# OPTIMISING CHILDBIRTH IN CROATIA – MOTHERS' PERCEPTIONS OF THE BEST EXPERIENCE AND THEIR SUGGESTIONS FOR CHANGE

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### Introduction

Pregnancy and childbirth are events of special importance for women and whole families. The International Federation of Gynecology and Obstetrics (FIGO) recommends that professional associations and facilities provide not only the best evidence based quality of care, but also attend to each woman's right to a positive birth experience and com-

Objective - The objectives of the research were to examine women's childbirth experiences and their suggestions for improvements in care provided during labour and birth. Methods - The study included 341 women who gave birth in Croatia within the previous five years before taking part in the on-line Babies Born Better survey. This survey was developed during a four-year EU funded project COST Action IS0907. It includes a maximum of twenty questions that relate to women's sociodemographic characteristics and experiences with maternity care. Content analysis of mothers' answers to two open-ended questions about their childbirth experiences and proposed changes in maternity care was used in this study. Results – The age of the respondents ranged from 19 to 46 years old. The most frequently described positive childbirth experiences were related to the birth environment (11.2%), characteristics of medical staff such as their kindness (10.4%), general quality (6.8%), support and understanding (6.3%) and expertise (5.6%) as well as to the general quality of care (8.3%). The contact with babies (7.9%) and support for breastfeeding (7.6%) were also stressed as positive experiences. The most frequently mentioned changes needed to improve maternity care included objective characteristics of the birth environment (16.5%), facilitation of natural childbirth, avoidance of invasive procedures and mothers' control of labour (13.8%), and provision of support and understanding (9%). Conclusions – The childbirth experience is a multidimensional concept that includes various positive and negative events. The findings from this study will enhance our understanding of factors that contribute to a positive experience of childbirth.

passionate care from knowledgeable providers who recognize the uniqueness of each woman, family, and newborn (1). Research suggests a woman's overall birth experience may be determined by a range of factors: support from the midwife (sensitivity to needs), duration of labour, pain, expectations of the birth, involvement and participation in the birth process, and surgical procedures (2). Poor support and caregiver-patient commu-

nication during labour and birth is associated with a higher rate of postnatal mental health problems including postnatal depression and post-traumatic stress disorder, increased use of pharmacological analgesia, more operative births and more reports of dissatisfaction with birth (3). A better understanding of the factors that contribute to mothers' experience of childbirth is, therefore, important in order to minimize psychological distress as a result of this event (4).

The childbirth experience is a complex and multidimensional concept and literature sources do not provide a clear theoretical framework to study and explain it. This concept encompasses more than satisfaction with the care-giving service. It is a psychological perception that includes practical and relational aspects (5). Standardised multidimensional instruments assess different dimensions of women's childbirth experience that are defined based on the results of empirical studies. For example, the Childbirth Experience Questionnaire measures four broad aspects of the childbirth experience: one's own capacity (sense of control, personal feelings during childbirth and labour pain), professional support (information and midwifery care), perceived safety (sense of security, fear and memories from the childbirth) and participation (being able to choose pain relief, movement and position of delivery) (6). Furthermore, literature sources mention dimensions such as postnatal sense of security based on a sense of midwives/nurses empowering behaviour, a sense of affinity within the family, a sense of autonomy/control and a sense of well-being including manageable breast feeding (7), whereas some authors focus only on control in childbirth (8).

In Croatia, to the best of our knowledge, there are no scientific publications that examine different aspects of women's childbirth experiences and there is a lack of quantitative measures of the childbirth experience that are developed or adapted in

the Croatian context. A partial insight into women's childbirth experiences is provided by a short survey conducted by a Croatian non-governmental organization, which reports prevailingly negative experiences (9). One study conducted on a sample of 160 women in Croatia showed that every fourth woman perceived giving birth as a negative experience and 4% of women had a traumatic experience of childbirth with symptoms of post-traumatic stress disorder and postpartum depression (10). In practice and research negative birth outcomes and psychopathology are often emphasised, although research findings show that the majority of women assess their overall experience of giving birth as positive (2). In this study, we aim to identify and better explain positive childbirth experiences. In order to improve care during labour and birth, it is important to comprehensively explore different domains of childbirth experiences and potential variables that can affect women's satisfaction with maternity care.

The aim of this study was to examine women's experiences with maternity care in Croatia. Specific objectives were to identify what are the best things about the care provided during labour and birth and which changes mothers suggest for the improvement of maternity care at the place where they gave birth.

### Methods

### Instrument

In this study, data collected on-line through the Babies Born Better (BBB) survey from women who gave birth in Croatia are analysed. The first version of the survey was developed during a four-year EU funded networking project COST Action IS0907: Childbirth Cultures, Concerns and Consequences. The Action's aim was to advance scientific knowledge about ways of improving maternity care provision and outcomes for mothers, babies and families across Europe

(11, 12). Babies Born Better has developed into a long-term project which aims to become a major resource for the improvement of maternal and childbirth care around the world. The second version of the survey includes some additional questions but it has not been launched yet (12). The BBB survey (Version 1) includes a maximum of twenty questions that are currently available in twenty-two languages. In the first part of the survey, women are asked to provide sociodemographic data, i.e. their age, country and place of residence, reasons for immigration (if they are migrants) and number of children. They also responded whether they gave birth in the last five years. Only women who gave birth in this period were asked to complete the survey. The survey continues with questions about the age of their youngest child, whether women experienced any difficulties during the last pregnancy and how many weeks they were pregnant when giving birth. In the second part of the questionnaire respondents are asked to answer two multiple choice questions about the place of birth and staff that provided most care as well as to provide information on the name of the health facility and the town where they gave birth. In addition, two open-ended questions allowed women to list up to three of their most positive childbirth experiences and to propose up to three of the most important changes in care received they would recommend at the place where they gave birth. These questions were as follows: 1. What were the three best things about the care you got there? 2. If you had the power to make three changes in the care you had, what would the changes be? Women's answers to the preceding questions are analysed in this study.

## Respondents

The study included 341 women who gave birth in Croatia within a period of five years before taking part in the on-line BBB survey.

### Procedure

The BBB Survey (Version 1) was launched online in February 2014 and data was collected through December 2015. The survey was available to women in different countries in Europe, including women who gave birth in Croatia. After a brief explanation of the study, women were informed that their responses would remain anonymous and would be used only for research and service improvement purposes. Their participation was voluntary and by completing the survey they gave their consent for the research team to use submitted information for these purposes. Respondents were informed that they were free to withdraw consent at any time by closing the browser window before submitting their responses. The survey has passed the ethics approval process of the University of Central Lancashire.

## Content analysis

Respondents' answers to two open-ended questions from the BBB survey were subjected to content analysis. Content analysis provides a method to systematically evaluate data by coding or categorising information. It is useful for interpreting information gathered in interviews, focus groups and surveys with open-ended questions (13). One of the authors performed a preliminary content analysis of respondents' answers to the question about the first, second and third best things in care provided during labour and birth and another author independently performed a preliminary analysis of respondents' answers to the question about the first, second and third most important desired changes in care received at the place of birth. All answers were read carefully in order to make a list of main themes, they were grouped into preliminary content categories and categories were labelled with codes. The two authors independently coded half of the answers to both

questions and discussed their disagreements in order to clarify the categories and refine the classification system. Since content categories of answers to both questions were very similar, in the next phase it was decided to develop a unique classification system which would enable better comparison of respondents' experiences with care and desired changes in maternity care. Most answers included short descriptions, in many cases only one word, and their meaning was relatively straightforward. Categories were formed by grouping together content which was similar in some way, taking into consideration that categories are clearly different from one another and incorporate all content. The final classification system included eighteen content categories. The list of content categories together with their descriptions can be found in Appendix 1.

To assess the reliability of coding, two researchers blindly scored all the answers. Answers to the question on positive childbirth experiences as well as answers to the question about the most important desired changes in care provided at the place of birth were coded with the respective number of their content category from 1 to18. An overall reliability across all content categories was calculated. In calculating interrater agreement all answers regardless of whether they were listed as first, second or third were taken as the total number of answers. An agreement between the two researchers was scored when they identified the same statements as belonging to the same content category. Over all categories, both researchers agreed in 92% of coding of women's first, second and third most important childbirth experience. The overall percentage of agreement for all the answers to the question about the most important desired changes in care at the place of birth was 87%. In cases where the two judges disagreed on the classification of answers, the final codes were given based on their joint discussion and agreement.

### Statistical analyses

Descriptive statistics for all survey questionnaire items were calculated using IBM SPSS Statistics for Windows, Version 20.0. Results of the content analysis of answers to two open-ended questions include both the categorical system which consists of content categories, as well as the prevalence of certain categories and their contents over others, established through frequency analysis. The first, second and third answers were coded as separate variables and the overall frequency of appearance of a specific content category was calculated across all respondents and all the answers given. The results of content analysis are presented in tables as the number of answers in each content category as well the percentage of answers representing specific content categories in the entire sample of responses to each question.

### Results

The age of the respondents ranged from 19 to 46 years old (except for one respondent who did not report her age), the average age was 32 years (M=32.6; SD=4.54). The women came from different parts of Croatia, and 22 of them came to live in Croatia due to employment, education, love, marriage, better living conditions after the Homeland War, etc. Among 341 women, 54.2% of them gave birth to one child, 32.3% women have two children, 10% three children, while 3.5% women have four or more children. Almost 40% of women in the total sample gave birth to their child or children in 2013, somewhat less than 46.9% between 2009 and 2012 and the remaining number of women in 2014 and 2015. The majority of women (92.3%) participating in the questionnaire gave birth between the 37th and 42nd week of pregnancy, 6.5% were pregnant for less than 37 weeks and 1.2% were pregnant for more than 42 weeks when they gave birth. Regarding problems faced in pregnancy, 17.9% women experienced problems and these were: suspicion of an ectopic pregnancy, premature opening of the cervix, bleeding, threat of premature delivery, twin-pregnancy complications, shortened cervix, hypertension, preeclampsia, gestational diabetes, intrauterine growth retardation, assisted reproduction, bacterial inflammation, nausea, headaches, gallstones etc. Based on women's reported opinion, the care at birth hospitals was mostly provided (responses to this question by 303 women) jointly by doctors, midwives and nurses (44.9% of women), followed by predominantly midwives (27.7% of women) and medical nurses (16.5% of women), whereas 6.9% women reported that during their delivery they were mostly taken care of by doctors or by someone else (4%).

# Mothers' perceptions of positive childbirth experiences

The general tendencies in experiencing different childbirth related events are given in Table 1. A total of 341 questionnaires were coded and the total number of answers in this sample was 734. The average number of answers per woman was 2.15. The frequency of appearance of a particular content category indicates the attention or importance women pay to the childbirth experience as described by that category.

The first seven most frequently stated content categories represent 58.5% of all the answers. The most frequently stated events refer to some positive aspects of the birth environment such as accommodation, hygiene or nutrition. It should be noted that among frequently described positive experiences, the characteristics of medical staff such as their

Content category	f	%
Objective characteristics of the birth environment	82	11.2
Kindness and general behaviour of medical staff	76	10.4
General quality of maternity care and care provided by medical staff	61	8.3
Rooming in and contact with the child after delivery	58	7.9
Support to breastfeeding	56	7.6
General quality of medical staff	50	6.8
Provision of emotional support and understanding	46	6.3
Facilitation of natural childbirth, absence of invasive procedures and mother's control of labour	42	5.7
Staff expertise	41	5.6
Provision of informational support, respect of women's needs and right to choice	37	5.0
Father's or close person's presence at birth	35	4.8
Continuity of care, a sense of security and individualised care	34	4.6
Childcare and children's health	33	4.5
Effective medical interventions and pain relief, short stay in hospital	25	3.4
Specific and vague answers	24	3.3
Subjective characteristics of the birth environment	21	2.9
There is nothing good or there is no need for change	9	1.2
Organisational aspects of care provision	4	0.5
Total	734	100.

Table 2 The most important proposed changes in care received at the place where women gave birth - characteristic answers and their frequencies

Content category	f	%
Objective characteristics of the birth environment	121	16.5
Facilitation of natural childbirth, absence of invasive procedures and mother's control of labour	101	13.8
Provision of emotional support and understanding	66	9.0
Specific and vague answers	64	8.7
Kindness and general behaviour of medical staff	50	6.8
Support to breastfeeding	45	6.1
General quality of maternity care and care provided by medical staff	41	5.6
Provision of informational support, respect of women's needs and right to choice	39	5.3
General quality of medical staff	39	5.3
There is nothing good or there is no need for change	29	4.1
Childcare and children's health	28	3.8
Effective medical interventions and pain relief, short stay in hospital	22	3.0
Organisational aspects of care provision	20	2.7
Continuity of care, a sense of security and individualised care	19	2.6
Rooming in and contact with the child after delivery	15	2.1
Subjective characteristics of the birth environment	12	1.6
Staff expertise	12	1.6
Father's or close person's presence at birth	10	1.4
Total	733	100.0

kindness, general quality and expertise, support and understanding as well as general quality of care provided during labour and birth are in the focus of women's attention. Significant experiences for new mothers are those related to contact with their babies and support for breastfeeding which are ranked fourth and fifth according to frequency of appearing in the whole sample of childbirth related experiences.

# Mothers' suggestions for improvement in maternity care

Answers to the second question are presented in Table 2. A total of 341 questionnaires were coded and the total number of answers in this sample was 733. The average number of answers per woman was 2.14. The first five most frequently stated content categories represent 54.8% of all the answers. The most frequently given answers describing the

most important changes needed to improve the care received at the place where women gave birth, relate to objective characteristics of the birth environment. The second content category refers to the facilitation of natural childbirth, absence of invasive procedures and the mother's control of labour. The third category with the highest number of answers refers to the provision of emotional support and understanding.

# Comparison of mothers' perceptions of positive childbirth experiences and mothers' suggestions for the improvement of maternity care

An inspection of the main topics included in different content categories revealed that these categories could be classified into more meaningful, higher-order categories that reflect either some characteristics of personnel or maternity care and childcare or the envi-

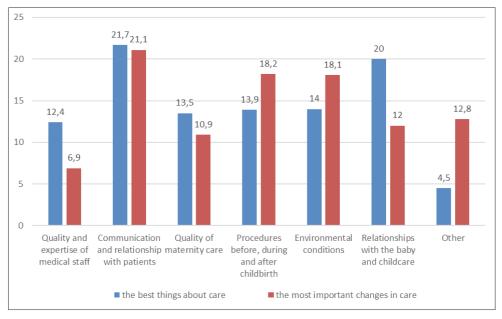
Table 3 Classification of characteristic answers into general content categories			
General categories	Specific categories		
A – Quality and expertise of medical staff	1 – General quality of medical staff		
	2 – Staff expertise		
B – Communication and relationship with patients	3 – Kindness and general behaviour		
	4 – Emotional support and understanding		
	5 – Informational support, respect of women's needs and right to choice		
C – Quality of maternity care	6 – General quality of maternity care and care provided by medical staff		
	7 – Continuity of care, a sense of security and individualised care		
	8 – Organisational aspects of care provision		
D – Procedures before, during and after childbirth	9 – Facilitation of natural childbirth, absence of invasive procedures and mother's control of labour		
	10 – Effective medical interventions and pain relief, short stay in hospital		
	11 – Father's or close person's presence at birth		
E – Environmental conditions	12 – Objective characteristics of the birth environment		
	13 – Subjective characteristics of the birth environment		
F – Relationship with the baby and childcare	14 - Rooming in and contact with the child after delivery		
	15 – Support to breastfeeding		
	16 – Childcare and children's health		
G – Other	17 – There is nothing good or there is no need for change		
	18 – Specific and vague answers		

ronment in which childbirth occurs. Therefore, specific content categories were rearranged to form general content categories. The classification of characteristic answers into general content categories is given in Table 3. Idiosyncratic answers or answers whose meaning was not clear as well as statements indicating that there was nothing positive or there was nothing to change were classified into "other" answers category.

The frequency of answers in general content categories was calculated by summing up the frequencies in respective low-order content categories. The comparison of the frequency of answers in general content categories is given in Fig. 1.

An inspection of Fig. 1 reveals the dominance of certain general categories and their contents over others, established through percentage of all answers belonging to a particular general category. More than one-fifth of all positive childbirth experiences stated by women in our sample are related to doc-

tors', nurses' or midwives' relationships with patients, i.e. to their kindness, informational support or emotional support. The quality of childcare, support for breastfeeding and continuous contact with their children are described as the second most important category of positive childbirth experiences, which indicates that women are not only focused on their experiences during labour and birth but also on the well-being of their newborn baby. Respondents also describe to a great extent positive experiences resulting from different objective and subjective characteristics of the birth environment as well as the positive impact of various events related to procedures before, during and after childbirth, such as procedures that support normal childbirth, pain relief and effective medical interventions and the presence of people close to them at the birth. A comparison of the frequency of answers in the general content categories showed that mothers more frequently mentioned desired changes than positive child-



**Fig. 1** Percentage of answers in general content categories for the best childbirth experiences and the most important proposed changes in maternity care.

birth experiences for the following categories: procedures before, during and after child-birth and birth environment characteristics. In addition, although the highest percentage of all positive childbirth experiences is found for caregiver-patient communications and relationships, almost the same percentage of all proposed changes is found for this domain, which indicates that there is still a need for improvement in medical staff's relationships and communication with women during labour and birth.

### Discussion

This research examined women's views and experiences with maternity care by analysing data from the Babies Born Better survey using the sample of Croatian women (12). Our specific objectives were to identify which childbirth related experiences are considered most positive for women and to compare these experiences with women's suggestions for changes in care provided during labour and birth. Content analysis provided rich

and valuable insight into different aspects of mothers' childbirth experiences and into proposed changes in maternity care at the place where they gave birth. A closer inspection of specific content categories revealed that the majority of responses for the mothers' perceptions of the best things and desirable changes in care during labour and birth relate to objective characteristics of the birth environment. This category includes nutrition, food and water intake during labour, accommodation, hygiene, equipment and visits. Similarly, responses in higher-order general content categories also point to the need for improvement in environmental conditions, which include objective and subjective characteristics of the birth environment. To some extent, these results could be compared to those obtained in studies on patient safety, satisfaction and quality of hospital care. Based on cross sectional surveys of nurses and patients conducted in twelve countries in Europe and United States, the authors have concluded that an increase in the quality of care and patient satisfaction in all countries

would be achieved by improving work environments and reducing the ratios of patients to nurses (14).

The classification of answers into general content categories revealed that, among various positive childbirth experiences, new mothers most frequently mention positive experiences in relations with staff in healthcare facilities, but they also most frequently express the desire for improvements in the same domain, i.e. in the caregivers' communication and relationship with patients. The second most important general content category includes continuous contact with their children, good quality of childcare and support for breastfeeding. Research findings also emphasize the importance of an empathic, individualized and caring approach from health-care providers, information and instruction about the care of an infant (15), person-centred communication skills and support in breastfeeding (16). Studies that assessed maternal experiences during labour and birth using standardized multidimensional instruments have also shown that professional support is an important dimension of the childbirth experience (4, 6). Classification of proposed changes in maternity care into general content categories shows that women frequently suggested changes in procedures before, during and after childbirth. Among those, the most important proposed changes referred to procedures that support normal childbirth such as, in mothers' words, the facilitation of natural childbirth, absence of invasive procedures and mother's control of labour. These results are in accordance with other studies which show that the amount of support from caregivers during labour, personal control and met expectations are important factors that contribute to women's satisfaction with the childbirth experience (17, 18, 19). Generally, important categories of women's experiences during labour and birth and their suggestions for change in maternity care are in accordance with criteria suggested in literature for 'mother and baby friendly' health facilities such as adopting preferred positions for women in labour and providing food and beverages, privacy in labour/delivery, choice of birthing partner, no routine practice, nonpharmacological and pharmacological pain relief, skin-to-skin mother-baby care and breastfeeding (1).

According to the percentage of answers for the best childbirth experiences, important sources of women's satisfaction are experiences related to relationships with the baby and childcare, while this general content category is of less relevance when describing the most important desired changes in maternity care. These results could support those obtained by the "Baby Friendly Hospitals" initiative jointly conducted by the Ministry of Health and the UNICEF Office for Croatia. Until now, almost all birth hospitals in Croatia have met the criteria to be awarded the title "Baby Friendly Hospitals" (20). However, the results of recent research conducted by the UNICEF Office for Croatia indicate that a significant proportion of parents are not satisfied with the relationship between medical staff and childbearing women in birth hospitals, which points to a need for new initiatives to be taken in this domain (21). The birth hospitals in Croatia show great disparity in their practices, procedures during and after birth and, as indicated by the results of our qualitative research, women giving birth require a higher level of care that could be ensured through organisational and technological improvements (22). In order to ensure the best possible newborn-mother interaction after birth, which is known to be exceedingly important, the birth environment should be as comfortable and soothing as possible, humane and friendly. Therefore, further systematic research should be conducted dealing with the birth hospital services and practices and mothers' perception of the provided care. Based on previous research, and as seen from the research described in this paper, it is evident that the time has come in Croatia for a new step toward improved birth hospital conditions (23). Data from our study concerning women's positive childbirth experiences and their proposed changes in maternity care could provide helpful evidence of what should be done to achieve an appropriate level of care and optimise childbirth in Croatia.

There are at least two important limitations of the current study. First, the study used a non-representative sample of women who gave birth in Croatia in the five years before the BBB survey was launched. Although our sample is not big enough to be representative of all women who gave birth in Croatia, it is relatively large for this type of research since qualitative analysis of women's childbirth experiences is usually performed on small samples of data gathered through interviews with women. In our study, data was collected through an on-line survey so we can assume that more educated women from bigger towns took part in the survey. However, the strength of on-line sampling is that it enabled the recruitment of a heterogeneous sample of women who have had a broad range of experiences in a number of institutions across the country. It should be noted that these experiences are characteristic for women who have given birth in Croatia, and further research is needed to determine whether a similar pattern of results would be found in countries with similar health care systems. Second, in order to examine women's childbirth experiences we used content analysis of answers to two open-ended questions of the BBB survey. Content analysis provides rich insight into a variety of women's childbirth experiences, but this type of analysis is purely descriptive and may not reveal the motives or reasons associated with the observed pattern of women's experiences. Studies that assess childbirth experiences with quantitative methods such as questionnaires have obvious advantages since

a large sample of respondents can be obtained, data from forced choice responses are easy to analyse, and the reliability and validity of the questionnaire items can be assessed. However, quantitative measures of women's childbirth experience usually do not include all or the most important domains of this multidimensional concept. The strength of our study is that domains of mothers' childbirth experience are derived from mothers' answers. The results of this study could be important for the development of an instrument that would include a representative set of items describing women's experiences with labour and birth. In future research, it would be useful to compare perceived components and importance of childbirth experiences from the perspectives of women and healthcare providers. This would help in developing strategies to improve patient-caregiver communication and health care facility environment.

### Conclusions

The childbirth experience is a multidimensional concept that includes various positive and negative events. This study focused only on women's positive birth experiences. Future research should include a wider range of childbirth events related to labour and the birthing experience. The findings from this study will enhance our understanding of the factors that contribute to positive experience of childbirth. Knowledge of women's perceptions of individual and institutional factors that promote respectful practices during labour and birth is important in order to improve the treatment provided to women during childbirth and minimize psychological distress as a result of negative birthing experiences.

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## Appendix 1

## The list of content categories and their description

- General quality of medical staff medical staff in general (the words 'staff', 'doctor', 'midwife', 'nurse'); general qualities of medical staff such as 'excellent' or 'good'; answers that suggest increasing their number
- 2. *Staff expertise* answers that explicitly emphasise the expertise of medical staff, i.e. their skills and professionalism
- 3. Kindness and general behaviour of medical staff most of the answers describe doctors, nurses or midwives as 'kind', sometimes including the adjectives 'polite' or 'attentive' and a general description of staff behaviour (good behaviour, manners)
- 4. Provision of emotional support and understanding – answers that include the words 'support', 'communication' or 'relationship' with medical staff, as well as examples of their compassion, understanding, dialogue, patience, encouragement
- 5. Provision of informational support, respect of women's needs and right to choice informing women about medical conditions and procedures (e.g. giving tips and instructions, answering questions); taking into account women's wishes and needs, respecting women's right to choice and decision-making
- 6. General quality of maternity care and care provided by medical staff refers to the

- general care for pregnant women, care and assistance of medical staff during childbirth (e.g. 'a great medical care', 'help of a midwife at birth', 'concern about me')
- 7. Continuity of care, a sense of security and individualised care perceiving that the staff is constantly available to the new mothers, that they are supervised; continuous presence of the same doctor or midwife; presence of the staff in which the person has confidence; individualised care, care 'one on one'
- 8. Organisational aspects of care provision

   admission to the maternity ward, the
  number of medical examinations (e.g.
  during pregnancy), performing medical tests without waiting, administrative
  procedures
- 9. Facilitation of natural childbirth, absence of invasive procedures and mother's control of labour uninterrupted flow of birth, natural birth, the absence of any intervention, without drip, without episiotomy, the umbilical cord is not cut immediately; free movement during labour, selection of position and mode of birth (e.g. birth on the side table, birth in the pool)
- 10. Effective medical interventions and pain relief, short stay in hospital quick and timely response of medical staff during

- delivery, fast recovery due to effective interventions (e.g. absorbable sutures after caesarean section); short hospital stay (e.g. going home after 48 hours); reduction of pain by epidural analgesia or spinal anesthesia
- 11. Father's or close person's presence at birth includes responses which explicitly mention the presence of husband, partner or father of a child at birth; sometimes the presence of a close person at birth is mentioned
- 12. Objective characteristics of the birth environment nutrition (e.g. 'delicious food', 'the food', 'all three meals a day'), food and water intake during labour; accommodation (e.g. 'layout and equipment of rooms', 'furniture', 'accommodation', 'comfort', 'cosy rooms'); hygiene (e.g. 'cleanliness', 'clean delivery room', 'clean sheets', 'hygiene'); equipment (e.g. 'new, refurbished maternity ward', 'new chair for the birth'; visits (e.g. 'visits allowed', 'the family was with me immediately after birth')
- 13. Subjective characteristics of the birth environment – general atmosphere and privacy (e.g. 'cosy atmosphere', 'peaceful and quiet', 'peace during delivery', 'noninterference', 'intimacy')
- 14. Rooming in and contact with the child after delivery rooming in, stay with the

- child, close and uninterrupted bond with the baby, skin to skin contact
- 15. Support to breastfeeding answers that specifically state 'breastfeeding' alone or with 'education', 'assistance', 'advice'; successful first breastfeeding; answers that suggest more equipment for breastfeeding (e.g. 'the number of pumps for breastfeeding')
- 16. Childcare and children's health stating the general care for the baby, the quality of medical staff that cares for the baby, methods of childcare, children's health; answers that suggest better equipment for childcare (e.g. 'the number of incubators')
- 17. There is nothing good or there is no need for change classified if specifically stated that there were no good things in the maternity care (e.g. 'nothing',' there is no care', 'everything was very bad'); classified if answers to the question about preferred changes in the care received specifically state that there is nothing to change
- 18. Specific and vague answers answers that refer to the pregnancy, private care or privileged treatment, childbirth at home, conditions for medical staff; answering that 'everything is fine' when describing the three best things in maternity care; one-word answers with vague meaning