

Feeding practices during the first six months of life

Thesis

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(..... رب إني لما أنزلت إلي من خير فقير)

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Abstract

Breastfeeding is the optimal way of providing ideal food for the health, growth, and development of infants while simultaneously benefiting the lactating mother. Exclusive breastfeeding should be the norm from birth until 6 months of age followed by the introduction of age-appropriate complementary foods. In this study, a sample of 400 mothers whose infants were in the first six months of life have been collected from the attendants of CSPM to estimate the prevalence of exclusive breastfeeding according to age and the pattern of breastfeeding. It was found that the practice of exclusive breastfeeding up to the age of 6 months was not satisfactory. Liquids (other than milk) and semisolids were introduced early to the infant's diet. Providing health education on breastfeeding as an intervention for the studied group has shown to improve the mother's knowledge and practice of breastfeeding.

Key words: exclusive breastfeeding- education- six months- complementary food

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List of abbreviations

- AAFP: American academy of family physicians
- AAP: American academy of pediatricians
- ACOG: American college of obstetricians and gynecologists
- ADA: American dietitians association
- ARA: Arachidonic acid
- BF: Breastfeeding
- CSPM: Centre of social and preventive medicine
- DHA: Docosahexaenoic acid
- EDHS: Egypt demographic and health survey
- FIL: Feedback inhibitor of lactation
- ILCA: International lactation consultants association
- LAM: Lactation amenorrhea method
- SIDS: Sudden infant death syndrome
- sIgA : Secretory immunoglobulin A
- USPSTF: U.S. Preventive Services Task Force
- WHO: World health organization

Introduction

Optimal infant and young child feeding practice rank among the most effective interventions to improve child health. In 2006 an estimated 9.5 million children died before their fifth birthday, and two thirds of these deaths occurred in the first year of life. Under-nutrition is associated with at least 35% of child deaths. It is estimated that sub-optimal breastfeeding, especially non-exclusive breastfeeding in the first 6 months of life, results in 1.4 million deaths and 10% of the disease burden in children younger than 5 years **(WHO, 2009)**.

Breastfeeding is an important public health strategy for improving infant and child morbidity and mortality, improving maternal morbidity, and helping to control health care costs. Breastfeeding is associated with a reduced risk of otitis media, gastroenteritis, respiratory illness, sudden infant death syndrome, necrotizing enterocolitis, obesity, and hypertension. Breastfeeding is also associated with improved maternal outcomes, including a reduced risk of breast and ovarian cancer, type 2 diabetes, and postpartum depression. These reductions in acute and chronic illness help to decrease health care related expenses and productive time lost from work **(ADA, 2009)**.

The AAP Section on Breastfeeding, American College of Obstetricians and Gynecologists, American Academy of Family Physicians, Academy of Breastfeeding Medicine, World Health Organization, and many other health organizations recommend exclusive breastfeeding for the first 6 months of life **(AAP, 2005)**

All family physicians, whether or not they provide maternity care, have a unique role in promotion of breastfeeding. Family physicians understand the advantages of family-centered care and are well positioned to provide breastfeeding

support in that context. By providing comprehensive care to the whole family, family physicians have an opportunity to provide breastfeeding education and support throughout the life cycle to all members of the family **(AAFP, 2001)**.

Family physicians may provide prenatal care and labor support, deliver the infant, and help in the prompt initiation and continuation of breastfeeding. Breastfeeding education and support can be woven throughout these visits. Family physicians have the unique opportunity to emphasize breastfeeding education beginning with preconception visits and continuing throughout prenatal care, delivery, postpartum care, and during ongoing care of the family. Encouragement from a physician and other family members, especially the baby's father and grandmother, are important factors in the initiation of breastfeeding. In caring for a mother's immediate and extended family, a family physician should encourage her social support system to support breastfeeding **(AAFP, 2001)**.

Aim of the work

1. To profile the pattern of feeding practice during the first six months of life among the studied group
2. To apply a breastfeeding education trial as an intervention for a sample.

History of breastfeeding and artificial milk

Throughout most of history, breastfeeding was the norm, with only a small number of infants not breastfed for a variety of reasons. In the distant past, wealthy women had access to wet nurses, but with the industrial revolution this practice declined.

By the late 19th century, infant mortality from unsafe artificial feeding became an acknowledged public health problem. Public health nurses addressed this by promoting breastfeeding and home pasteurization of cows' milk. After the turn of the century, commercial formula companies found a market for artificial baby milks as safer alternatives to cows' milk. During this same period, infant feeding recommendations became the purview of the medical profession. Partially because of physician support and a vision of "scientific" infant care, the widespread use of formula as a breast milk substitute for healthy mothers and babies emerged in the first half of the 20th century (**Greer and Apple, 1991**).

Throughout the middle part of the 20th century, most physicians did not advocate breastfeeding, and most women did not choose to breastfeed. An entire generation of women and physicians grew up not viewing breastfeeding as the normal way to feed babies.

Despite the resurgence of breastfeeding in the late 20th century, breastfeeding and formula feeding continued to be considered virtually equivalent, representing merely a lifestyle choice parents may make without significant health sequelae (**AAFP, 2001**).

Benefits of breastfeeding

According to the American Academy of Pediatrics, breastfed infants are the reference against which all alternative feeding methods must be measured with regard to growth, health, development, and other outcomes (AAP, 2005). Human milk has many beneficial effects on the health of infants, especially premature and low birth weight infants and young children. These benefits are magnified with exclusive breastfeeding and breastfeeding beyond 6 months of age (WHO, 2002).

I. Benefits of breastfeeding for infants

Optimal Nutrient Composition

Human milk is uniquely tailored to meet the nutrition needs of human infants. It has the appropriate balance of nutrients provided in easily digestible and bioavailable forms. The milk changes its composition-from colostrum for newborns to mature milk for older infants-to meet the nutrient needs of growing infants. It provides adequate amounts of carbohydrates, essential fatty acids, saturated fatty acids, medium- chain triglycerides, long-chain polyunsaturated fatty acids, and cholesterol (WHO, 2003).

Reduction in Infant Morbidity and Mortality

Breastfeeding, especially exclusive breastfeeding, during the first 6 months of life is an important factor for reducing infant and childhood morbidity and mortality. Breastfeeding is associated with a reduction in postneonatal deaths from all causes other than congenital anomalies and malignancies, and exclusive breastfeeding is associated with lower rates of hospitalization from infections in the first year of life (Talayero et al., 2006).