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A CONCEPT OF DHATRI (WET NURSE) - AN ANCIENT SCIENCE IN MODERN WORLD. W.S.R. HUMAN MILK BANK

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ABSTRACT

Ayurveda is the internal science of life. The knowledge is never static, stagnation is detrimental it has to flow continuously, discarding old or unacceptable ideas and incorporating newer one, so is the case with Ayurveda, rather with every branch of Ayurveda. multitude of advances in medical science have necessitated reorganisation or re thinking about old concept of ancient science which have very scientific fundamental and very bless full for today's era. Breastfeeding is a feature of our human design whereby newborn babies get the nutrition, immunity and nurturing required for growth and development. If the mother does not have enough breast milk or if she is sick or her milk is grossly vitiated, in that case wet nurse would or dhatri would be required. In some cultures wet nurses were slaves or as today, many are employed allowing mothers freedom to work or pursue a lifestyle choice. In this situation human milk replace with human milk. It is better to employ a wet nurse as no other milk can be compared with mother's milk for proper growth and development of the child. Likely dhatri today newly developed human milk bank both aims to nutrition newborn babies. So, human milk bank correlated with dhatri the fundamental of ancient science. Milk banks store breast milk for newborns whose mums can't breastfeed them. Usually, the banks collect expressed breast milk from pre-screened mums, who have a plentiful milk supply.

KEYWORD: Dhatri, Human Milk Bank, Nutrition.

INTRODUCTION

Breast milk is the optimal food for almost all infants in the first year of life. The breast milk provides numerous health benefits to both mother and baby. Milk is the primary source of nutrition for newborns before they are able to eat and digest other foods; older infants and toddlers may continue to be breastfed, either exclusively or in combination with other foods from around six months of age when solid foods may be introduced.

The World Health Organization recommends exclusive breastfeeding for the first six months of life, with solids gradually being introduced around this age when signs of readiness are shown. Supplemented breastfeeding is recommended until at least age two and then for as long as the mother and child wish.[1]

Breastfeeding is a feature of our human design whereby newborn babies get the nutrition, immunity and nurturing required for growth and development. Unfortunately there can be health problems, which undermine the natural breast-feeding process. If the mother does not have enough breast milk or if she is sick or her milk is grossly vitiated, in that case wet nurse would or dhatri would be required. In some cultures wet nurses were slaves or as today, many are employed allowing mothers freedom to work or pursue a lifestyle choice. It is better to employ a dhatri (wet nurse) as no other milk can be compared with mother's milk for proper growth and development of the child. Nowadays developments of science and technology millk bank take place of wet-nurse. Today milk bank develop all country of the world. Donation of breast milk from one woman to an unrelated infant has a long history.

History

Before this century, the infant would have been directly breastfed by the woman who was referred to as a "wet nurse". Rules governing wet nursing have been around since 1800 BC. Wet-nursing itself has had periods throughout history when it has fallen from favour. For

example, in the 15th century, wet nursing became very unpopular due to the spread of syphilis.[2]

Human milk banking has had similar peaks and troughs. In the early half of this century, milk banking saw resurgence in popularity, but around the 1970s, this began to change. The first reason for this loss of interest in human milk was the heavy promotion of infant formula, including formulas specially designed for preterm infants. Later, a fear of transmission of viruses, including HIV, in body fluids led to an anxiety about donation of body fluids, including breast milk.

WHO and UNICEF, made a joint statement in 1980: "Where it is not possible for the biological mother to breast feed, the first alternative, if available, should be the use of human milk from other sources. Human milk banks should be made available in appropriate situations.[3]

Dhatri (Wet Nurse)

In Mahabharta also described Dhatri for absence of mother milk.[4] Also lord Krishna feed by Dhatri Yashoda while mother Devaki in prison. So in the deficiency of Brest milk, the concept of Dhatri to feed the baby gains its relevance. This is due to the fact that baby should not only be supplemented with food but also be provide with an affectionate experienced and nurturing support. In Ayurveda Acharya detail explains about Dhatri (wet nurse). Acharya Vagbhata, a famous physician suggested that it is better to employ two wet nurses.[5] so that they can feed their own babies adequately. That times no pasteuration and preserve facility so if mother could not feed properly newborn Dhatri should feed the baby. Acharya also explain about supplement milk like goat milk, cow milk laghu panchmool sidha milk (medicated-milk).[6]

Human Milk Bank

Milk banks store breast milk for newborns whose mums can't breastfeed them. Usually, the banks collect expressed breast milk from pre-screened mums, who have a plentiful milk supply.

The collected breast milk is pasteurised. It is then ready to be given to babies who most need the benefits of breast milk. The babies who need it may be unwell, premature, or unable to breastfeed or their mums may not have enough breast milk.

DISCCUTION

A mum who gives birth prematurely gives birth prematurely may experience a delay in her milk coming in. Or a mum whose baby is too sick or too immature to breastfeed may not be able to express enough milk.

Babies who are ill or are premature are cared for in neonatal intensive care units (NICUs) or special care baby units (SCBUs). A baby being cared for in hospital may receive donated milk for a few days or weeks until he can be fed with enough milk from his mum. Occasionally, milk banks have milk available for other babies, who may temporarily need more milk than their mums can produce.

Mother's milk is more important for newborn for first year of life. Giving breast milk to babies who are premature or ill protects them against some infections, and helps them to grow and develop well. If they are given breast milk, babies with a low birth weight, or who are unwell, are much less likely to develop a life-threatening gut infection.[7]

Screening of Dhatri (wet nurse) Examination of the Wet Nurse

One should say bring the wet nurse which belongs to the same caste, in youthful age, submissive the same place, not mean minded or indulged in mean acts, born in a good family, having affectionate disposition toward children, free from disease having living male children, having profuse lactation free from carelessness not sleeping on excrement's not married to man of lower caste skilful in management clean having dislike for unclean less and endowed with excellence of breasts and breastmilk.[8]

Physical and psychological status of wet-nurse should be taken in consideration as they influence quality and quantity of milk. Here are few other qualities that you should look for in the wet-nurse you employ for your kid:

- Middle Aged - because very young woman does not have any affection for child and old woman cannot withstand troubles (the latter's milk is also not much nutritious).
- She should be humble or modest.
- She should be extremely patient by nature.
- She should be able to produce ample amount of breast-milk.
- She should be over-cautious.
- She must be an expert in nursing.
- She must be clean and hygienic.
- She should have a good character, be affectionate and interested in the welfare of the baby.
- She should have a caring nature.
- She should not be on any prescribed medicine.
- She should not be suffering from communicable diseases.

Screening of Mother For Milk Bank[9]

One of the major issues milk banking faces is the possibility of transmission of an infectious disease via the milk. Parents may fear accepting donated milk for this reason, while doctors may feel that the benefits of donated milk are outweighed by the possible legal implications. Consequently, screening is extremely important. A system of "triple protection" is applied:

1. Review of donor's health history.
2. Serum screening and.
3. Heat treatment of all donor breast milk.

The Human Milk Banking Association of North America (HMBANA)[10] has exhaustive "Guidelines for the Establishment and Operation of a Human Milk Bank". There are similar guidelines for Britain. Both these countries recommend serological testing every 2 to 6 months of the donor for HIV 1 and 2, HTLV 1 and 2, hepatitis B and C and syphilis. Another part of screening is a consent form for the woman and her doctor to ensure that neither the donor mother nor her infant will suffer if the mother donates milk.

Collection of The Human Milk[11]

This varies from milk bank to milk bank. For some centres, hospital patients are the major source of donations, while others will ship milk from interstate from a donor's home. Donors are educated regarding the most hygienic way to express milk. Hand expression is the best method for collection; however some centres will allow certain types of hand pumps to be used. Drip milk (milk that drips from the unused breast during feeding or expressing from the other breast) has a lower caloric content and is more susceptible to contamination, but is acceptable to some centres.

The type of container used for collection also varies according to what is most readily available. Polythene bags are associated with a decrease in the IgA content of milk, while glass is linked to a loss of leucocytes. The current recommendation is that glass is best, but worldwide many different types of materials are used. In India steel utensils / containers are used.

Controls / Pasteurization[12]

Most milk banks do bacterial counts on each donor's milk before pasteurization, as pasteurization may be ineffective if the milk is heavily contaminated with microorganisms. There are no set levels for colony count levels, but this is an example one centre uses:

< 103 colony- forming units: milk is used.

> 105 colony -forming units: milk is not used.

103 - 105 - forming units: milk is only used if organisms are skin commensals.

Unless the milk being stored is for a mother's own infant, banked milk is then pooled; a bacterial check is done again here to ensure the pooling process does not lead to contamination. Pooling is usually from 4 to 6 donors and is thought to be beneficial because it averages out the immunological and nutrient content of the milk. The numbers are kept low so that any contamination can theoretically be traced back to its source. In Germany, however, pooling is not used because of the concern regarding contamination.

Most milk banks pasteurize their milk. The old protocol was called "Holder Pasteurization" which meant that milk was heated at 62.5 degrees Celsius for 30 mins, and some centres still use this. New guidelines now recommend 56 degrees Celsius because at this temperature most bacteria and viruses are adequately dealt with, while retaining many of the immunological and nutrition properties of breast milk.

It appears that pasteurized breast milk is as good as raw breast milk at preventing NEC. The milk is again checked for bacterial counts after heat treatment, but no level of growth is accepted. Some centres analyze each batch of milk for its nutritional content and labelled appropriately. Some centres find it appropriate to try to match the age of the donor's infant to the age of the recipient, but this is not necessary if pooled milk is used.

Benefits of Donating Breast Milk

By donating breastmilk, you are helping babies in need to get the best start in life. Breastmilk is the ideal food for babies.It contains all the nutrients (at least 400 of them) that a baby needs. Breastmilk also contains hormones and disease-fighting compounds that can't be found in formula milk. Some babies are allergic to formula milk, and some have illnesses that prevent them from absorbing formula. If their mums can't temporarily provide enough breastmilk, for whatever reason, these babies urgently need donated milk.

Banked human milk uses

Banked human milk is regarded as "the next best" after the biological mother's breast milk. It is used for the treatment of many conditions (mainly in Neonatal Intensive Care Units: NICUs): prematurity, malabsorption, short-gut syndrome, intractable diarrhea, nephrotic syndrome, some congenital anomalies, formula intolerance, failure to thrive, immune deficiencies (IgA). Studies have found that breast milk has a protective effect against necrotising enterocolitis (NEC). Lucas and Cole found that NEC was 6-10 times more likely to develop in exclusively formula fed infants than in those fed only breast milk, and that NEC was 3 times more likely when formula-only fed infants were compared to those receiving both breast milk and formula.[1] Other studies have demonstrated that formula fed infants had lower IQ scores than infants fed breast milk.Milk banks vary in their use of banked milk. In some cases, milk is provided for adopted babies or older children with severe food allergies.

Viruses and Breast Milk

A review of the literature has not found that no banked milk has ever been linked with the transmission of disease, nor has any worker become infected due to the handling of the milk. However, continuing the process of screening and pasteurization is essential in order to maintain this record.

It is possible for the human immunodeficiency virus to be transmitted in breast milk. However, pasteurization is known to inactivate HIV 1 and 2. HTLV-1 is associated with T-cell leukemia, so it is recommended that women who test positive should not breastfeed; the same recommendations are made for women with HTLV-2.Hepatitis B is not thought to be transmitted via breast

milk, although at risk babies are given hepatitis B immunoglobulin and vaccine to decrease any potential risk. It appears that there is also a low risk of transmission of Hepatitis C via breast milk.

Cytomegalovirus is transmitted via breast milk, although viral shedding varies; less in Colostrum compared with later in breastfeeding. As with HIV, viral shedding peaks during seroconversion, so breastfeeding is not recommended at this time, even though transmission usually does not cause symptomatic disease. Immuno-compromised or very premature infants should be fed on pasteurized milk, or milk donated from a seronegative mother.

Rubella is potentially transmittable in breast milk, but no disease is ever seen. It seems unlikely that herpes is transmitted through breastfeeding, unless there are herpetic breast lesions present.

Human Milk Banks In India[2]

- Amara Milk Bank (In collaboration with Fortis la Femme), Greater Kailash, New Delhi.
- Lokamanya Tilak Hospital (Sion Hospital), Sion, Mumbai.
- Cama Hospital, Fort, Mumbai.
- KEM Hospital, Parel, Mumbai.
- Sir JJ Group of Hospitals, Byculla, Mumbai.
- Divya Mother Milk Bank, Udaipur, Rajasthan.
- Dheenanath Mangeshkar Hospital and Research Centre, Pune.
- SSKM Hospital, Kolkata.
- Institute of Child Health, Egmore, Chennai.
- Vijaya Hospital, Chennai.

CONCLUSION

Ancient science and its basic fundaments are as useful as Modern time. In ancient time Acharya knows very well and aware about newborn baby nutrition. if mother did not feed in adequate quantity, if mother had disease, if mother died. So, They solved problem of feeding to newborn as arrange wet nurse Dhatri ,so child can survive if mother milk is not available. In modern time science and technology developed but they do not develop artificial milk as useful as mother milk, so they solve problem by collecting human milk in the milk bank. Dhatri (wet nurse) can store her milk in milk bank so later they provide milk to baby. During ancient time preservation of the milk was not available but today help of science and technology human milk can store and preserve and supply needy baby. Here same fundamental use for newborn baby for feeding.

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