for the needs of a Greek survey for the evaluation of delivery rooms by midwifery students, according to their observations during their internship.

Keywords: Intrapartum care, WHO recommendations, midwifery care, quality of intrapartum care.

#### 1. Introduction

Intrapartum care should be provided with minimal interventions so that it has a healthy mother and neonate and a positive childbirth experience <sup>[1]</sup>. Previous research has shown several factors connected with a positive experience of birth and intrapartum care, such as women perceptions for their birth <sup>[2]</sup> and having a vaginal birth without unnecessary interventions <sup>[3]</sup>. However, some factors seem to be of major importance, such as the availability of support during childbirth, the need for pain relief, more normal deliveries and favorable results for neonates <sup>[4]</sup>. Fewer interventions during childbirth lead to greater maternal satisfaction, more spontaneous deliveries, less need for epidural analgesia <sup>[5]</sup> and fewer cesarean sections <sup>[6]</sup>.

Both in Europe and in developing countries there are several deaths every year due to pregnancy, delivery, or postpartum complications <sup>[7,8]</sup>. Many of these deaths can be avoided through appropriate maternity care and the use of midwifery interventions. Therefore, obstetric and midwifery interventions are aimed at allowing those who care for women during labor to gain an extensive understanding of such care for women and neonates <sup>[7]</sup>. It has been more than 20 years since the World Health Organization (WHO) issued technical guidance dedicated to the care of healthy pregnant women and their neonates <sup>[9]</sup>. Since then many maternity services have changed significantly since the last directive with the result that women give birth in organized maternity centers but still the lack of quality in some cases still hinders the achievement of the desired outcomes. Consequently, the WHO has released several recommendations to address specific aspects of labour management

and the leading causes of maternal and neonate mortality and morbidity for the needs of all countries. More specifically, the WHO developed some recommendations for low-risk births for positive childbirth experience <sup>[1]</sup>.

#### 2. Content

In order to address the above issues, especially in Greece with high rates of cesarean deliveries, we developed in the context of a survey <sup>[10]</sup>, a questionnaire based on WHO recommendations for intrapartum care. The research was conducted by midwifery students who had the role of observer during their internship. The results of this research showed that not all recommendations are met and therefore an extensive investigation of the factors leading to non-compliance with these guidelines is required.

The purpose of the questionnaire is to evaluate the functioning of the delivery room staff through observation by another person. In more details, the questionnaire is not aimed at self-evaluation, but at the overall evaluation of the delivery room through a third party (supervisor, director, midwife, gynecologist or even student). The first time this questionnaire was tested, the entire Greek maternity hospitals were evaluated by midwifery students <sup>[10]</sup>; however, each maternity hospital can be evaluated individually and by a different health care provider.

The questionnaire consists of 3 parts: a) questions concerning the first stage of birth, b) questions concerning the second stage of birth, c) questions concerning the third stage of birth (**Table 1**).

First Stage of Labor				
How often do you see:	Always	Often	Rarely	Never
Avoid grooming before delivery				

Avoid enema before delivery				
Feeding /per os liquids in parturients				
Encouraging position change				
The same person for vaginal examination				
Vaginal examination at intervals of four hours				
Companion				
Non-routine cardiotocography at low-risk pregnancy				
Labour induction >41 weeks				
Difference between Low-risk - High-risk groups for labor induction				
Relaxation techniques for pain management				
Not use of amniotomy for prevention of delay in labour				
Second Stage of Labor				
How often do you see:	Always	Often	Rarely	Never
Spontaneous pushing without epidural analgesia				
Absence pressure at uterus bottom to accelerate 2 <sup>nd</sup> stage labour				
Labour in different posture				
Midwives perform normal delivery				
Alternative techniques (perineal massage, warm compresses and a "hands on") forpreventing perinealtrauma				
Episiotomy only in non-spontaneous deliveries				
Third Stage of Labor				
How often do you see:	Always	Often	Rarely	Never
Contact with mother- 1 <sup>st</sup> breastfeeding during the first hour				
Delayed umbilicalcord clamping (1'minute)				
Close follow-up of postpartum mother				
Neonate bath after 24 of birth				
Administration of uterotonic drugs to avoid hemorrhage				
Vitamin K to neonate				1
Avoid nasal or oral suction in neonates born through clear amniotic fluid who start breathing on				1
their own after birth				

This questionnaire does not accept any score, but the evaluation results from the number of 4 answers (Always, Often, Rarely, Never). More specifically, the more "Always" answers we have, we reach the desired goal. The results are evaluated as optimal when they are "Always". For any other answer, the possible causal factors should be investigated and addressed. The goal of the delivery room should be to cover all the questions with "always" answers. In cases where this goal is not met, the individual factors should be reevaluated with corrective interventions.

## 3. Conclusions

To reduce the complications of vaginal delivery, cesarean section rates and the mother's dissatisfaction with the way she gave birth, some measures should be taken to treat the adverse conditions. The Quality of Intrapartum Care Questionnaire is a measure of the evaluation of the delivery room, according to the WHO recommendations. Of course, the high quality of intrapartum care is a consequence of all perinatal care; therefore, it is not possible to achieve high rates of intrapartum care when there are low rates of prenatal care. Understandably, poor quality of intrapartum care may result in increased postpartum and neonatal complications. Finally, it should be noted that this questionnaire covers the basic intrapartum care proposed by the WHO. The intrapartum care recommendations by WHO cover the full range of care and are recommended to be followed by all perinatal care professionals.

## Ethics approval and consent to participate

Macedonia Ethics Commission. Approval: 53-2021

### List of abbreviations

WHO: World Health Organization

## **Data Availability**

Not applicable

## **Conflicts of Interest**

The authors declare that there is no conflict of interest regarding the publication of this paper.

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None

## Authors' contributions

E.O., P.E., and E.A analyzed and interpreted the sample data, writing and editing the paper. M.L., and M.Y., conducted the survey. All authors read and approved the final manuscript.

### References

- WORLD HEALTH ORGANIZATION. Who Recommendations on Intrapartum Care for a Positive Childbirth Experience.; WORLD HEALTH ORGANIZATION: Place of publication not identified, 2018.
- Hauck, Y.; Fenwick, J.; Downie, J.; Butt, J. The Influence of Childbirth Expectations on Western Australian Women's Perceptions of Their Birth Experience. Midwifery 2007, 23 (3), 235–247. https://doi.org/10.1016/j.midw.2006.02.002.
- [3] Hildingsson, I.; Johansson, M.; Karlström, A.; Fenwick, J. Factors Associated with a Positive Birth Experience: An Exploration of Swedish Women's Experiences. International Journal of Childbirth 2013, 3 (3), 153–164. https://doi.org/10.1891/2156-5287.3.3.153.
- [4] Bohren, M. A.; Hofmeyr, G. J.; Sakala, C.; Fukuzawa, R. K.; Cuthbert, A. Continuous Support for Women during

Childbirth. Cochrane Database Syst Rev 2017, 7, CD003766.

https://doi.org/10.1002/14651858.CD003766.pub6.

- [5] Sandall, J.; Tribe, R. M.; Avery, L.; Mola, G.; Visser, G. H.; Homer, C. S.; Gibbons, D.; Kelly, N. M.; Kennedy, H. P.; Kidanto, H.; Taylor, P.; Temmerman, M. Short-Term and Long-Term Effects of Caesarean Section on the Health of Women and Children. Lancet 2018, 392 (10155), 1349–1357. https://doi.org/10.1016/S0140-6736(18)31930-5.
- [6] Hanahoe, M. Midwifery-Led Care Can Lower Caesarean Section Rates According to the Robson Ten Group Classification System. European Journal of Midwifery 2020, 4. https://doi.org/10.18332/ejm/119164.
- [7] Essential Antenatal, Perinatal and Postpartum Care: Training Modules. 392.
- [8] Asrese, K. Quality of Intrapartum Care at Health Centers in JabiTehinan District, North West Ethiopia: Clients' Perspective. BMC Health Services Research 2020, 20 (1), 439. https://doi.org/10.1186/s12913-020-05321-3.
- [9] Care in Normal Birth: A Practical Guide: Report of a Technical Working Group; Maternal and Newborn Health/Safe Motherhood Unit, Family and Reproductive Health, World Health Organization, 1996.

[10] Orovou, E.; Ymeraj, M.; Lilo, M.; Antoniou, E. The Midwifery Student's Observations about the Implementation of International Guidelines and Protocols in Greek Maternity Hospitals. Sexes 2022, 3 (2), 244-253. https://doi.org/10.3390/sexes3020019.

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