OBSTETRIC AND INFANT FEEDING PRACTICES IN PUNJAB: EFFECT OF EDUCATIONAL INTERVENTION

A. Gupta
R. Gupta

ABSTRACT

A survey of obstetric and infant feeding practices in 100 mothers showed that only 17% infants were exclusively breast fed. Antenatal advice regarding breast feeding was given to only 13%. Sixty eight per cent infants were put to breast 24 hours after delivery. Campaign against bottle feeding was then launched. Fifteen months later, a survey on another 100 mothers showed that 44% infants were exclusively breast-fed, antenatal advice was given to 11% mothers and 60% mothers got active postnatal advice regarding disadvantages of bottle feeds. Incidence of exclusive breast feeding was more in infants who were roomed-in with the mother early, started on breast feeding earlier and whose mothers received antenatal advice. It was concluded that even if the percentage of antenatal advice did not improve, active postnatal campaign directed towards dangers of bottle feeding could increase the prevalence of exclusive breast feeding.

Key words: *Breast feeding, Infant feeding practices, Education.*

From the Children Medical Centre, BP-33, Pitampura, Delhi 110 034.

Reprint requests: Dr. A. Gupta, Consultant Pediatrician, Children Medical Centre, BP-33, Pitampura, Delhi 110 034.

Received for publication September 1989;
Accepted January 2, 1992

Inspite of the fact that advantages of breast feeding are widely known, its prevalence has shown a decline and early supplementation of milk with bottle is on the rise(1). This could be dangerous for the young infant. Holland reported that children who were not breast fed were almost 6 times more likely to die in first two months than those exclusively breast-fed(2). An Indian study concluded that morbidity in bottle and mixed fed infants was 3-4 times higher than those exclusively breast fed even though good hygiene was kept in bottle fed group(3).

Taking these facts into consideration it was decided to study the effect of a campaign against bottle feeding on infant feeding practices.

Material and Methods

During the month of December 1987, 100 mothers with a child below 6 months were interviewed in our private clinic. Information regarding obstetric services, advice regarding breast feeding, type of delivery and postnatal feeding practices was recorded (*Group I*).

After analyzing the above information, a meeting of local doctors was called where results of the above study were presented. Two video films on breast feeding obtained from Association of Consumers Action on Safety and Health, Bombay, were screened. Posters with theme: "By feeding your child with a bottle, you are offering him disease; would you like to do so?" were prepared and pasted in almost all hospitals of the city and in clinics of pediatricians and obstetricians. An expert on infant feeding was called from outside to deliver a lecture on appropriate and harmful feeding practices. Personal meetings with local obstetricians were held and request was made to stop

the usual practice of giving bottle and formula milk at birth.

During March-April 1989, another survey on 100 mothers with babies below 4 months was conducted. Information regarding rural/urban status, type of delivery, antenatal/postnatal advice, initiation of breast feeding, exclusive breast feeding and prelacteal feeds was recorded (*Group II*). Only mothers who had a normal vaginal delivery were included in the study.

Results

In *Group I*, antenatal advice regarding breast feeding was given to 13% mothers though all had attended antenatal clinics. Breast feeding was started within 1 hour in 2%, 2-24 hours in 30% and after 24 hours in 68%. Bottle feeding was used at one or other time in 90% infants. S333eventeen per cent infants were exclusively breast fed at the time of interview.

In *Group II*, of the 100 mothers interviewed, antenatal check up was done in all but only 11% mothers received advice regarding breast feeding. However, after the campaign against bottle feeding, 60% mothers got postnatal information on advantages of breast feeding and dangers of bottle feeding. The baby was roomed in with the mother within half an hour in 42%, half to two hours in 22% and 3-48 hours in 36%. Five per cent started breast feeding within 2 hours of birth, 19% within 2-12 hours, 27% within 12-24 hours and 49% after 24 hours. Reasons given for late initiation included family customs and a belief that milk comes in only after second or third day of birth.

At the time of interview, 90% infants were being given some breast milk and 44% were exclusively breast fed. Prevalence of artificial feeding was 56% (54% were fed with bottle and 2% with a spoon). The commonest reason (70% of the bottle fed group) for giving supplementary feeds was to get the child used to a bottle lest he may refuse it later on. Insufficient breast milk was the other reason in about half of the cases. The advice to give bottle feeds was received by the mother from doctor in 25 cases, nurse in 20 cases and grand mother in 16 cases. In 6 cases the decision was that of the mother.

Prevalence of exclusive breast feeding was 54.6% in babies roomed-in with the mother within 2 hours and 25% in those roomed-in after 2 hours. Prevalence of exclusive breast feeding was 75% if breast feeding was started within 12 hours, 37% if started within 12-24 hours and 32.6% if started after 24 hours.

Breast milk was the first feed in 2% infants, honey in 90%, glucose water in 5% and jaggery, sugar salt water or plain water in 1% each. Most of the exclusively breast fed infants, had received some other feed before establishing a status of exclusive breast feeding.

Discussion

Health education during antenatal period has shown a positive influence on success in breast feeding(4,5). As reported by Anand(6), we also noted a low incidence of antenatal advice on breast feeding. The present study demonstrates, an increase in prevalence of exclusive breast feeding in a given population as a result of campaign against bottle feeding and motivation of others in postnatal period. Earlier Bathija and Anand had reported that perinatal motivation of mothers could increase the prevalence of exclusive breast feeding(7).

Prevalence of exclusive breast feeding increased with early 'rooming-in' and early

initiation of breast feeding. Delayed initiation of breast feeding is reported to have a negative influence on successful breast feeding(8). The practice of delayed 'rooming-in' of babies must also be discouraged since it causes problems in initiation of breast feeding and deprives the newborn from getting colostrum. Delayed initiation in turn can cause many breast feeding problems like engagement, mastitis and lactation failure.

The customary practice of making the child used to a bottle is getting into our culture. This must change. Moreover, it is possible to feed the child with a cup or spoon. As was observed by Singhal *et al.*, health workers need to be made aware of the unique qualities of breast milk(9). In our study, bottle feeding was advised by a doctor or nurse in about half of the cases. Agarwal *et al.* also observed a similar pattern(10). Along with the advantages of breast feeding, it is important to inform the mothers about dangers of bottle feeding.

The undesirable practices like giving honey, should also be discouraged and pediatricians should take a lead in this connection. A high prevalence of bottle feeding and low prevalence of exclusive breast feeding requires urgent intervention to save infants from infections(11). Undesirable obstetric and infant feeding practices observed by us included poor antenatal advice, delayed 'rooming-in' delayed initiation of breast feeds and introduction of prelacteal feeds. However, changing the usual hospital practices and creating awareness among the mothers regarding dangers of bottle feeding could increase the incidence of exclusive breast feeding.

Acknowledgement

The authors are grateful to Dr. R.K. Anand, Bombay for his help and guidance.

REFERENCES

1. Walia BNS, Gambhir SK, Sora SR, Chaudhary S. Decline in breast feeding practices in urban population of Chandigarh during a decade. Indian Pediatr 1987, 24: 879-887.
2. Holland B. Breast feeding and infectious diarrhea. JAMA 1987, 257: 3361.
3. Chitkara AJ, Gupta S. Infant feeding practices and morbidity. Indian Pediatr 1987, 24: 865-871.
4. Johnson CA, Graza C, Nichols B. A teaching intervention to improve breast feeding success. J Nutr Education 1984, 16: 19-22.
5. Wiles LS. The effect of prenatal breast feeding education on breast feeding success and maternal perception of the infant. J Obstet Gynecol Nurs 1984, 13: 253-257.
6. Anand RK. Obstetric practices and breast feeding. Indian Pediatr 1987, 24: 953.
7. Bathija CG, Anand RK. Effect of perinatal motivation on breast feeding in educated mothers. Indian Pediatr 1987, 24: 933-937.
8. Kumar S, Nath LM, Reddaiah VP. Breast feeding practices in a resettlement colony and its implications for promotional activities. Indian J Pediatr 1989, 56: 239-242.
9. Singhal PK, Taneja DK, Patwari AK, Mullick DN. Advantages of breast feeding--knowledge among paramedical health personnel and mothers. Indian Pediatr 1989, 26: 492-495.
10. Agarwal DK. Agarwal KN, Khare BB. Study on current status of infant and childhood feeding practices. Indian Pediatr 1985, 22: 716.
11. WHO/UNICEF. Infant and Young Child Feeding: Current Issues. WHO, Geneva, 1981.