

## ACTUAL TOPIC

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## BREASTFEEDING: DIFFICULTIES OF THE ORGANIZATION AND MODERN WAYS TO SOLVE PROBLEMS OF 10 PRINCIPLES OF SUCCESSFUL BREASTFEEDING IMPLEMENTATION

### ABSTRACT

This article discusses the issues of one of the topical problems of medicine – the organization of breastfeeding (BF). BF is the «gold standard» of optimal nutrition. The type of nutrition largely determines the state of health of the child not only at an early age, but also in further period of his life. The authors aimed to assess the current state and effectiveness of current practice and the system of support for BF, and also to identify the problems of implementing the ten principles of successful BF in the Republic of Sakha (Yakutia). The results of the questionnaire of lactating woman and medical staff in the obstetric department of the «Yakutsk City Clinical Hospital» (YaCCH), Polyclinic No. 1, which received the status of «Child Friendly Hospital» (CFH). With the receipt of the status of the CFH of the above-mentioned hospitals, the prevalence of BF increased. The analysis of women motivation, the duration, reasons for stopping BF, medical staff training on BF questions, the impact of each object (lactating woman, doctor, nurse) on the duration of breastfeeding. Difficulties in organizing of ten principles for successful breastfeeding introduction have been identified. The main reasons for stopping and transition to mixed feeding are subjective signs of a lack of milk, which could be eliminated with proper counseling. The level of knowledge of physicians on BF affects the level of knowledge of nursing staff; the latter in turn affects the frequency of conversations with mothers. The nursing staff in this situation is a support point for lactation in women. In the current practice of BF, the process of educating and motivating pregnant women at the level of women's counseling, the poor training of young professionals when entering the workforce, especially the nursing staff, the inadequate consultation on BF with preterm birth, the lack of a support group of mothers with positive experiences of breastfeeding.

**Keywords:** breastfeeding, lactation, WHO, newborns.

### INTRODUCTION

In Russia, the problem of establishing breastfeeding is very relevant. According to the Government of the Russian Federation in 2010, only 41% of children received breastmilk in Russia, while in some European countries this figure reaches 98% [1]. One of the main reasons for stopping BF is maternal ignorance. Often doctors do not pay attention to this problem. Meanwhile, the main role in the promotion of BF should be played precisely by medical personnel and healthcare organizers, as well as by BF consultants from those mothers who had positive experience, who could teach mothers the methods of BF [3]. According to Abolyan L.V., there is no unified system of training medical personnel for BF. There is also no official national program on BF, according to which attestation of medical institutions would depend on the coverage of BF [2].

### MATERIALS AND METHODS OF RESEARCH

We developed a questionnaire based on WHO recommendations. The questionnaire met the standard requirements for this method of research: filling time about 20 minutes; availability of questions that are understandable to most respondents on this topic. The main part of the questionnaire included questions about well-known and generally accepted positions on BF that do not require any special knowledge; theoretical and practical questions on the knowledge of recommendations for supporting lactation and assessing

its adequacy. A retrospective cross-sectional study was conducted. The survey was conducted in the obstetric department of the «Yakutsk City Clinical Hospital» (YaCCH), and Polyclinic №1, which were received the status of «Child Friendly Hospital» (CFH) for the period 2016-2017. The inclusion criteria were: a woman after childbirth and breastfeeding; Doctors and nurses working in these hospitals. A total of 300 respondents: 200 lactating mothers – 140 (70%) were interviewed in obstetric department, 60 (30%) in the polyclinic who gave birth in the obstetric department of the YaCCH, 100 medical workers – 76% from the YaCCH staff, and 24% from the polyclinic. Statistical processing of the results of the study was carried out by the SPSS-16 program. To assess the association of qualitative and correlation of quantitative traits, Spearman's nonparametric analysis was used, indicating the value of the degree of correlation (rs). The degree of correlation was estimated as weak at  $rs \leq 0.25$ , moderate at  $0.25 < rs < 0.75$  and strong at  $rs \geq 0.75$ . The level of statistical significance  $p$  was calculated for all statistical analysis procedures, the critical level 0.05 was adopted.

### RESULTS AND DISCUSSION

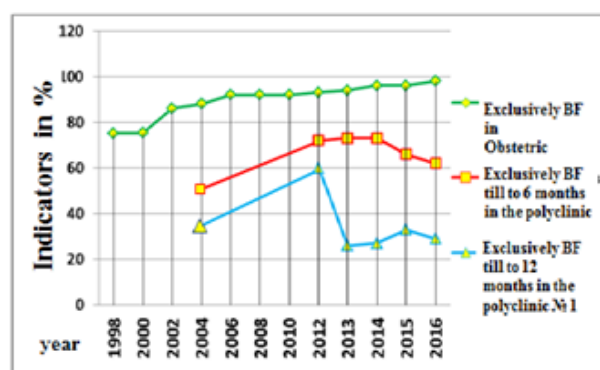
The prevalence of BF in the CFH has a tendency to increase over the past 13 years, from 75.2% to 98.3% in the obstetric department in Yakutsk and in the Polyclinic № 1 till 6 months old from 50.2% to 60.3%, till 1 year age from 31.0% to 59.8% (chart 1). The status of the CFH of the above-mentioned hospitals was

received in 2012 and confirmed in 2015 in the YaCCH. Polyclinic №1 did not pass the confirmation procedure.

Among the interviewed lactating women, 76 (38%) are employees, 48 (24%) female are students, 19% housewives, 12% workers, 5% unemployed, 2% individual entrepreneurs, 42% with higher education, 28% special secondary, 20% incomplete higher education, 10% without education. The median age was 29 (18; 47) years. 168 (84%) of women with repeated delivery, 148 (74%) were naturally given birth, 152 (76%) on time.

An analysis of the motivation for BF of lactating mothers revealed that only 128 (64%) had a desire to breastfeed for a long time, 72 (36%) women had low motivation, 36 (50%) of whom had repeated childbirth. The degree of correlation of natural birth and lactation motivation was moderate -  $rs = 0.26$  ( $p < 0.009$ ). 48% of women had full knowledge of the rules of successful breastfeeding. Only 21% of women visited their mother's school during pregnancy. Among the sources of information about BF, women in our study were called doctors 74 (37%), nurses 66 (33%), parents 26 (13%), special literature 38 (9%), media 8 (4%). 112 (56%) of respondents defined their lactation process as having no problem and not requiring support. 88 (44%) women needed help at the first stage, the main problems were inability to express milk – 48 (54.5%), lack of milk – 22 (25%), lactostasis – 26 (29.5%).

A total of 80 (47.6%) maternity females had a positive history of lactation and fed



**Figure 1.** The prevalence of BF in Hospitals with the status of «Children friendly hospital» for 13 years

their children for a long time. The average duration of lactation was  $11 \pm 1.3$  months. Out of 60 women respondent in the polyclinic 18 (30%) had already stopped breastfeeding at 3 months, 15 (25%) were on mixed feeding. The reason for the transition to artificial feeding was hypogalactia, in 94.4% of cases this complaint was purely subjective and not supported by objective signs of lactation insufficiency. For this, it is necessary to evaluate two fairly simple objective criteria - an increase in body weight and the frequency of urination. The reason for transition to mixed feeding is a lack of milk 8 (53.3%), refusal of the baby from the breast 2 (13.3%), hyperbilirubinemia syndrome with a temporary transition to artificial feeding 5 (33.4%).

Among the interviewed medical staff, doctors accounted for 68%, the nursing staff 32%. Most doctors had more than 10 years of work experience (61.8%), 53.1% of nursing staff less than 5 years. Almost all the medical personnel did not doubt the advantage of BF. The full level of knowledge of the «10 principles of successful BF», the support of women in the event of problems and the solution of the majority of issues of preserving lactation among doctors showed 36 (52.9%), incomplete knowledge of 32 (47.1%), among nurses 8 (25%) and 24 (75%), accordingly. The degree of correlation between the level of knowledge of medical staff and the work experience, the availability of a qualification category was  $-rs = 0.525$  ( $p < 0.001$ ); The level of knowledge of the doctor and the level of knowledge of nursing staff was  $-rs = 0.615$  ( $p < 0.001$ ); The level of knowledge of the nursing staff and the frequency of the conversation with mothers on BF questions was  $-rs = 0.528$  ( $p < 0.001$ ); Level of mother's knowledge about

BF and motivation for breastfeeding  $-rs = 0.289$  ( $p < 0.05$ ); Frequency of conversation between medical staff and duration of feeding  $-rs = 0.75$  ( $p < 0.001$ ); Motivation for BF and duration of BF  $-rs = 0.826$  ( $p < 0.001$ ); A moderate negative correlation is determined between the frequency of premature birth and the duration of feeding  $-rs = -0.473$  ( $p < 0.001$ ).

WHO in the last paragraph of the «10 principles of successful BF» recommends the creation and promotion of maternal groups supporting breastfeeding, but according to the results of the questionnaire, this item did not have a positive response from the respondents.

### CONCLUSION

1. Prevalence of HB for 13 years in the primary link tend to increase. Before to obtaining the status of the CFH, the coverage rates of children with a natural feeding were low. The set of measures taken by the Healthcare Ministry of RS (Y) to support the BF gave positive results and led to the fact that the highest figures were achieved in recent years.

2. Low motivation of mothers for BF leads to a decrease in the duration of breastfeeding. The main reasons for stopping and transition to mixed feeding are subjective signs of a lack of milk, which could be eliminated with proper counseling.

3. The level of knowledge of physicians about BF affects the level of knowledge of nursing staff, the latter in turn affect the frequency of conversation with mothers about BF issues. The nursing staff in this situation is a support point for lactation in women. From here follows an important recommendation for the heads of departments and doctors about the necessity to train nursing staff for all BF skills.

4. The existing practice of the BF does not fully implement the protocol for implementing the «10 principles of successful BF»:

- the point of training and motivation of pregnant women in the BF is affected (work of the women's consultation);
- poor-quality training of young professionals when entering the workforce, especially nursing staff;

- a fairly high percentage of children born prematurely is lost due to inadequate care at all stages – training in expressing milk, absence of joint mother and premature baby in intensive care beds, «Kangaroo» contact;

- the lack of a support group for BF from among mothers with a positive experience of breastfeeding. Given that the transfer of the mother's experience of breastfeeding from mother to mother, from the older generation to their children most often does not require any specialized intervention of medical workers, it is necessary to create, through modern means of communication, maternal groups supporting breast-ligation at the local level.

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