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Benefits of Breastfeeding

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***Abstract*— The objectives of this work were to review the benefits and drawbacks of breastfeeding , as well as to study the factors influencing its initiation and prolongation.**

***Material and methods.* - Bibliographic research by consultation of data banks .**

***Results.* - Breastfeeding is associated with better cognitive development of children . This effect is even stronger when mothers breastfeed exclusively and for a long time. In the context of prevention of a large number of diseases to more or less long term (ear infections, gastrointestinal infections, atopic diseases, obesity and cardiovascular diseases...), exclusive breastfeeding and extended from 4 to 6 months is recommended.**

***Conclusion.* - Breastfeeding could be considered as one of the essential elements to promote for human new born.**

***Index Terms*- : Breastfeeding - Exclusive Breastfeeding - Benefits , Disadvantages.**

I. Introduction

Breastfeeding is the most natural and best way to feed a child. The superiority of breast milk over cow's milk and industrial substitutes is accepted by all and is summarized in the Anglo-Saxon slogan " breast is best, "This is why the WHO recommends since May 2001, an exclusive breastfeeding during the first six months of life and continued until the age of two years or more according to the desire of the mother.

Breastfeeding is one of the most effective ways to maintain the child's health and survival. Recent research shows that the knowledge, attitudes and practices of mothers and non-optimal breastfeeding practices, including non-exclusive breastfeeding, accounted for 11.6% of all deaths of children under 5, which in 2011 corresponded to 804 000 deaths in the world [1]. Breastfeeding drastically reduces deaths from acute respiratory infection and diarrhea, two major causes of infant mortality, as well as other infectious diseases. The potential impact of optimal breastfeeding practices is particularly important in situations in developing countries with a high burden of disease and poor access to safe drinking water and sanitation. But children who are not breastfed in industrialized countries also have a higher risk of death.

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II. Patients and Methods

The bibliographic search was conducted on the PubMed and Direct Science databases Criteria for the selection of publications were as follows: recent studies in countries identifying the benefits and risks of AM practice .The study was completed with a manual search for articles and reports available on the subject.

III. Benefits of Breastfeeding

A. Protection against infections:

The main advantage of breast milk for the child is undoubtedly the protection against infections. This protection is due to the properties of the milk itself (antibodies, oligosaccharide ...) and to a lower exposure to the pathogenic germ. These factors account, at least partially, for the lower prevalence of infectious diarrhea, otitis media, pneumonia, bacteremia, and meningitis in the first year of life in infants who were exclusively breastfed during the first six months of life whatever in the industrialized or developing country [2].

B. Obesity:

Several studies have shown that breastfeeding lowers the risk of overweight and obesity in childhood and adolescence, and this effect is directly related to the duration of breastfeeding [3]. Several mechanisms have been invoked to explain this protective effect. First of all, breastfed children naturally control their energy intake, unlike bottle-fed children whose parents can control these intakes. Then breast milk which is denser in energy, is more easily metabolized and consumed in smaller quantities compared to maternized milk which could contribute to lower insulin -secretion with a consequent of best quality of control adipogenesis [4, 5].

C. Psychoaffective and cognitive development

The potential benefits of the Breastfeeding on cognitive development are of great scientific interest. From the first study conducted in 1929 to the most recent studies and although data obtained are readily discordant, they never against the Breastfeeding. Firstly, several studies argued the fact that cognitive development is multifactorial, and depends on the cultural and educational environment, the socio-economic level of the parents, the rank in the siblings ..., whereas others, report on the difficulties inherent to methods of evaluating cognitive functions that in general use imperfect instruments [6]. However, several recent meta-analyzes have concluded that exclusive Breastfeeding is significantly associated with better cognitive development in children, albeit modest [4, 7].

D. Allergic diseases:

The prevalence of allergic diseases and asthma among school-aged children is increasing worldwide. During intra-uterine life and early childhood a child genetically predisposed to more risk of sensitization to allergens. The role of breastfeeding in the protection of allergic diseases and asthma is controversial [8]. A meta-analysis has shown that breastfed children have a lower risk of developing asthma in childhood, especially in low- and middle-income countries, according to the study. This is mainly explained by the fact that breastfeeding maternal protects against respiratory infections [9].

This study also concluded that children breastfed exclusively for at least 3-4 months have a reduced risk of eczema ≤ 2 years and allergic rhinitis ≤ 5 years. However, in the same study it has not been shown that Breastfeeding would have a protective effect against food allergies.

E. High blood pressure and cardiovascular diseases:

Owen's meta-analysis includes data from 24 studies that provide measured blood pressure values at different ages based on the diet of the first weeks of life. This study shows a minimal mean decrease in systolic blood pressure (-1 mm Hg) in people who have been breastfeeding. A decrease in mean of 2 mmHg could reduce the adult prevalence of high blood pressure by 17%, and the risk of coronary heart disease and stroke by respectively 6 and 1 5% [10]. This role is thought to be related mainly to the high level of polyunsaturated fatty acids in breastmilk, which improves the structure of cell membranes in the vascular endothelium [11]. A meta-analysis of 37 studies has shown that cholesterol levels are lower in breast-fed adults, which could be explained by high cholesterol intake at the initial stage of life, which acts as a nutritional stimulus for HMG COA reductase activity of the long-term persistent LDL cholesterol receptor. Thus, breastfeeding may play a long-term preventive role in vascular risk and the development of coronary insufficiency in adulthood [12].

F. Diabetes:

Diabetes mellitus is one of the leading causes of morbidity and mortality, and its prevalence has increased rapidly worldwide, particularly in developing countries [13]. In type I diabetes, the destruction of β cells in Langerhans cells is genetically transmitted, yet many individuals who carry the gene do not systematically express the disease. This fact suggests the existence of environmental factors that control its manifestation. Early use of cow's milk, a highly allergenic food and lack of breastfeeding are thought to be responsible for triggering the autoimmune process. This protective effect has been reported with the anti- inflammatory properties of breast milk [14]. One study found that children who were breastfed were less likely to develop type II diabetes than those fed bottle-feeding, and this protection was proportional to the duration of breastfeeding. These properties have been assigned to these bioactive substances in breast milk that could have a role in the reduction of insulin resistance [15].

G. Celiac disease :

Like diabetes, celiac disease is an autoimmune disease that depends primarily on genetic and environmental factors. A systematic review suggested that the risk of celiac disease may be decreased in breastfed children at the time of gluten introduction. Nevertheless, it cannot be concluded that this is only a delay in the onset of symptoms [16].

H. The tumoral pathology of the child

Most studies have shown that breastfeeding has a protective effect against childhood cancers, however this effect has not been demonstrated in other studies [17]. Ortega-Garcia et al. have demonstrated that the protective effect of breastfeeding could be observed from the first eight weeks of exclusive breastfeeding and gradually increase during the first six months of life among children exclusively breastfed [18].

I. Dental malocclusion

Several studies have demonstrated the effect of breastfeeding on the normal oral development of the child [19]. This is explained by the fact that the muscular activity required for breastfeeding is different from that associated with the sucking of a pacifier, and allows a better vertical, transverse and sagittal development of the structures [20]. In addition, non-breastfed children often have different non-nutritive sucking habits than breastfed children (no more lollipops and thumb sucking), and these habits persist longer, so their deleterious potential is exerted more often durably on the maxillofacial structures [21].

J. Sudden Infant Death Syndrome

Sudden Infant Death Syndrome (SIDS) is one of the leading causes of post-neonatal child mortality. Several studies have shown that all breastfeeding protects against SIDS, but exclusive breastfeeding confers a stronger effect [22].

A recent meta-analysis of 8,259 cases of sudden death and 6,894 of healthy controls found that breastfeeding would reduce Sudden Infant Death Syndrome (SIDS) by almost half. The results also showed that the longer infants were breastfed, the lower the risk of SIDS. On the other hand, according to this study breastfeeding for less than two months did not provide long-term protection for babies against SIDS [23].

K. Autism Spectrum Disorder (ASD)

In addition to the genetic factors that influence the onset of ASD symptoms, there is growing interest in the potential involvement of non-genetic environmental factors. Some non-optimal breastfeeding practices have been reported as risk factors for (ASD). A meta-analysis of a group of children with ASD (n = 1463) and another group of healthy children (n = 1180) concluded that non-optimal brestfeeding practices were significantly associated with elevated TSA [24]. The study by Kathleen M. Krol et al. suggested that exclusive breastfeeding may modulate some of the deficiencies involved in autism, especially when the problem is related in children to the CD38 gene (involved in oxytocin release and thus in interactions between individuals) [25].

IV. Conclusion

There is unanimous agreement on the superiority of breast

milk over cow's milk, so breastfeeding offers short- and long-term protection for the health of the child and the health of the mother. It is considered one of the essential links that have allowed the survival of humanity.

CONFLICTS OF INTEREST

None identified.

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