

Critical Review on the Impact of Nutrition Education on the Health of Infants

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Abstract :

The goal of human life is to remain happy. This is only possible when people remain free from all complications of body. For this purpose people have to be aware of proper and adequate nutrition. This is made possible through nutrition education. Nutrition scientist should keep in mind about all different sources to spread knowledge about nutrition in the community. Whole nation in the world can prosper when the people become healthy. Many people do not get opportunity to be aware about adequate, balanced and variety in diets. Only just eating is not enough. Everyone should be aware about immunity. Infants are the future of any Nation, so care should be taken for proper growth and development of infants, specially in urban and ruler slums. Exclusive breastfeeding till six months after six months complementary feeding should be introduced and till 2 years breast milk to be continued. This knowledge should be provided in the community through nutrition education. It has been seen that knowledge of mother and care giver increases and health of infants improve after having knowledge of nutrition.

Keyword: Nutrition, Immunity, Exclusive breastfeeding.

Introduction

The nutrition is the intake and use of eating material and other nourishing things by the living being or human being. Nutrition passes through three process, firstly food or drink is consumed second the food or drink is broken down by the body into nutrients and third the nutrients passes through the bloodstream to whole parts of the body where they use it as fuel for different purposes. To have proper nutrition, people have to eat or drink such amount of food that will provide enough nutrition to the body. (US Department of Health and Human Services International Institute of Health National Cancer Institute/ USA.gov NIH- Turning Discovery Into Health) <https://www.cancer.government.different.nutr>. The food that is taken in by the body has the function to carry out different process in the body that is needed for survival and to the remain fit of human beings <https://www.vedanta.com>. The five basic nutrients are carbohydrates, protein, fats, mineral, vitamins and water. Nutrition is the biochemical and physiological process by which organisms uses all nutrients for the survival. Colostrum is the first discharge of mothers milk. It is also called yellow gold. Because it has valuable benefits in providing immunity in infants that carries on till future old age. Many woman of childbearing age do not know its benefit and they do not use it. So it is essential for health worker to go in community and give nutrition education to all woman of childbearing age. For infants mothers milk is most essential nutritious food. Till six months infants should be provided

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with mothers milk and no other foods to be provided. If in case mothers milk is not available for the baby due to some reason then formula milk is to be provided. In formula milk all required ingredients are presented that are in mothers milk. Everything should be made aware to the mothers and caregivers regarding feeding practices during nutrition education. After six months complementary feeding should be provided. While providing complementary feeding care should be taken that all nutrition required by the body is given or not. For this purpose balanced modified and variety of foods should be introduced in diet of baby in soft and mashed form.

Review of Literature

When the infants are fed on only breast milk and no other food or even water is given then it is called exclusive breastfeeding. It is to be provided till six months age of infant. Nutrition education is a strong tool to reduce malnutrition, mortality and morbidity of infants. (S.K. Thakur, Swapan Roy November 2011). The practice of breastfeeding which are faulty may lead to malnutrition in infants. (Onubogu 2016-11-01). Nutrition education on breastfeeding is very effective in providing knowledge and awareness regarding exclusive breastfeeding in infants. (Pitts, 2015-03-01). The practice of breastfeeding are very effective in getting Vitamin A nutrition in babies. (Ross, Jay 2003-01-01). There are some factors which hinders breastfeeding such as sore nipples, insufficient milk. To curtail the risk of obesity, hypertension, gastroenteritis and mortality in infants WHO has recommended breastfeeding. (Ashmika Motee and Rajesh Jeewon 30.08.2014)

WHO and UNICEF recommend –

- Early initiation of breastfeeding within one hour of birth.
- Exclusive breastfeeding for the first six months of life
- Introduction of nutritionally adequate and safe complementary (solid food) and six month together with continue breastfeeding up to two years of age or beyond.

(World Health Organization in infants and young child feeding. 09 Jun 2021)

Many infants do not receive the optimal amount of feeding, hence nutrition education is essential to provide knowledge and awareness regarding WHO and UNICEF recommendation for improving the health condition of infants. The correct feeding practices and proper health care practices will be adopted if mothers will be provided nutrition education. (Kulwa K.B, et al 16 October 2014). Nutrition education is of immense help in eradicating malnutrition in infants. (Jardi et al. 20 July 2021). It has been seen that stunting in infants is due to bottle feeding and complementary feeding not provided at proper age. (Yirgu Fekadu et al. 02 Sept 2015). Study shows that first two year of life of infants are critical because during this period brain development also starts and wastages, stunting and underweight also likely to occur if not fed properly. It has been studied that the knowledge, faulty feeding practices, complementary feeding inadequate sanitation and hygiene practices of mothers of malnourished infants have improved through nutrition education. (Richard Kajjura, et al. May 2019). Nutrition education program through communication by mixed channel can not only bring out change of attitude, knowledge and behaviour but also infants feeding practices of mother

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and caregivers. An improvement was observed by adding variety, quantity and modification of nutrients fed to infants. (Vani Sethi et al. 2003). In the review of literature it was analyzed that nutrition education, breastfeeding, health care of infants, anthropometry measurement of infants, hygiene situation, education makes mothers to remain engaged in health related behaviour of infants such as breastfeeding practices. (Kumar et al 2015). The awareness on the part of mothers is also related to nutrition, health, hygiene, sanitation (Basu, 1994). Exclusive breastfeeding reduces the leading cause of death due to diarrhoea and pneumonia. (Black et. al 2008). The breastfeeding provide enough energy and essential element required by body and will also provide infants immunity against infection (UNICEF, WHO, World Bank & UN, 2014). A study conducted by Afgan Public Health Institute et. al 2011, revealed that there is drop in child mortality when there is increase in mother educational attainment. A study from Northern India showcased that the mothers who breastfed within one hour constituted 19 percent of the respondents and those who exclusively breastfed their infants for six months were merely 5 percent. (Kishore SS, et al 2009). In the year 2012, our country recorded an infant mortality rate (IMR) of 44 and the under 5 mortality rate (U-5MR) of 58 against the global average of 35 and 48 respectively. (World health organization, Global health observatory. Infants mortality. Situation and trends. (Internet) Geneva: WHO: 2014). Mothers milk is the basic right of infants and also the beneficial natural source of nutrition(United Nations Community on the right of the child, United Nations Children's fund, and Bernard Van Leer Foundation,2006). Implementing child right in early childhood. The Haque: Bernard Van Leer Foundation 2006 (googles scholar). Due to lack of awareness and practice optimal breastfeeding among women, India rank close to the bottom amongst other countries and it loses million of lives year after year. (Lancet 2008). The national survey data throws light on the fact that early introduction of liquid and solid or semi solid foods before the recommended age of six months is negatively influencing the practice of exclusive breastfeeding(EBF). Around 30 percent of children are introduced to complementary food at the age of 4 to 5 months. Delayed complementary food is also becoming a common practice. (Nonita D et al 2018). Study revealed that good neonatal feeding practices was only observed in 15.8 percent cases. Newborn care should be essential and it should be improved through nutrition education. (Mahama Saak et al. 24 May 2018). Study revealed that infants below six months (U6 m) worldwide are moderately wasted are 4.7 million (wight for length ≥ -3 to $< -2Z$) and severely wastage (weight for length $< -3Z$) are 3.8 million (Kerac et. al 2011). It shows that malnutrition is a serious global problem related to health. The problem of malnutrition among infants under six months is particularly more alarming in India, where the wasting in this age group is 31.9 percent and that of severe wasting is 14.9 percent (IIPS, 2017). The cases of wasting is most prevalent at birth (37 percent) and sees a gradual decline with age (IIPS, 2017).The result shows that many infants are being born with low birth weight (LBW) each year. Maternal education has impact on infants mortality. (Sonaide Desai et al. Feb 1998). Nutrition education had a significant impact in improving nutrient intakes and changing food habit. (Vadavalli Sachithanathan et al. 2012). The nutrition education resulted in improvement of knowledge, attitude, practice

increase in consumption of nutrients. (Adhikari Poudel Sasmita et al. June 2022). The prevalence of low birth weight (LBW) was observed in the 9.6 percent of the cases and that was due to delayed initiation of breastfeeding as compared to the normal birth weight babies (Taha et al. 2020). Breastfeeding promotes intestinal maturation and epithelial recovery from infection. Both yearly initiation and exclusive breastfeeding are important and should be promoted by nutrition education. (NEOVATA April 2016. The lancet Global health). Nutrition education provide fruitful guideline of appropriate maternal knowledge and practices of infants.(Ekhlas A.I. Mohammed et al. 2022 March 03). Nutrition education will make a larger impact on, growth, dietary adequacy and health of infants. (Kissa Kulwa et al. October 2014). Nutrition education will also encourage mothers to change their behavior regarding to modify faulty feeding practices.

Nutrition education will improve the nutrition related awareness and attitude of good feeding practices and of consumption of varied diet. (World Nutrition Journal, Dec 2021). Nutrition status of children is associated with nutritional knowledge of mothers. (Appoh LY et al. 2005). The risk of undernutrition may be reduce by providing nutrition education to infants families. (Ojha S et al. 25 July 2020). A study showed that there is less increase in body mass index due to energy, fats, carbohydrate, intake by providing nutrition education. Study shows that there is increase in weight and hence effect of nutrition education is positive. (Dagmara et al. 2022).

Study revealed that the nutritional status of infants who are undernourished has improve significantly (Nutrition and food science, Oct 2018). It has been seen in a study that there is a significance reduction in respiratory and gastrointestinal mobility due to exclusive breastfeeding until four months old infants and partially afterwards (Liesbeth et al. 2010). Study revealed that the Darrion, pneumonia, malaria and measles are associated with the death due to malnutrition (undernutrition). (Caulfield LE et al, July 2004)

It has been seen that only 3% of mothers where known about colostrum that it is nutritious in a study by Kulsum et al 2008. With the help of the knowledge of nutrition of infants, mothers have made significant improvement in increase of the nutritional status of infants or children, hence nutritional knowledge is an effective method in reducing the risk of malnutrition. Therefore the need of nutrition education is important and it should be treated as urgent in community (Kaur et al. 2015). Better child health has not been achieved due to obstacle by high malnutrition (Ragini 2014).

Conclusion

Thus it is clear from review of literature from various researchers that nutrition education is an important tool to improve infants health. So it should be treated as urgent and continuous program of nutrition education must be carried out at all level. To much extend risk of mobility and mortality of infants have been reduced. Nutrition education has impact in changing attitude knowledge and of mothers and caregivers of infants. The level of knowledge regarding breastfeeding sanitization and good food habits have been improved. Nutritional knowledge of mothers and caregivers improved and hence nutrition status of infants improved. Body mass index also improved of infants. Nutrients Intak increases and hence health of infants shows better and positive sign. When the

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infants health have improved then it is quite natural that the economical condition of country will improve. Nation will prosper in all fields, may it be in sports field, agriculture field, economical field or corporate field. Infants are the future of any nation so care should be taken in the beginning right from birth. Infants have right to get mothers milk so exclusive breastfeeding till six months of age including colostrum should be provided to all infants right from birth. Nutrition education program shows positive impact and fruitful results so it should be keep going on in community, village, rural and urban slum.

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