

## EXCLUSIVE BREASTFEEDING - THE RELATIONSHIP BETWEEN MATERNAL PERCEPTION AND PRACTICE

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### ABSTRACT

**Background:** The behaviour adopted by individuals is moulded by their perception of various issues. In spite of well established benefits of exclusive breastfeeding (EBF) to babies, mothers and society, the EBF practice rate (EBFPr) in our environment has remained low.

**Objective:** To evaluate mother's perception of exclusive breastfeeding and determine the relationship between such view and their practices.

**Subjects and Methods:** Two hundred mothers were interviewed to elicit their perception of the merit and demerits of exclusive breastfeeding. The pattern of perception was related to actual practice in order to seek for possible associations.

**Results:** Of the 184 respondents, 39 (21.2%) practiced EBF for all their babies, while 95 (51.6%) never did so for any of their babies. Knowledge of EBF was excellent (94.0% and 90.8%) of the study group gave accurate definition and duration respectively. Most mothers felt that EBF babies look healthier (85.1%), have less disease (84.5%), are more intelligent (59.1%) but their mothers eat a lot (79.3%). Those who agree to the positive benefits of EBF generally had higher overall complete EBFPr than those who disagreed, as they looked healthier ( $p = 0.0001$ ), had less disease ( $p = 0.041$ ) and more intelligent ( $p = 0.0001$ ). In addition to this, mothers who did EBF for all babies (ie those with an EBFPr of 100%) had more positive perception on the benefits of EBF.

**Conclusion:** There is a fairly good relationship between pattern of maternal perception of the benefits of EBF and actual practice. Efforts need to be intensified to educate and encourage mothers to see the merits of EBF both for themselves and their babies.

**Key Words:** Exclusive breastfeeding, maternal, perception, practice

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### INTRODUCTION

Breastfeeding, the art of nurturing a child with breast milk is the most natural way of infant feeding in all traditions.<sup>1,2</sup> The unique nature of human milk which is well adapted for infant nutrition makes it the most appropriate of all available types of milk.<sup>3</sup> Exclusive breastfeeding (EBF), as defined by the World Health Organisation (WHO), is exclusive intake of breast milk by an infant from its' mother or wet nurse or expressed milk with the addition of no other liquid or solids with the exception of drops or syrups consisting of vitamins, mineral supplements or medicine and nothing else.<sup>4</sup> Breastfeeding has several benefits for the infant, mother and community. These include reductions in infant morbidity and mortality from infectious diseases,<sup>5,6</sup> diarrhoeal incidences,<sup>7</sup> and allergies.<sup>8</sup> Longer duration of breastfeeding is associated with better cognitive development, improvement of intelligence,<sup>9-11</sup> protection against development of

asthma and wheeze in children,<sup>7</sup> and reduction in adolescent obesity.<sup>7</sup> Maternal benefits include reduced postpartum bleeding and protection against breast and genital cancers.<sup>12,13</sup> Other benefits of breastfeeding include lactational amenorrhoea which enhances child-spacing,<sup>14</sup> early mother-infant bonding, and reduction in infant abandonment and child abuse.<sup>15</sup> There is also reduction in overall financial burden to government and families. In line with the Innocenti Declaration in Italy in 1990, Nigeria and about 32 countries resolved to follow the WHO and UNICEF recommendation that calls for governments to create an environment enabling women to practice exclusive breastfeeding for the first 4-6 months of life and continue breastfeeding with adequate complementary foods for up to 2 years.<sup>16</sup> Reports from other centres in Nigeria have given EBF rates (EBFR), at 6 months, as 58.3% in Port-Harcourt<sup>17</sup> (2005), 57% in Benin<sup>18</sup> (1999), and 40.9% in Jos<sup>19</sup> (2000). These are less than optimal. Losch *et al*<sup>20</sup> recognised the need for health professionals seeking to increase the rate of initiation

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and duration of breastfeeding to build on the knowledge of factors that influence a woman's attitude about breastfeeding. They also noted a strong relationship between positive attitudes concerning breastfeeding and its initiation as important to development of programmes targeting women before they become pregnant. Other factors that influence breastfeeding include peer support groups which help to reinforce mothers' belief and confidence in the superiority of breastfeeding over other forms of infant feeding.<sup>21</sup> Peer support also results in more mothers evaluating their breastfeeding experience more positively, leading to higher maternal satisfaction.<sup>21</sup> Most studies from both within and outside Nigeria have focused on the benefits of exclusive breastfeeding. Authors are unaware of any work that has evaluated mothers' perception of EBF and related it to the actual practice. We decided to investigate mothers' perception of EBF and its impact on the average performance of Nigerian mothers with respect to EBF. This is important because the behaviour adopted by an individual on any issue is moulded, at least partly, by that individual's perception of that issue.

## SUBJECTS AND METHODS

This study was carried out from May 1 to November 30 2006, at the Paediatrics Clinics of University of Nigeria Teaching Hospital (UNTH) Enugu, Nigeria, which is the apex health institution in the state and designated "Baby-friendly" in 1992. Details and benefits of EBF are communicated to mothers during ante-natal clinic visits, immunization exercises and in all Paediatrics Clinics. There is however no established breastfeeding support group. Ethical clearance and verbal consent was obtained from the Ethical Committee of the hospital and mothers respectively. An average of 30-40 patients are seen per day with about 20 new cases. Among those who gave consent, 1 out of every 3 mothers was selected. Children excluded from the study were those born before 1992 or in hospitals where EBF was not being promoted, those who were less than 6 months at time of study, and those who were not brought by their mothers. A structured questionnaire was administered to the mothers to elicit their perception of the merits and demerits of EBF. The number of their children that were exclusively breastfed was also obtained and the fraction of children who received EBF of all who were breastfed was expressed as percentage to give the EBF Practice rate (EBFPr). This EBFPr, which was determined retrospectively, was obtained for each of the participating mothers and the mean rate was calculated for the group. The pattern of perception of merits and demerits of EBF was related to the level of Breastfeeding achieved by the women i.e. actual practice rate (EBFPr) for all their babies. We sought for an association between the EBFPr and the pattern of perception of the effects of EBF.

The data was analysed with the Statistical Package for Social Sciences (SPSS) version 11.0. Means and

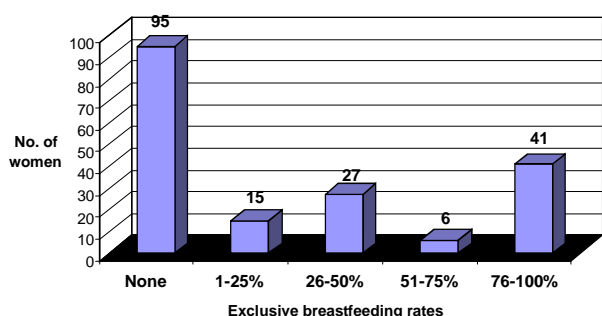
proportions were compared using student t-test and chi-square respectively. Value of  $p < 0.05$  was taken as significant.

## RESULTS

Of the two hundred mothers who received the questionnaires, 184 completed and returned same giving a response rate of 92%. Sixteen were discarded because of grossly inadequate information in several areas making analysis difficult. Among the 184 women, there were 570 children with an average of 3 children per family. Of the 184 mothers, 173 (94%) gave correct definition and 167 (90.8%) knew that EBF should be practiced for six months in line with current recommendation. More women agreed that exclusively breastfed children are usually more intelligent and had better cognitive development. EBFPr was significant among such mothers in comparison with those with alternative views (40.7% vs 8.7%;  $p = 0.0001$ ), or those who were unsure (40.7% vs 27.3%;  $p = 0.015$ ). As regards acceptance of accept water at cessation of EBF, the practice rates was significant between those who agreed and unsure (32.6% vs 19.6%;  $p = 0.008$ ) or unsure and disagree (19.6% vs 46.7%;  $p = 0.0001$ ) Figure 1 shows the various exclusive breastfeeding practice rates and the proportion of women that achieved those levels. The overall 6 month EBF practice rate for the study group was 32.4%. Only 39 (21.2%) women practiced EBF for all their children while 95 (51.6%) did not practice for any child.

Table 1 depicts the various effects of exclusive breastfeeding. Most mothers, (85.1%) believe that exclusively breastfed babies look healthier than babies who received other forms of feeding. Similarly, 84.5% of mothers agree that children on EBF are less prone to infections and diseases like diarrhoea and respiratory tract infections; 59.1% believe they are more intelligent, and demonstrate better cognitive development. But 32.9% of subjects think that exclusively breastfed children find it difficult to accept water afterwards. About 79% of respondents feel that mothers who practice EBF tend to eat a lot and consequently gain weight. Table 2 compares those subjects who did not practice EBF for any of their children (ie 0% EBFPr) with those who breastfed all their children (ie 100% EBFPr). The EBFPr was significantly better for those who believed that children that were exclusively breastfed are healthier than those with alternative views. ( $p = 0.005$ ). On the issue of intelligence and better cognitive development, there is still a significant difference between those had 0% EBFPr and those with 100% EBFPr ( $\chi^2 = 8.209$ ;  $p = 0.004$ ). However, no significant difference was noted between these two groups of subjects on the issue of proneness to diseases and infections. ( $\chi^2 = 2.370$ ;  $p = 0.124$ ) as well as perception on the appetite of women who practice EBF ( $\chi^2 = 0.52$ ;  $p = 0.82$ ).

Figure 1: Exclusive Breastfeeding Practice Rates among Subjects.



Intelligent. Also they believe that these children have better cognitive development. These are well documented benefits of EBF<sup>5-10,17,18</sup> and it is convenient to say that those women who believe these facts apparently see them as drive to practice exclusive breastfeeding for their babies. Though not a direct focus of their study, Otaigbe *et al*<sup>17</sup> attributed the apparent improvement in EBF among mothers, in their study when compared to figures from other parts of the country,<sup>18,19</sup> to encouragement given to the participating mothers on the benefits of EBF during the study. Other workers<sup>21,23</sup> had noted that when mothers are actively mobilized and preparative measures taken, the EBF practices improved among them. The belief that babies who are exclusively breastfed do not accept water well after

Table 1: Perception Pattern of Women on Effects of EBF.

| Effect of EBF                          | Agree<br>No. (%) | Unsure<br>No. (%) | Disagree<br>No. (%) | Total<br>No. |
|--|------------------|-------------------|---------------------|--------------|
| Patients look Healthier                | 154(85.1)        | 13(7.2)           | 14(7.7)             | 181(100)     |
| Prevents some disease And infections   | 153(84.5)        | 18(9.9)           | 10(5.6)             | 181(100)     |
| More intelligent cognitive development | 107(59.1)        | 52(28.7)          | 22(12.2)            | 181(100)     |
| Refuse water afterwards                | 60(32.9)         | 36(19.8)          | 86(47.3)            | 182(100)     |
| Excessivematernal appetite             | 142(79.3)        | 19(10.6)          | 18(10.1)            | 179(100)     |

Table 2: Mothers' Perception of Effects of EBF and thier Ebfr.

| Effect of EBF                     | EBFPr r (%) | Agree    | Disagree | Chi-square, (? <sup>2</sup> ) | p-value |
|-----------------------------------|-------------|----------|----------|-------------------------------|---------|
| Babies are healthier              | 0%<br>100%  | 65<br>39 | 14<br>0  | 7.842                         | 0.005*  |
| Prevents diseases and infections  | 0%<br>100%  | 66<br>38 | 8<br>1   | 2.370                         | 0.124   |
| More intelligent/better cognition | 0%<br>100%  | 42<br>28 | 18<br>1  | 8.209                         | 0.004*  |
| Refuse water afterwards           | 0%<br>100%  | 32<br>12 | 33<br>2  | 2.712                         | 0.1     |
| Excessive maternal appetite       | 0%<br>100%  | 60<br>32 | 9<br>5   | 0.052                         | 0.820   |

\*Statistically significant.

## DISCUSSION

This study demonstrates that there is a significant relationship between mothers' perception of Exclusive Breastfeeding and their practice of it. Most women in this study who had positive ideas on the benefits of exclusive breastfeeding, did significantly better in terms of their achieved EBFPr. This holds true with respect to the fact that babies who had EBF look healthier and are more

the practice of EBF is an erroneous idea held by a number of women in our society. It is thought that this idea adversely affects a lot of women and breeds in them an unwillingness to carry on with EBF. A rather positive perception by those who disagreed to this apparently erroneous idea may probably have encouraged them to breastfeed exclusively. This again emphasises the need to encourage women to appreciate the overall benefits of EBF

while redressing the false ideas that may have been acquired from ill-informed individuals in the society. The fact that majority of respondents agree that women who practice EBF tend to eat excessively and may add excess weight, but still had higher EBF rates than those who disagreed may be due to an over-riding influence of the positive effects or benefits which they perceive in the practice of EBF. It may, therefore, be reasoned that when women are well-motivated on the benefits of EBF on their babies, they feel less worried about the seeming negative impact on themselves. Similar view have been held by other workers.<sup>20,23</sup> It is also speculated that less women in developing countries are disturbed about the effects of EBF on their physical appearances as compared to those in the more developed countries.<sup>22</sup> In this study the presence of an established breastfeeding support group may have improved the EBFPr. However, this could not be assessed in a study of this nature. The strong and positive influence of peer support was demonstrated by Dennis *et al*<sup>21</sup> among primiparous women randomized to a breastfeeding peer support group. These women were able to reach their breastfeeding goals both in terms of duration and exclusivity when compared to mothers who did not receive such support. Thus by impacting on their perception of breastfeeding, the support programmes ensure that mothers become more willing to breastfeed their babies.

We strongly believe that there is need to explore the ideas which mothers hold about EBF. This has been shown to have significant influence on their willingness or otherwise to practice EBF. There is need for continuous education and reiteration of the benefits of EBF by physicians and other health workers at every point of contact with mothers so as to improve on their exclusive breastfeeding practice. Establishment of breastfeeding support groups should be encouraged.

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