

CHAPTER TWENTY EIGHT

Tehneek: A Medical Discovery ¹

O Allah (The Exalted) bless our master Muhammad (may Allah bless him and grant him peace) to the extent of Your forbearance.

It is a long-established custom among Muslim parents to put a piece of well-chewed date in the mouth of a newborn baby. Muslims do this following the practice of the Prophet Muhammad (may Allah bless him and grant him peace) believing him to be, as the Qur'an says, sent as a healing and a mercy to mankind. We may infer from the way this custom originated that there is a virtue in this practice. There is - in addition to the virtue and pleasure of following the Sunnah (the practice of the Prophet) - a benefit in placing a 'sugary substance' inside the mouth of a newborn baby, it dramatically reduces pain sensation and heart rate. An interesting study, published in the British Medical Journal,ⁱ demonstrated the benefit of giving a newborn baby sugar, in order to reduce the feeling of any painful procedure like heel pricking for a blood sample or before circumcision.

The study, entitled 'The analgesic (pain relieving) effect of sucrose in full term infants: a randomised controlled trial', was done by Nora Haouari, Christopher Wood, Gillian Griffiths and Malcolm Levene in the post-natal ward in the Leeds General Infirmary in England.

60 healthy infants of gestational age 37-42 weeks and postnatal age of 1-6 days, were randomised to receive 2ml of one of the four solutions: 12.5% sucrose, 25% sucrose, 50% sucrose, and sterile water (control).

The first group of 30 babies received sugar syrup before a routine blood test (heel pricking) done to detect the level of jaundice. The other 30 babies were given only sterile water as a control group.

Placing 2ml of a 25% or 50% sucrose solution on the tongue before pricking the heel significantly reduced the crying time, compared to babies who got water. Also, their heart rate returned to normal more quickly. The stronger sugar solution had the greater effect, crying being reduced further with increasing concentration of sucrose. We may conclude that sucrose (sugar) placed on the tongue may be a useful and safe form of analgesia² for use with newborn infants.

Blass and Hoffmeyer also showed that 12% solution of oral sucrose significantly reduced the duration of crying in new-born babies subjected to heel pricking or circumcision. This study was reported in The Independent newspaper (Friday 9 June 1995) as well as in the British Medical Journal.

The practice of the Prophet (may Allah bless him and grant him peace) is recorded in the collections of his sayings and reports about him, of which the most revered are the two Sahih collections of Bukhari and Muslim: Abu Buradah (may Allah be pleased with him) reported from Abu Musa (may Allah be pleased with him) narrates that, *"I was blessed with a son and I took him to the Messenger of Allah (may Allah bless him and grant him peace) who named him Ibrahim, and put in his mouth the juice of a date (which he himself had chewed), and invoked Allah's (The Exalted) blessing upon him, and then gave him back to me."*ⁱⁱ

¹ See Volume One, Chapter Fifty Six for this Sunnah

² Reduced sensibility to pain, without loss of consciousness and without the sense of touch necessarily being affected.

Section One

Benefits of breast feeding ⁱⁱⁱ

The World Health Organisation recommends mums breastfeed their babies exclusively for the first six months of their life so they can achieve growth, development and health.

Christine Marshall, 27, of Lea, Preston, has been breast-feeding her 15 month-old son Sam since his birth. She states “it is perfectly designed for your own baby and helps cut the risk of it getting ill. “In 15 months, Sam has only had two colds and has shaken them off well – he’s always in fine form.”

Racheal Windsor, a health visitor for Preston Primary Care Trust, who is Preston’s breastfeeding project co-ordinator, said: “Babies have greater protection against infection and mums have lower risk of pre-menopausal cancers such as cervical cancer.

“It also gives mums a closer bonding with their child.” ^{iv}

There is a dramatic decline in breast-feeding in the United States and European countries, which are all Industrialised countries. It is disheartening to note the abandonment of breast-feeding in developing countries, such as India and others in Asia, Africa, and South America. This is particularly true in tire urban and periurban areas. In both Europe and United States, the shift from breast milk to artificial means of infant feeding was both recent (since 1930s) and rapid. Bottle-feeding has many disadvantages for the child, mother, society, and the nation. The liberated women think bottle feeding is natural and normal, and that breast-feeding is old-fashioned, animal-like, primitive, and obsolete. They treat breast-feeding as a sign of backwardness, low social status, ignorance and poverty. On the contrary, none of these is true. They are being exploited by self-interested, profit making commercial enterprises, which manufacture bottles, nipples, baby foods, milk powder, formulas, pacifiers, etc. Breast-feeding is a very natural and normal way designed by Allah (The Exalted).

Benefits to the child

Breast fed babies not only grow healthy with mental and physical development, but their chances of survival is substantially higher compared to the bottle fed babies. In a study conducted in the Khanna district of the rural Punjab, it was found that 19 of the 20 infants (95%) who were artificially fed from birth, died before reaching age one. But only 12 percent of the breast-fed infants died before reaching age one.

Human milk is the best food for the human infants. An analysis of human milk shows it consists of more than 100 separate constituents of which few of them are available to the bottle fed infant. Human milk is easily digested by the infant with quick emptying of the stomach with almost 100% protein utilisation. Lactose (primary sugar) helps in the absorption of calcium, increases protein efficiency, and creates an acid medium in the child's intestines. The growth of putrefactive³ bacteria is inhibited by the presence of pure culture of *Lactobacillus bifidus* in the baby's intestines. This prevents diarrhoea too. A mother can breast feed her baby even under unhygienic conditions without fear of Infection due to the presence of lysozymes⁵. Fewer Infections, absence of food allergy, and many immunological⁶ benefits are derived from breast milk. One study showed that the bottle-fed children had a higher incidence of gastrointestinal diseases, respiratory, middle-ear diseases (chronic ear infection-), anemia, allergic and autoimmune⁷ diseases compared to the traditionally breast fed youngsters.

As the infant grows, his increasing need for milk is met by stronger sucking which in turn stimulates more milk production. Sucking in the first 24 to 48 hours after birth causes the breasts to secrete *colostrums*. Colostrum is the name given to the first milk secreted by the breast; it is much richer and creamier than the milk that soon follows. This first milk has been reported as being valuable to the infant's health, for cells present in Colostrum have been known to ingest and destroy bacteria. It has also been reported that no formula can duplicate the gradual changes that occur in the Colostrum and milk following childbirth. Colostrum contains natural antibodies

³ The process whereby proteins are decomposed by bacteria.

⁴ Genus of gram-positive non motile rod like bacteria capable of growth in acid media and of producing lactic acid from the fermentation of carbohydrates.

⁵ An enzyme found in tears and egg white. It catalyses the destruction of the cell walls of certain bacteria.

⁶ A failure of the body to distinguish between materials that are 'self' and therefore to be tolerated, and those that are 'not self', against which it mounts an immune response.

⁷ One of a number of otherwise unrelated disorders caused by inflammation and destruction of tissues by the body's own immune response.

against measles, polio, mumps, and a host of other diseases. Colostrum acts on bacteria (E. Coil) that are notorious for causing infant diarrhoea the first month of life and may cause infantile meningitis, and offers the baby protection against respiratory infections, such as flu and pneumonia. Breast milk protects a child from obesity, staph and other infections. Cow's milk causes allergy in some children. It may manifest itself by mild wheezing (asthma), eczema or persistent colds. Breast fed babies have less diaper rash and require less care.

Allah (The Exalted) has designed baby's facial structures, such as flat nose, sucking pads in the cheeks, in such a way, as is best fit for breast-feeding. The ridged edge of the gums helps the baby to grasp and to hold on to the nipple while sucking. In Western countries, a dentist will point out the frequent problems of bottle fed babies, such as lip and finger sucking, tongue-thrusting, tooth decay, bite deformities, incorrect swallowing and mouth breathing. The tongue and jaw muscles of a breast fed baby show better muscular development, as he has to suck harder with his lips, tongue, and Jaw muscles. The breast is nature's pacifier for the baby. It calms the Infant. The baby finds security and warmth at his mother's breast.

Benefits to the mother

The American Cancer Society and the National Cancer Institute in United States, report that cancer of the breast is more apt to develop in those breasts that do not give milk (among Nuns, unmarried women, married women with no children, mothers who bottle-fed) and scientific studies confirm the fact that long-term breast-feeding lowers the breast cancer risk.

If the infant is allowed to suck immediately after birth, the sucking causes a strong uterine contraction, which helps to expel the placenta⁸, and also prevents post-partum (after birth) haemorrhage⁹. With continued nursing, the uterus involutes rapidly without shots and pills. Many times a third-degree prolapsed of the uterus after the birth of a child virtually disappears without surgical correction in cases of breast-feeding mothers. Breast-feeding may help restore the sagging sinews and muscles to original condition.

It has been well established that breast-feeding has a contraceptive effect by delaying the return of ovulation. The underlying mechanism is believed to operate through an ovulation effect of prolactin¹⁰ and other hormones secreted in response to the infant's suckling. The high levels of prolactin in the mother's body stimulate the ovaries to maintain a high progesterone¹¹ level. As a result of this, the return of menstruation is delayed anywhere from eight to eighteen months. This is good for the mother as her body's iron is conserved. A lengthy absence from menstrual periods following childbirth is called lactation amenorrhea. Not having periods during pregnancy is termed pregnancy amenorrhea. Many mothers have relied successfully on breast-feeding during amenorrhea as a method of natural child spacing, and some mothers have experienced some infertile cycles after the return of menses. However, some nursing mothers have conceived without a return of menses. Present research seems to indicate that the risk of pregnancy during lactation amenorrhea (prior to the first menses after childbirth) is about 6 percent. Thus, lactation amenorrhea is a health asset to the mother in her childbearing years. Breast-feeding eliminates the need for drugs and prevents breast cancer.

Relaxation

Nursing provides brief rests during the day and gives relaxation for a mother who tends to be tense and nervous or gives a break for a busy mother. Bottle feeding mothers don't have prolactin, a "mothering" hormone, whereas prolactin¹² in a nursing mother produces the mood and a feeling of a good mother. The personal satisfaction that a woman can experience only through breast feeding, the total giving of herself to her baby, and a deep feeling of pride in her motherly accomplishments cannot be found in bottle feeding mothers. A nursing mother learns that true fulfilment comes in the giving and not the taking.

Breast-feeding saves time

She need not spend the time in the kitchen preparing bottles, nipples, and formula, or spend the time in cleaning up afterwards. Night time feedings are no bother when mothers generally nurse in bed and fall asleep while doing so. This also doesn't disturb the sleep of other members of the family. Breast feeding not only helps satisfy the baby's nutritional and emotional needs, but satisfies the emotional needs of the mother not only in that it is restful

⁸ An organ with the uterus by means of which the embryo is attached to the wall of the uterus.

⁹ The escape of blood from a ruptured blood vessel, externally or internally.

¹⁰ A hormone , synthesized and stored in the anterior pituitary gland, that stimulates milk production after child birth and also stimulates production of progesterone by the corpus luteum in the ovary.

¹¹ A steroid hormone secreted by the corpus luteum of the ovary, the placenta, and also (in small amounts) by the adrenal cortex and testes.

¹² A hormone , synthesized and stored in the anterior pituitary gland, that stimulates milk production after child birth and also stimulates production of progesterone by the corpus luteum in the ovary.

for her, but she derives satisfaction in doing what is best for her baby and from having a contented and quiet baby as a result.

Baby and mother thrive on each other. More and more emphasis is being placed on the importance of skin-to-skin contact between parent and child. Physical contact generates warm feelings of being loved and appreciated. The baby feels secure in the mother's arms or bosom. With breast-feeding, the child is guaranteed frequent contact with his mother. The child needs to receive much skin stimulation from his mother (nursing a baby, rubbing a child's back, or rocking a child to sleep) In order to survive physically and emotionally. Breast-feeding is a very satisfying and enjoyable experience for the nursing mother. It gives a mother a feeling of satisfaction, security, and trust in herself, which she needs in the future care of her child. Ashley Montague in his book, *Touching: The Human Significance of the Skin*, says, "tactile failure in infancy results only too often in estrangement, uninvolvement, lack of identity, detachment, emotional shallowness and Indifference all marks of the schizoid or schizophrenic¹³ personality." For a travelling mother, nothing can match the conveniences of breast-feeding without the problems of baby stops warming the bottle, or running short of formula.

Benefits to the family and society

Breast-feeding saves money for the family. Money not spent on bottles, nipples, brushes, sterilizer, formula, juice, foods, food and bottle warmers, and the gas, electricity or fuel wood required in the preparation, is money saved for the family. In the years to come, less money will be spent on doctor's fees, hospital fees, and probably fewer drugs and fewer dental bills. Except the tender loving care, breast-feeding costs nothing. In case of bottle fed babies, the artificial foods and juices stain baby's and mother's clothes and require frequent washing and dry-cleaning.

When all infants are breast fed, the society will have mentally and physically healthy and active children. When these children grow the nation will be proud of its great leaders and admirable citizens. Such a nation will be strong in character and a model nation to emulate.

Breast-feeding never pollutes a country's air or water, nor does it detract from the environment. With bottle-feeding, our environment will be polluted with broken or unbroken bottles, bottle liners, nipples, pacifiers, baby jars, cereal boxes, sterilizers, formula, and powder milk cans, bottle brushes, so on and so forth. With natural breast-feeding, there will be a decrease in the usage of sanitary napkins because mothers would be averaging one year or more without menstruating after childbirth.

It was mentioned earlier that prolonged lactation protects against pregnancy mainly by delaying the "return of ovulation." The problem of population growth is a very serious and urgent, problem of developing countries. If unchecked or uncontrolled, it will be detrimental to the country. The abandonment of breast-feeding among the urban people in the developing countries will have a significant demographic impact resulting in increased birth rates because the practice of birth control is not universal. It is recognised that although lactation is not highly reliable as a contraceptive for individual women, it can have a large effect at the societal level, especially where the practice of birth control is not widespread. The developing countries should give more attention to the role of breast-feeding in decreasing the birth rate as a natural child spacer. A slogan like "Breast-fed is Best-fed" should be popularised.

The Qur'an mentions that a child be breast-fed for upto two years, *Subhanallah!*

ⁱ The analgesic effect of sucrose in full term infants: A Randomised controlled trial: British Medical Journal: 1995: 310: 1498-1500

ⁱⁱ Bukhari

ⁱⁱⁱ Dr. Ibrahim B. Syed, President, Islamic Research Foundation International, Inc.

^{iv} Lancashire Evening Post. Thursday 28th October 2004

¹³ A severe mental disorder characterized by a disintegration of the process of thinking of contact with reality and emotional responsiveness.