



Review Article

DHAATRI: AN UPDATED REVIEW WITH SPECIAL REFERENCE TO HUMAN MILK BANKING

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ABSTRACT

In ancient science of Ayurveda the concept of dhaatri (a wet nurse) is mentioned by many Acharyas like Charaka and Sushruta and Kashyapa. In deficiency of breast milk, the concept of dhaatri-a wet nurse-to feed the baby gains its relevance. This is due to the fact that baby should not be supplemented with food but also be provided with an affectionate, experienced and nurturing support. According to a joint statement made by the WHO and UNICEF; "The best food for baby who cannot be breastfed should be milk expressed from the mother's breast or from any other healthy mother". Mother's milk is considered to be mandatory for a newly born. It is said that the mother's first milk is helpful in giving immense immunity to a child. So breast milk has a very important role for a child. As prevalence of so many diseases like HIV, HbsAg, CMV etc. are increasing in the society so prohibit the transmission of these diseases in children society is accepting the concept of human milk banking. The purpose of establishment of human milk banking is collecting, screening, processing, storing, distributing and donating of human milk. So the purpose of the study is review of both ancient dhaatri and modern human breast milk banking literature and give a glance at advantages and disadvantages of both concepts.

Keywords: Dhaatri (a wet nurse), human milk banking, advantages, disadvantages.

INTRODUCTION

In deficiency of breast milk, the concept of dhaatri-a wet nurse-to feed the baby came forward. The baby should not be supplemented with food but also be provided with an affectionate, experienced and nurturing support by dhaatri. Acharya Charaka described the qualities of dhaatri in detail which is directly related to breast milk secretions.

Qualities of Dhaatri

Samana varnam

It refers to same caste or religion¹. Breast milk was deemed to possess magical qualities, and it was believed that breast milk could transmit both physical and psychological characteristics of the wet nurse so she should be from the saman varna i.e. from the same lifestyle and one of the more important cause of saman varna may be the baby will easily accept the dhaatri as a mother for breast feeding.²

Youvanastha

It implies that the lady should be in reproductive age. Hormones tend to be more stable when women are in their 20s and 30s so she has the adequate breast milk secretions to feed the baby.³

Avyanga

It is free from physical disability. It can considered as free from infectious diseases like lepracy as it can transmit the disease to the baby or free from the breast disorders like Polythelia, Congenital Nipple Inversion, Athelia, Amastia etc so she can feed the baby properly and adequately.⁴

Anatura, Aroga

It is free from diseases to save baby from diseases which can transmit through human breast milk.

Vatsala

The advantages of bonding with baby can prevent disease, boost immunity against viruses and bacteria, and enhance child's IQ. Skin on skin contact has been found to help premature babies pick up as much as 50 % more weight than others.⁵

Avyasanam

It should be free from addiction. More than 250 million women throughout the world smoke.⁶ The amount of nicotine transferred into breast milk is more than double that transferred to maternal serum.⁷ The biggest health risks of nicotine exposure to baby leads increased incidence of infant respiratory allergy, SIDS, low milk production, poor infant growth.⁸

Suchi, Asuchi dweshee, Anuccharashayini

Dhaatri should maintain proper hygiene which is the best way to prevent breastfeeding-related infections.⁹

Deshajatiya

Dhaatri should be from the same region and religion. So should be from the same culture and lifestyle as baby can easily accept her as a mother for breast feeding.¹⁰

Aprayata

It should be Psychological feet. Psychological problem produce the hormonal imbalance. Oxytocin and prolactin are the hormones produced during breastfeeding that work together to make milk, establish a letdown, and keep up with the supply as demand of a nursing infant.¹¹

Human Breast Milk Banking

It is an Institution established for the purpose of collecting, screening, processing, storing and distributing, donated human milk.¹²

“Human Milk Bank” was first mentioned in the medical literature in 1914 when a physician observed that ill children “do very much better if they are fed wholly or in part on human milk.”¹³ The first official milk bank was opened in Vienna at the outset of the 20th century 1911.¹⁴ another milk bank was started at U. K. in 1939.¹⁵ and U.S.A. in 1937.¹⁶ The American Academy of Pediatrics was the first to publish the guidelines for milk banking operations in 1943. In the early 80’s WHO and UNICEF established that the first alternative when the mother cannot breastfeed her own child should be using breast milk from other sources.¹⁷ The Human Milk Banking Association of North America (HMBANA) was established in 1985.¹⁸ Asia’s first human milk bank was established at SION Hospital, Mumbai on 27th November 1989. Presently there are 10 working milk banks in India and 5 are in Mumbai alone.¹⁹

Organization

- 1) Staff nurses of NICU
- 2) 2 Technicians
- 3) 1 Social worker/counsel
- 4) 1 Senior Pediatrician²⁰

Selection of Donors

- 1) Consent of the mother
- 2) Physically fit-BMI around 18.5
- 3) Hb% around 10 g%
- 4) HBsAg/HIV/VDRDL-Negative²¹

Equipments Required

- 1) Pasteurizer-1
- 2) freezers locktable-1
- 3) Refrigerators-1
- 4) Ex locktable room and computers
- 5) Record maintaining registers
- 6) Breast milk pumps. Electronic- 4, Manual-20
- 7) Milk collecting stainless steel container.²²

Storage

Room Temperature - 4-6 Hours at 66-78⁰ F
Cooler with 3 Frozen Ice Packs – 24 Hours at 59⁰F
Refrigerator – 3-8 days at 39⁰F
Freezer – 6-12 Month 0-4⁰F²³

DISCUSSION

The concept of dhaatri described in Ayurveda comprises supplementing the real breast milk with love and affection to a child. In the concept of breast milk banking there is lack of an important part of this feeding i.e. Love. As bonding with baby can prevent disease, boost immunity against viruses and bacteria, and enhance child's IQ. Skin on skin contact has been found to help premature babies pick up as much as 50 % more weight than others.²⁴ Dhaatri (Wet Nurse) concept has a high transmission risks of Infectious disease (like HIV, HbSag, CMV etc) compared to Human Breast Milk Banking as screening of Donor before collection is always there. But on the other side the qualities of dhaatri told by the Acharyas is also one of the screening method for the selection of donar to prevent the transmission of diseases. An important thing about Dhaatri is the relative freedom from bacterial

contamination of breast milk. However, bacterial contamination can be major problem with bank human milk.²⁵ The complicated banking procedure results into some wastage of milk, and increases the risk of transmitted undiluted toxic substances (eg. drugs, nicotine, pesticides and environmental contaminants) which are secreted in milk which is one of the important disadvantage of human breast milk banking system.²⁶ The basic concepts of both the methods are almost same and both the methods have a common and broad view of giving nutrition and health to the needful. But now days dhaatri concept has some limitations due to fast lifestyle which can be avoid by using the human breast banking system. Currently the associations of Pediatrics indicate the advantages of breastfeeding over present and future conditions of the child and the mother, increasing the bonding between mother and child and assuming a benefit to society by reducing the consumption of health resources and health expenditure among others.²⁷ Human breast must remain an important area of research for benefits of next generations.

CONCLUSION

When one compares the current socio cultural background of the human as a whole, the concept of dhaatri is not relevant in a civilized society. But need of real human breast milk is the ultimate option for the problem of lactation failure. Therefore, the concept of breast milk banking is now emerging from the west where the breast milk is stored using localized preservation methods.

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