

Lactational Amenorrhoea Method in Birth Spacing

*Dr. Muder Hassen , **Dr. Ahmed Shem , *** Dr. Yasmin Waleed

Introduction

Breast feeding is important to infants health and child spacing. it is often stated that in the postpartum period one of the major concerns of the women (and her partner) is contraception. The fact that she has given birth to a child for whose care and upbringing they are now responsible should prompt them to realize that another child will soon be there if they don't take steps to prevent or postpone the next birth(1). Women who don't breast feed may ovulate before 6-7 w. after delivery. It is well known that lactation causes amenorrhoea by inhibition of ovulation, but in industrialized countries this knowledge is seldom turned into official medical advice to rely on breast feeding as a contraceptive method after birth. This is apparently related to the fact that many women in these countries, if they breast feed their infants, do so for relatively limited period and soon add supplementary fluids or formula. In the developing countries, where breast feeding is more common, and last longer and where the spacing of births is often largely dependent on lactational amenorrhoea, showed more interest in the subject. Lactational amenorrhoea is an acceptable mean of effective & safe human contraception that not oblige a possible unwanted side effect of many contraception: as endocrinopathy, thromboembolism, ectopic pregnancy, irregular uterine bleeding that were occurred in hormonal contraceptive pills, Or uterine perforation, uterine cramping, bleeding and pelvic infections that were occurred with intrauterine device⁽²⁾. In addition lactational amenorrhoea method is acceptable to most cultures and religions, it is now used to some extent in at least 48 countries⁽³⁾.

*Dept.of pediatrics , college of medicine , Babylon university

** Dept.of pediatrics , college of medicine , Babylon university

***Dept.of obstetrics and gyre cology, Babylon maternity and children hospital .

Method

In the outpatient clinic of Babylon maternity and childhood hospital we study 450 women who fully breast feed their babies during the first 6 months of life; that is feeding on demands, day and night and no other added foods, also we study 50 women in the first 6 M. postpartum who do not depend on lactation amenorrhoea method. Both group submit to questions about time of menstruation resumption & occurrence of new pregnancy. Women who use any method of contraception were excluded from the study.

Aim of the study

To produce convincing argument that lactation amenorrhoea method is indeed an effective method of contraception in order to:

- 1- promot breast feeding.
- 2- discourage the use of some other contraceptive method that affect milk production in women who are breast feed especially in the first 6 months of postpartum as progesterone in hormonal contraceptives decrease milk production.

Result

From 450 women 62 resume menstruation before 6M. of postpartum (short duration amenorrhoea) and 388 resume menstruation after 6 month postpartum. (long duration amenorrhoea). There is only one recorded pregnancy in those 62 women who continue full breast feeding while menstruating (1.6%) (Fig.1). There is also one pregnancy was recorded in those 388 women , the pregnancy rate was 0.25% in those who continue amenorrhoeic for the 1st 6 M. postpartum (Fig. 2) but there were 4 pregnancies recorded in those 50 women who did not depend on this method(i.e the pregnancy rate was 8%) (Fig. 3) .In 1988 an international group of scientists gathered in Bellagio, Italy they concluded that women who are not using family planning methods but who are fully or nearly fully breast feeding and amenorrhoeic are experienced risk of pregnancy of less than 2% in the 1st 6 months after delivery. The study by Perez *et. al.*, (1992) in chile, a total of 422 women took

part in the study, the cumulative 6m. pregnancy rate was 0.45% among the 221 women (56%) who relied on LAM. (1 pregnancy in the 6m.) 3 other pregnancies were occurred in women who had stopped the LAM. Kazi *et. al.*, (1995) in Pakistan & Romas *et. al.*, (1996) in Philippine recorded pregnancy rate per 100 women during 6 months of correct use of the methods (in Pakistan 0.58% and in Philippines 0.97%) but also during incorrect use (in Pakistan 1.65% and in Philippines is 1.5%)⁽¹⁾. The method has not only been studied in developing countries, Le-Strat Thalabard, in a large group of Australian women breast feeding for extended period of time, ovarian activity was determined by measuring salivary progesterone, they concluded that LAM provided good protection against pregnancy in the first 6 M. postpartum⁽⁴⁾. Tennekoon, in Srilanka concluded that women with longer period of lactational amenorrhoea (>24 w.) maintain higher-prolactin concentration than those with short period of lactational amenorrhoea (<24 w.) during the early postpartum, period even when breast feeding frequency was reduced, this could explained by a greater sensitivity of pituitary lactotrophe to the suckling stimulus in women who have long period of lactational amenorrhoea⁽⁵⁾. Rahman, Muhmudur; Rosetta were investigate a sample of 97 mother-infant pairs living in a poor urban area of Dhaka, that found the median duration of lactational amenorrhoea was determined to be 24.07 weeks and there was a tendency for women with lower body mass index to have longer duration⁽⁶⁾ Campino, Torres, Catalan said fully breast feeding women experience an amenorrhoea of variable duration. The women who experienced a long lactational amenorrhoea had twice as much prolactin level and half the oestradiol level as compared with those who experience short lactational amenorrhoea⁽⁷⁾ Baszak, Radomansk, Sikorski found the average period of lactational amenorrhoea was 7 month, after delivery⁽⁸⁾.

Fig. (1) Show incidence of pregnancy in 62 women who resumed menstruation while continue full breast feeding

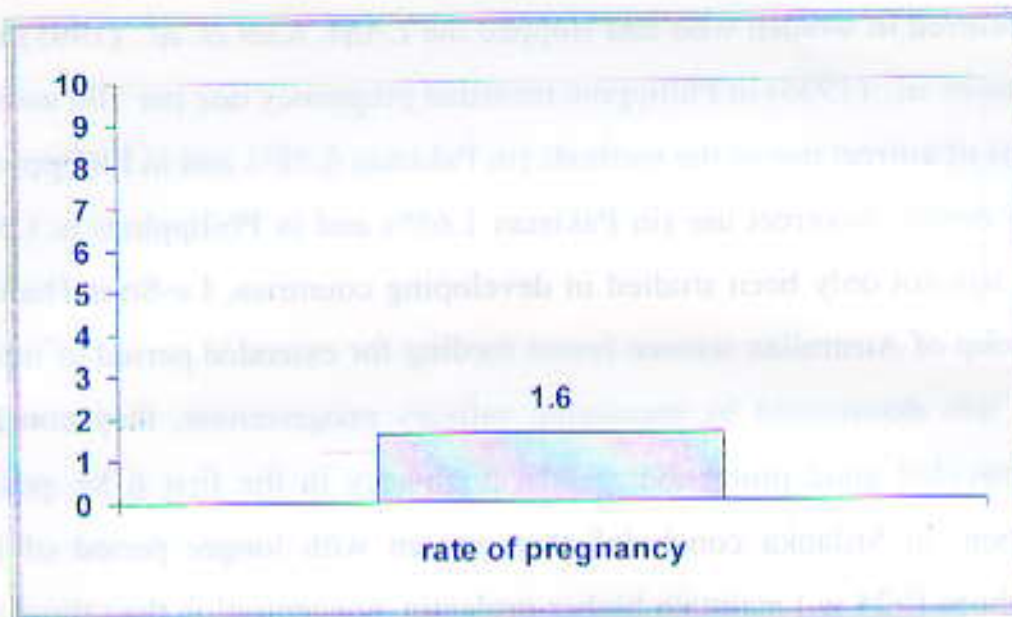


Fig.(2) Show incidence of pregnancy in the first 6 months postpartum in 388 women who are amenorrheic and continue full breast feeding

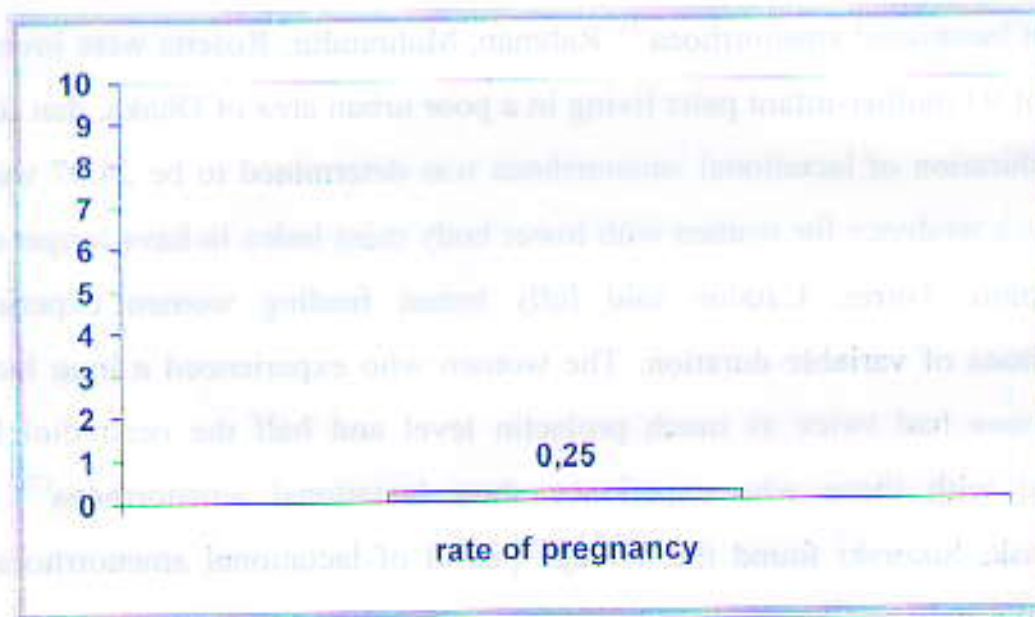
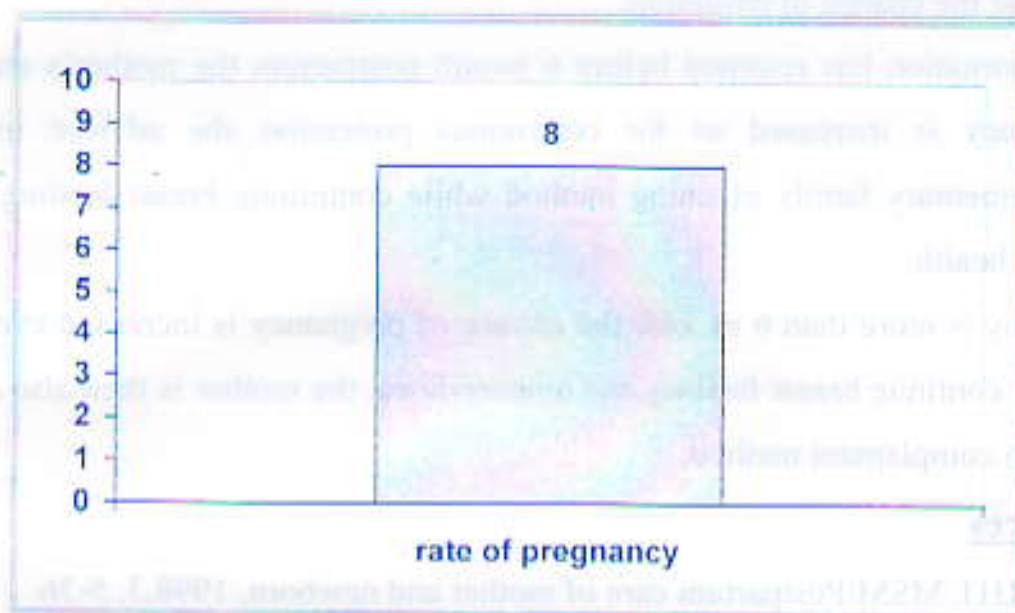


Fig.(3) Show incidence of pregnancy in 50 women who were not breast fed her babies in the first 6 month postpartum



Discussion

From the above mentioned results we found the rate failure of LAM is 0.25% which is acceptable as compared with other methods of birth spacing, and we found the occurrence of pregnancy in those menstruating women who keep breast feeding is very low (1.6%) as prolactin level is higher in lactating women than non lactating women and this protect against pregnancy ,this is also explained by the fact that even if ovulation occur, the abnormal endocrine profile of the first luteal phase offers effective protection to women during lactation within the first 6 months postpartum, later luteal phases are improved and then women are at risk of pregnancy. While the rate of pregnancy in high (8%) in the 1st 6 M. postpartum in women who stop breast feeding.

Conclusion

It can be concluded that LAM is an effective and reliable method of birth control provided that the following are applied:

- 1-The mother is fully or nearly fully breast feeding the baby, feeding must be on demand and both in day & night to increase the duration of amenorrhoea and decrease the chance of ovulation.
- 2- If menstruation has returned before 6 month postpartum the mother's chance of pregnancy is increased so for continuous protection she advised to use a complementary family planning method while continuing breast feeding for the child's health.
- 3- If a baby is more than 6 m. old, the chance of pregnancy is increased even if the mother continue breast feeding and amenorrhoea, the mother is then also advised to use a complement method.

References

- 1- WHO/RHT/MSM/Postpartum care of mother and newborn, 1998,3, 5-36.
- 2- F.Gary Cunningham, MD, Norman F. Gaut, Kenneth J. Leveno, MD; William's obstetric, 21th ed. 2001, family planning, 78.
- 3- The Baby-Friendly Hospital Initiative News, Oct./Dec. 2001, 2, Development of LAM.
- 4- Le-strat, P.; Thalabard, J.C. analysis of postpartum lactational amenorrhoea in relation to breast-feeding, J. Biosoc. Sci. , 2001, Oct. 33(4): 529-49.
- 5- Tennekoon, K.H., Maternal prolactin concentration in early postpartum in women with lactational amenorrhoea, Ceylon. Med. J. 2001, Mar; 46(1): 6-10.
- 6- Rahman- Muhmudur ; Masic. Taylor; Rosetta: L., J. Biosoc. Sci. the duration of lactational amenorrhoea in urban Bangladsh women, 2002, Jan. 34(1): 75-89.
- 7- Campiño, C.; Torres, C. Pugin, E. Human. Reproduction , 2001, Dec. 16(12): 5
Plasma prolactin / estradiol ratio at 38 week gestation predict the duration of lactational amenorrhoea.
- 8- Baszak, F. Sikorsk, R. Resumption of menstruation during lactation after delivery, Gineko. Pol. 2000, Sep.; 71(9).