

THE PHENOMENON OF BREAST MILK – MOTHERS' AWARENESS IN THE SUBJECT OF NATURAL FEEDING

FENOMEN MLEKA KOBIECEGO – ŚWIADOMOŚĆ MATEK NA TEMAT KARMIENTA NATURALNEGO

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ABSTRACT

Introduction. As it is commonly known, feeding a child with breast milk brings a number of long-term, but also immediate benefits. These are both benefits for the newborn and for the nursing mother. The phenomenon of woman's milk is that it is a unique substance adapted to the nutritional needs of the newborn and the infant. At the same time, the mother's milk ensures appropriate psychophysical, cognitive and emotional development as well as a protective function for the body of a newborn baby.

Aim. The objective of the thesis was to analyze the state of knowledge of mothers in childbirth on the phenomenon of woman's milk. In addition, special attention was paid to mothers' awareness of breastfeeding.

Results. 40,7% of surveyed women were interested in the subject of breastfeeding before the pregnancy, 43,3% of women started to reach for the information during the pregnancy, while 16% only after the childbirth. 61,3% of women fed the child naturally up to 6 months, 48,6% fed the child up to 1 year of age and 22% of the respondents fed the child longer than 1 year. The most frequent difficulties reported by women were: nipples sore (64,7%), insufficient milk supply (36,7%), difficulties with latching on the newborn properly to a breast (23,3%) and breast fullness (20,7%).

Conclusions. The earlier the woman began to acquire her knowledge in the field of breastfeeding, the presented level of evaluation was higher. In addition, the time of breastfeeding increased depending on the educational level of the respondents.

KEYWORDS: breastfeeding, infants, women in childbirth.

STRESZCZENIE

Wstęp. Jak powszechnie wiadomo, karmienie dziecka mlekiem kobiecym niesie za sobą szereg długoterminowych, ale też natychmiastowych korzyści. Są to zarówno korzyści dla samego noworodka, jak i dla matki karmiącej. Fenomen pokarmu kobiecego polega na tym, że jest on unikatową substancją dostosowaną do potrzeb żywieniowych noworodka, jak i niemowlęcia. Mleko matki zapewnia jednocześnie odpowiedni rozwój psychofizyczny, poznawczy oraz emocjonalny, a także spełnia funkcję ochronną dla organizmu nowo narodzonego dziecka.

Cel. Celem pracy była analiza stanu wiedzy położnic na temat fenomenu pokarmu kobiecego. Ponadto szczególną uwagę zwrócono także na świadomość matek dotyczącą karmienia piersią.

Wyniki. Największą część badanych, bo aż 40,7% rozpoczęła interesować się tematem karmienia piersią przed ciążą, 43,3% badanych zaczęła sięgać po te informacje w czasie ciąży, natomiast 16% osób badanych dopiero po urodzeniu dziecka. W badanej grupie osób średni czas naturalnego karmienia dzieci wyniósł średnio 8±7 miesięcy. Do 6. miesiąca życia dziecka 61,3% badanych kobiet karmiło je naturalnie, do 1. roku życia dziecka karmiło 48,6% kobiet, zaś dłużej aniżeli jeden rok karmiło 22% badanych kobiet. Wśród ankietowanych położnic najczęstszymi trudnościami, z jakimi się spotkały, były: bolesność brodawek sutkowych (64,7%), niewystarczająca ilość pokarmu (36,7%), trudności z prawidłowym przystawianiem noworodka do piersi (23,3%) oraz nawet mleczny pokarmu (20,7%).

Wnioski. Poziom wiedzy na temat mleka kobiecego oraz karmienia piersią u większości osób jest dobry. Ciekawe jest to, że im wcześniej kobieta zaczęła przyswajając swoją wiedzę w zakresie karmienia piersią, tym prezentowany poziom wiedzy wg jej oceny był wyższy. Ponadto wraz ze wzrostem poziomu wykształcenia wydłużał się czas karmienia piersią przez daną kobietę.

SŁOWA KLUCZOWE: karmienie naturalne, noworodek, kobieta w położu.

Introduction

Breastfeeding helps to maintain newborn's optimal health and supports proper development. Newborn's or-

ganism is not yet fully mature, and mother's milk supplies it with a perfectly balanced nourishment [1]. It is easy to digest, it contains all the ingredients necessary

for development and proper growth of the child's body. It contains numerous enzymes, hormones and bioactive factors thanks to which it has a protective function and influences the development of the immune system [1–2].

Children fed with human milk present less frequent severity of infectious diseases, they are much less likely to die and be hospitalized [1, 3]. Among the immediate breastfeeding results one can distinguish: reduced children's incidence of diseases such as: bacteremia, urinary tract infections, celiac disease, gastrointestinal infections, atopic dermatitis, necrotizing enterocolitis, diarrhea, infant death syndrome, pneumonia, late sepsis in prematurely born babies, otitis media, infectious respiratory tract inflammation and bacterial meningitis [1–3].

What is more, the breast-fed infants present much lower risk of obesity and overweight, asthma, Hodgkin's disease, myeloid leukemia and lymphocytic leukemia, type I and II diabetes, non-Hodgkin's lymphoma (NHL), and Crohn's disease [1–3].

Long-term breastfeeding results include reduced blood cholesterol levels in adults, lower risk of developing type II diabetes, and a reduced percentage of people with Attention Deficit Hyperactivity Disorder (ADHD). Apart from that, adults who were breastfed as infants are reported to have lower blood pressure parameters and thus a much lower risk of developing hypertension. It is also believed that people who were breast-fed do not abuse alcohol in their adulthood [1].

The analysis of numerous studies [1–4] confirms that the cognitive, intellectual, emotional and psychomotor development of breast-fed children is better than in children who were fed with a milk replacer.

Objective

The objective of the thesis was to analyze the state of knowledge of mothers in childbirth on the phenomenon of woman's milk and to draw attention to mothers' awareness of breastfeeding.

Material and methods

The study involved a group of 150 women of different age who were hospitalized at the Obstetric Ward of Szpital Powiatowy (District Hospital) in Śrem. The research was conducted at the turn of January and March 2017. The qualification criterion for the study was a female gender and passed pregnancy and delivery.

The research was carried out using the method of a diagnostic survey in a form of a proprietary questionnaire. The questionnaire consisted of 25 questions, of which the first 8 questions concerned personal data

necessary for the group's research characteristics, while the remaining 17 questions concerned knowledge and awareness about breast milk and breastfeeding.

The collected data was statistically analyzed using Microsoft Excel and Statistica 12.5 by StatSoft. In order to compare the compatibility of the distribution of variables with the normal distribution, the Shapiro-Wilk test was used. Analyzing the statistical dependencies, R Spearman's rank correlation test was used. The value of $\alpha = 0.05$ was assumed as the level of statistical significance. For $p < \alpha$ the result was considered statistically significant.

Results

The survey was conducted within the group of 150 women between 17 and 45 years of age. The average age was 29 ± 5.62 . Characterizing the level of education of the studied group, 65 women (43.3%) had a university degree, 57 (38%) had secondary education. 22 respondents declared vocational education (14.7%), and 6 basic education (4%). 80 subjects (53.3%) lived in a village, while 70 (46.7%) were the residents the city.

The women were also characterized with the method of the last delivery. 92 women (61.3%) had a natural birth, 56 (37.3%) underwent the Cesarean section, 2 respondents (1.3%) underwent a medical intervention - vacuum extraction or forceps delivery.

The respondents were asked when they first started to search for the information concerning breastfeeding. The largest part of respondents (40.7%) started to be interested in the topic of breastfeeding before pregnancy, 43.3% started to search for information during pregnancy, while 16% after the birth of a child ($p = 0.000003$). Other figures and percentages are shown in **Figure 1**.

Considering the source of knowledge among the respondents, the most common answers were press, books (51.3%), Internet (50.7%), knowledge gained during their stay at the maternity ward (50%) and an environmental midwife visit (38%). The least frequent response were visits to the doctor (10%), ($p = 0.000003$).

When divided the respondents according to education, the largest number of those who think that women's milk changes depending on many factors were women with higher education (86.2%) followed by secondary (77.2%), vocational (72.3%), and primary education (66.7%). The highest number of responses stating that woman's milk has a permanent composition was given in a group of the respondent with primary education (33.3%) (**Figure 2**).

The most important benefit of breastfeeding for a child is building bonds with the mother (73.3%), reduction of the risk of infection (65.3%) and a reduced risk of allergy in a child (53.3%). Data are presented in **Figure 3**.

According to the respondents, the most important benefit is the strengthening of the emotional bond with the mother (78.7%), while the least frequent answer was that natural feeding does not bring any benefits (7.3%), **Figure 4**.

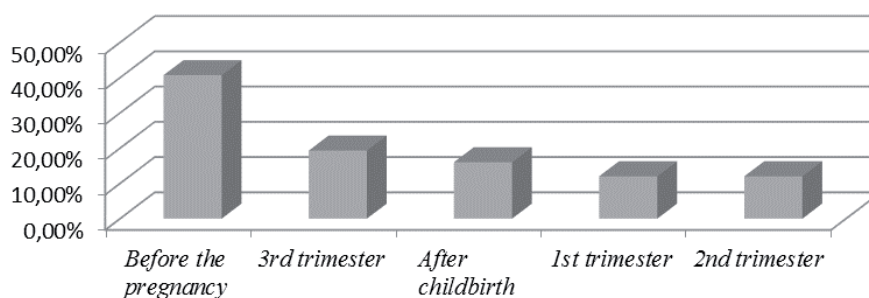


Figure 1. Start of the interest in breastfeeding among the female respondents

Source: author's own analysis

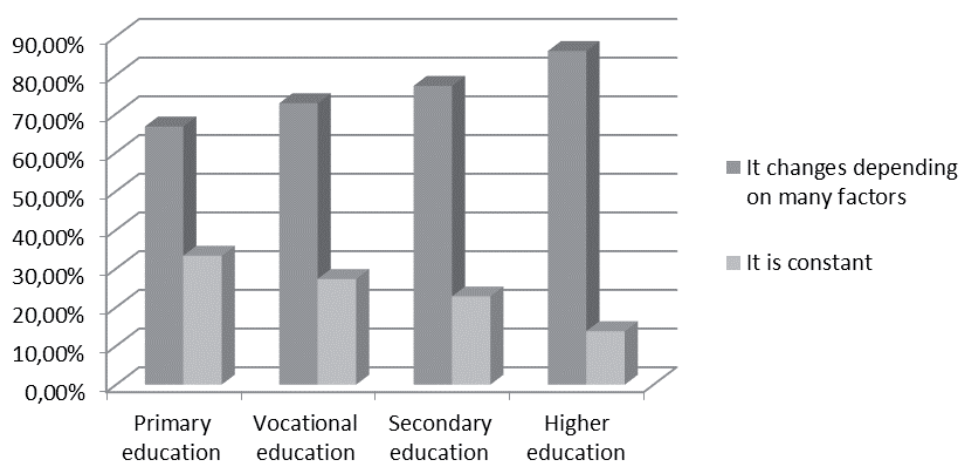


Figure 2. Is the composition of breast milk constant? (answers with the division of the respondents according to their education)

Source: author's own analysis

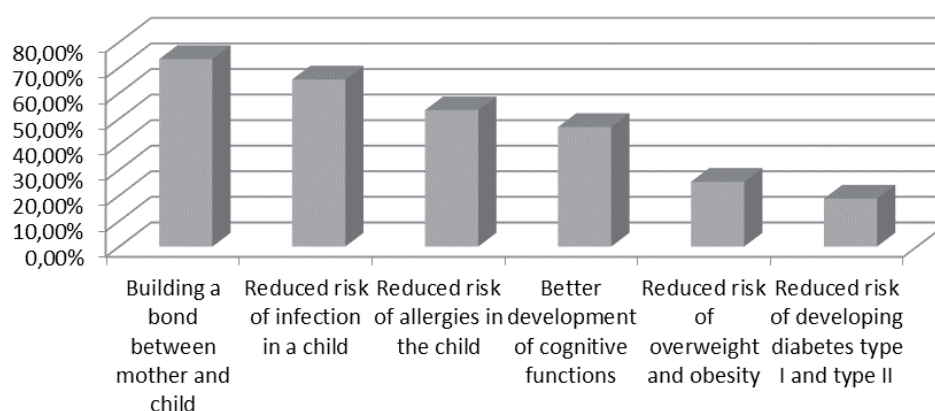


Figure 3. Child's benefits from breastfeeding according to the respondents

Source: author's own analysis

The respondents also answered the question about the ingredients distinguishing female milk from the milk replacer. 62.7% of respondents claimed that the correct answer was bioactive components, 26.7% of respondents believed that vitamins distinguished natural female nutrition from a milk replacer mixture. 8% of respondents chose macroelements as an answer, and

2.7% indicated carbohydrates as an answer. In addition, the answers to the above question were divided according to the respondents' education: the largest number of women with higher education chose bioactive components (75.4%) as an answer, followed by those with secondary education (68.4%). The results are presented in **Figures 5 and 6**.

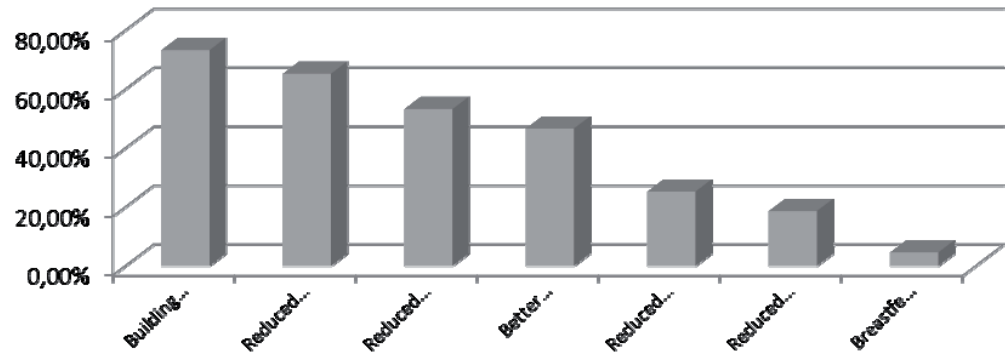


Figure 4. Mother's benefits from breastfeeding according to the respondents
Source: author's own analysis

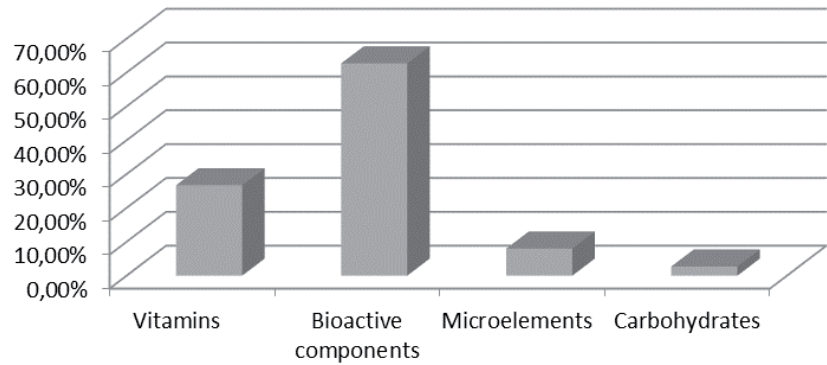


Figure 5. The most important ingredients of breast milk distinguishing it from the milk replacer according to the respondents
Source: author's own analysis

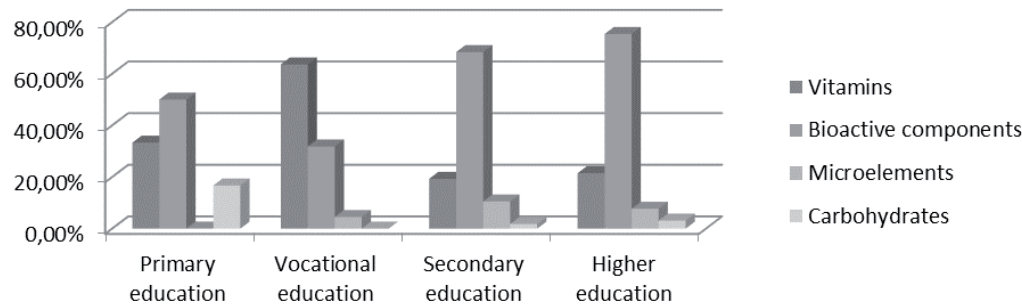


Figure 6. The most important components of the female breast milk differentiating it from the milk replacer according to the group of respondents, divided by their level of education
Source: author's own analysis

The most frequent difficulties reported by women were: nipples sore (64,7%), insufficient milk supply (36,7%), difficulties with latching on the newborn properly to a breast (23,3%) and breast fullness (20,7%). The least frequent response was breast inflammation - 5.3% of the subjects.

The respondents also answered short questions requiring confirmation or denial. Answers to these questions are presented below in **Figure 7**.

Moreover, in terms of education, the more advanced education a person had, the more often the answer was correct in this group of people. Also, when asked about the ingredients breast milk that distinguishes it from artificial milk replacers, 62.7% of respondents gave the right answer.

In the available scientific literature [5-9], one can find works that examined the state of knowledge and the process of breastfeeding among women in terms of certain data.

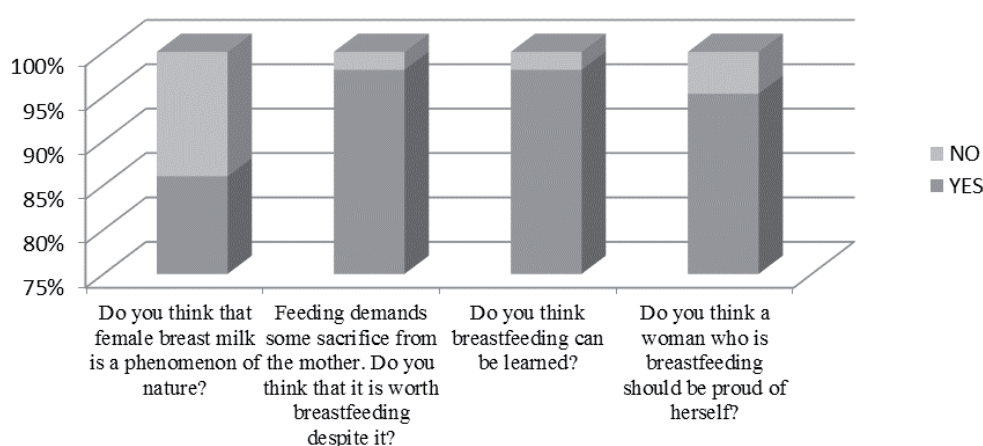


Figure 7. Answers to the short (yes/no) questions concerning the knowledge about breast milk and breastfeeding
Source: author's own analysis

Discussion

Female breast milk is the most appropriate nourishment for the newborn and infant, it has a unique composition enabling the child's physical and mental development. The breastfeeding process itself gives mutual benefits not only for the child, but also for the mother. To explain the breastfeeding process one needs knowledge in the field of human physiology.

The researched group participating in the study varied in many respects. One of the factors differentiating the respondents was age. Because of the fact that only nursing women were examined, the age of surveyed women ranged between 17 and 45 years of age. The largest percentage were women with higher education (43.3%) and secondary education (38%), while the least were the respondents with vocational and basic education (14.7% and 4%).

When it comes to the correctness of answers given to individual questions requiring knowledge about breastfeeding, it can be noticed that the level of knowledge was not diversified to a large extent among the respondents, and the responses were correct in most of the cases. When asked about whether woman's milk is constant, up to 80% of respondents gave the right answer.

In terms of the sources of knowledge about breastfeeding, the most common answers were: press, books (51.3%), then the Internet (50.7%), and knowledge gained during stay at the maternity ward (50%) and the midwife visit (38%). The physician was the least likely answer (10%).

According to Kamianowska et al. [5], the main source of knowledge about lactation among women in labor was the midwife (52%) followed by magazines (44%) and books (33%), then family (21%). The lowest percentage was the Internet (13%) and a doctor (9%). This is also confirmed by the studies of Cierpka et al. [6] and Klejewski et al. [7]. The above research differs from our own study in terms of the source of knowledge, which is the Internet. It can be presumed that this difference is due to the times in which studies by Kamianowska et al. [5] were carried out, when the Internet was a less popular source of knowledge. Our own study is comparable to the above-mentioned research in terms of the source of knowledge when a doctor is concerned. This may be due to the insufficient amount of time that a physician can devote to a patient. Currently, for a significant part

of time in the postpartum period, the woman in labor stays in contact with midwives in maternity wards or district midwives.

Another examined factor was the time of breastfeeding among the studied women. In our own research it was on average 8 months. 61.3% of the surveyed women breast-fed their children up to 6 months of age, 48.6% of women up to 1 year, while breastfeeding for the time longer than one year was indicated by 22% of respondents. In the study of Ćwiek et al. [8] 67.4% of women breast-fed the baby up to the third month of life, 31.5% of the subjects fed the child with women's milk up to 6 months, and 2.2% of women up to the first year of life. Similar studies were carried out by Plagens-Rotman et al. [9] and Łukasik et al. [10], in which it was shown that 51.02% of women breast-fed their child up to 6 months of age.

When characterizing the time of reaching for information about breastfeeding by nursing women, 40.7% of respondents began to be interested in the topic before pregnancy, 43.3% of respondents during pregnancy, and 16% after the birth of the child. According to research by Wyderka et al. [11], about 30% of respondents began to gain knowledge about breastfeeding before pregnancy, ca. 20% of the respondents during pregnancy and 16% of women began to reach for knowledge about breastfeeding after childbirth, which was also confirmed in our own research. What is more, our survey took into account the influence of other people on the decision regarding breastfeeding. Similar results were obtained by Plagens-Rotman et al. [9], where 76.19% of the respondents made their own decision, when in our own study the percentage was 85.3%.

Another element of our research was the level of women's knowledge about the advantages of breast milk and its impact on the health of the child. According to studies by Wyderka et al. [11], approximately 90% of respondents believe that breast milk is the best nourishment for a child, protecting it from infections. On the basis of the results of their own research Gebuza et al. [12] claim that breastfeeding is an important element that strengthens the emotional bond with a born child and its priority is the health of the child. According to surveys by Cierpka et al. [6] who examined the knowledge of women in the field of the impact of breast milk on the child's health, the most frequent response was the impact on the child's immunity (96.04%), followed by a beneficial effect on the general condition (77.23%) and a beneficial impact on intellectual and emotional development (62.38%) as well as allergy prevention (53.47%).

Breastfeeding is a natural process, it seems simple, but it is not obvious. This activity requires a mother's dedication and can carry problems with which a nursing

woman has to deal. However, looking through the prism of the benefits, breastfeeding is the best for the health of the born child because of a unique composition that is not possible to be reproduced with human skills through manufactured, artificial milk replacers. It is thanks to the phenomenon of female breast milk, its ideal composition and adaptation to the needs of the child, that it is possible to provide the necessary nutrients for the proper development of the child's systems and organs. Another advantage is the fact of enhancing the immunity of the child with immune antibodies existing in milk, bacteriostatic agents and hormones. Mother's breast milk delivered to the child prevents the development of civilization diseases such as allergies, osteoporosis, atherosclerosis or obesity. Breastfeeding is also very beneficial for the mother, because it reduces the risk of, e.g. breast cancer, and close contact between mother and child affects the development of emotional bonds.

Breastfeeding still requires promotion and support through promotion programs aimed at increasing women's knowledge and awareness about natural feeding of a child. This process can also take place by educating healthcare professionals, mainly midwives working in maternity wards and district midwives who spend most time taking care of the women in labor. Persons dealing with mothers in the postpartum period are primarily committed to thoughtful and reliable communication of information, as well as practical help about breastfeeding, breastfeeding techniques, breastfeeding diets and the most common problems of lactation and ways of dealing with them.

Having the skills and the right amount of knowledge in the field of natural feeding by the nursing mother is one of the factors that determine the course of proper lactation.

Efforts to promote natural feeding over recent years have had a positive effect on the dissemination of breastfeeding, they encourage and make mothers feel more motivated to feed their children in the best natural way.

Conclusions

1. The earlier the woman began to acquire her knowledge in the field of breastfeeding, the higher the presented level of evaluation was.
2. The time of breastfeeding increased depending on the education level of the respondents.

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