

Assess the Effectiveness of Fenugreek Consumption on Lactation among Primi Postnatal Mothers at Maternity Centres, Coimbatore

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Abstract:

Cherney, (2019), Pregnancy is a wonderful, crazy, exciting and often confusing time in a women's life. The Pregnancy test, which positive can be overwhelming for a couple who have been trying to conceive or it may be a total surprise. Pregnancy is a natural physiological event. Pregnancy is the process which places the health of the mother at risk. In the life cycle, a female has to undergo various stages like daughter, wife, mother, mother-in-law, and grandmother. Among these one of the most beautiful and memorable events is becoming a mother. Safe motherhood is an essential factor for all women.

Keywords: maternity centres; primi postnatal mothers; hypocholesterolemic

Introduction:

Cherney, (2019), Pregnancy is a wonderful, crazy, exciting and often confusing time in a women's life. The Pregnancy test, which positive can be overwhelming for a couple who have been trying to conceive or it may be a total surprise. Pregnancy is a natural physiological event. Pregnancy is the process which places the health of the mother at risk. In the life cycle, a female has to undergo various stages like daughter, wife, mother, mother-in-law, and grandmother. Among these one of the most beautiful and memorable events is becoming a mother. Safe motherhood is an essential factor for all women.

Davis, (2020), Lactation is the process of milk secretion from the mammary glands of a mother soon after childbirth. The milk, thus produced provides nutrition and immunity to the young one. Galactopoeitics is the stage that maintains milk production and requires prolactin and oxytocin. Lactation is maintained by regular removal of milk and stimulation of the nipple, which triggers prolactin release from the anterior pituitary gland and oxytocin from the posterior pituitary gland. For the on-going synthesis and secretion of milk, the mammary gland must receive hormonal signals; and although prolactin and oxytocin act 2 independently on different cellular receptors, their combined action is essential for successful lactation.

Warwick, (2020), Colostrum is a breast fluid produced by mammal's gland before breast milk is released. It's very nutritious and contains high levels of antibodies, which are proteins that fight infections and bacteria. Colostrum promotes growth and health in infants and newborn animals, but research shows that taking bovine colostrum supplements may promote immunity, help fight infections, and improve gut health throughout life. Colostrum contain immunoglobulin's, maternal immune cells, and cytokines. In the mare, IgG is the major immunoglobulin class in colostrum, with

approximately 60% isotype IgGb, 25% isotype IgGa, and 15% isotype IgG. Normal colostrum has greater than 3000 mg/dl of IgG, with excellent quality colostrum having IgG levels greater than 6000 mg/dl. Colostrum contains more than 1 million cells per milliliter, including macrophages, lymphocytes, neutrophils, and epithelial cells. Other factors, including complement, lactoferrin, epidermal growth factor, interferon- γ , and insulin-like growth factor, are also present. Research in nutrition and food Science; Javan, (2020) Fenugreek (*Trigonella foenum-graecum*) seeds contain mucilage, trigonelline, 4-hydroxyisoleucine, sotolon, diosgenin, luteolin, phenolic acids, and protodioscin. Fenugreek has been used in a number of geographical register worldwide as a galactogogue to increase milk supply and is included in numerous proprietary mixtures promoted to increase milk supply. The galactogogue effect of fenugreek may be primarily psychological in humans. U.S. Food and Drug Administration.

Objectives 1: To assess the pre - test level of breast milk secretion among primi postnatal mothers in interventional group and routine care group. 2. To administer fenugreek consumption on lactation among primi postnatal mothers in interventional group. 3. To assess the post - test level of breast milk secretion among primi postnatal mothers in interventional group and routine care group. 4. To find out the association on post - test level of breast milk secretion among primi postnatal mothers with their selected demographic variables in interventional and routine care group.

Hypothesis

H1 - There will be significant difference between pre - test and post - test level of breast milk secretion among primi postnatal mothers in the interventional group and routine care group.

H2 - There will be a significant association between pre - test breast milk secretion among primi postnatal mothers in interventional group and routine care group with their selected demographic variables.

Review of literature:

Jesass. A.I, et al, (2020) conducted a study regarding potential health benefits of Fenugreek with multiple pharmacological properties. Fenugreek comprises a fairly high amount of alkaloids, saponins, flavonoids, and antioxidants. Fenugreek endosperm has 35% alkaloids; primarily trigonelline fenugreek seeds contain 100mg/g flavonoids. Such compounds are referred to as biologically active constituent as these have pharmacological effects on the human body when consumed. The study concluded that the major medicinal properties of fenugreek include antidiabetic, antioxidant, hypoglycemic and hypocholesterolemic, anticarcinogenic, activities. Fenugreek is a promising dietary supplement with versatile properties and several research studies have reported its beneficial effects. It contains vitamins such as thiamin, ribofavin, niacin, folic acid, vitamin A, C and minerals as Potassium, Calcium, Zinc, Magnesium, Iron, etc.

Xiaoli.M, et al, (2021), conducted a study regarding determinants of exclusive breastfeeding for the first six months in China: a cross-sectional study. Data were obtained from a national cross-sectional survey in China in 2018 that included 5237 infants less than 6 months with available measurements of breastfeeding. Result shows that about 30 % (29.5%) of infants fewer than 6 months were exclusively breastfed; 2.3% (2.3%) had never been breastfed and 3.2% had ceased breastfeeding. No breast milk (60.7%), maternal illness (13.9%), and infant illness (13.1%) were the top three reasons for non-commencement of breastfeeding. The study concluded that the exclusive breastfeeding rate is still very low in China. Multidimensional barriers contribute to this situation.

s. Salarfard.M, et al, (2020), conducted a study regarding effect of fenugreek on breastfeeding adequacy in breastfeeding mothers: In this review, trials on the effect of fenugreek on breast milk sufficiency were searched on the electronic databases of Scopus, EMBASE, Cochrane, Web of Science, and Medline. The result shows that effects of fenugreek on breastfeeding adequacy were demonstrated in increasing neonatal weight gain, breastfeeding frequency, and faecal excretion frequency, number of changing diapers, increased breast milk production, and increased maternal prolactin hormone levels. According to the conclusion, the use of fenugreek to improve breastfeeding adequacy and promote neonatal growth is recommended, considering its ease of access and use and rare adverse effects on the mother and infant.

Methodology:

A Quantitative approach was used to assess the effectiveness of fenugreek consumption on lactation among primi postnatal mothers. True experimental pre - test post - test control group design. The samples were selected by non - probability convenient sampling technique was used for selecting the samples. The sample size for the study was 40. Out of which 20 samples who receive fenugreek belong to the interventional group and 20 samples who do not receive fenugreek belong to the routine care group. After the investigator collected the demographic data from the samples. Then the investigator assessed the level of breast milk secretion in interventional group and routine

care group by using LATCH assessment tool. Then 2.5 gm. of fenugreek in 100ml of water was given to the interventional group for continuous 5 days. IN post - test on 5th day, level of breast milk secretion was assessed for interventional and routine care group by using the same LATCH assessment tool.

Result:

Distribution of respondents regarding the pre - test and post scores of interventional group and routine care group.

The interventional group had 1(5%) sufficient milk secretion and 19(95%) insufficient milk secretion and in routine care group none of the mother had sufficient milk secretion and 20(100%) insufficient milk secretion in the pre-test. The interventional group had 19(95%) sufficient milk secretion and 1(5%) insufficient milk secretion and routine care group had 13(65%) sufficient milk secretion and 7(35%) insufficient milk secretion in the pre-test

Comparison Of the Post Test Scores of The Interventional Group and Routine Care Groups on The Effectiveness of Fenugreek on Lactation Among Primi Postnatal Mothers

The table value of t 8.31 and the p value $P < 0.0001$ reveals that fenugreek consumption is effective on lactation among primi postnatal mothers.

Conclusion

The level of breast milk secretion among primi postnatal mothers who received fenugreek consumption was significantly induced than those who have not receive fenugreek consumption. The post-test level of breast milk secretion among primi postnatal mothers who received fenugreek consumption was significantly more than those who have not receive fenugreek consumption. So the fenugreek consumption has significant effect on inducing the level of breast milk secretion among primi postnatal mothers.

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