Students' Corner

Perception of college going Females regarding Breast Feeding: an Epidemiological Profile

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Abstract

Objectives: 1) To assess the knowledge of young unmarried girls regarding breast-feeding and 2) to find out the sources of their misbeliefs.

Subjects and Methods: A qualitative assessment based cross-sectional survey was conducted at degree girls' colleges in Karachi on unmarried girls from BA part I, part II, BSc part I and part II classes only. Two hundred and fifty forms were selected and analyzed. The responses were scored to judge the level of knowledge.

Results: The knowledge of girls regarding breast-feeding was below satisfactory level; mean scores being 25 ± 9 out of a total score of 55. BSc part II students had more knowledge than other classes (p=0.0098). Mothers emerged as the most common source of information about breast-feeding (47%) while media stood second (26%). However, there was no difference between scores of girls who had different sources of knowledge (p=0.29).

Conclusion: This study shows that young unmarried girls do not have adequate knowledge regarding breast-feeding and many misbeliefs are prevalent. It provides the baseline statistical data and points towards certain key areas where interventions are required (JPMA 53:258;2003).

Introduction

Breast Feeding has an inverse association with infant morbidity and mortality. Higher occurrence of breast-feeding is associated with lower infant mortality and morbidity figures.[1] Epidemiological studies done to date suggest that children who are breast fed have advantage over the formula fed children in terms of general health, growth and development[2] as well as intelligence[3] and some adult diseases[4], while significantly decreasing the risk of a large number of acute and chronic diseases.[5]

However in Pakistan, only 16% of mothers exclusively breast-feed for a period of 3 months.[6] The same value for other countries is China 64%, Bangladesh 52%, India 51%, Sri Lanka 24%.[7] These statistics include our disappointing Infant Mortality Rates of 95/1000 live births per year.[8]

Exclusive breast-feeding means giving only and solely human milk, which should be, continued for a period of 4 - 6 months.[9] According to demographic surveys, 90% of mothers in Pakistan breast-feed initially but either start weaning too early or give inappropriate foods under quasi-religious or cultural beliefs or bottle-feed the infant.[10] An important question in this context concerns the source of these misbeliefs. Where do the mothers pick up these misbeliefs from and how deep-rooted are these misbeliefs in our society? Are these misbeliefs acquired before marriage or during marital life? If the sources of misbeliefs can be identified, appropriate interventions can be used to modify general public opinion regarding breast-feeding.

The objectives of this study were: a) to assess the knowledge of college going females regarding breast feeding, b) to identify prevailing misbeliefs and c) to identify the sources of information about breast feeding.

The population studied was chosen because these young girls are the 'future mothers' and their knowledge and attitude towards breast feeding will have profound effect on there practices as mothers.[11] If the sources of their misbeliefs can be identified, appropriate intervention can be used to modify general public opinion regarding breast-feeding.

Methodology

This study was a descriptive cross-sectional study, conducted at degree girls' colleges in Karachi. A questionnaire-based survey was carried out consisting of both open and close-ended questions. Some questions in the questionnaire asked about certain facts and fallacies regarding breast-feeding and were closed ended questions (Choices were True, False and don't know). For each correct response one mark was given and for incorrect response no mark was given. There was no negative marking. While the questionnaires were being filled out, interviewers were there to answer all queries that arose. Study sample was randomly collected from the bachelors' level female students from five eminent girls' colleges of Karachi, generating a total sample size of 250 students. A maximum

of 50 students were randomly sampled from each college so as to ensure that no bias occurred due to over sampling from any one college. The sample was then stratified with respect to age and class to allow comparisons. Where appropriate, t-tests and ANOVA[12] were carried out and level of significance taken was 5% (α =0.05).

Results

The mean age of the sample was 19 years with a standard deviation of 1.64 years. About 14% girls had illiterate mothers while 4% girls had illiterate fathers. Only 42% liked to breast feed their children while 45% were uncertain (Table 1). As regards to their decision regarding breast-feeding, 24% of girls would adopt breast-feeding on advice of husband, 32% from mothers, and 14% from mother-in-law (Table 2).

Table 1. Would you breast feed your children?

Response	%
Yes	42
No	3
Don't know	45
No reply	10

Table 2. On whose advice would your choice of breast feeding depend?

Source	%
Mother	32
Husband	24
Mother-in-law	14
Doctor	12
Friend	7
Sister	7
Sister-in-law	4

About 43% girls got their knowledge regarding breast-feeding from their mothers, and 34% from media (Figure 1). The mean score of the sample regarding knowledge of breast-feeding was 25.0 (out of a maximum score of 60) with a standard deviation of 9.0. Assessment scores when correlated with the class revealed that girls of BSc part II had significantly higher scores as compared to the rest of classes (p value for ANOVA = 0.009). Age was

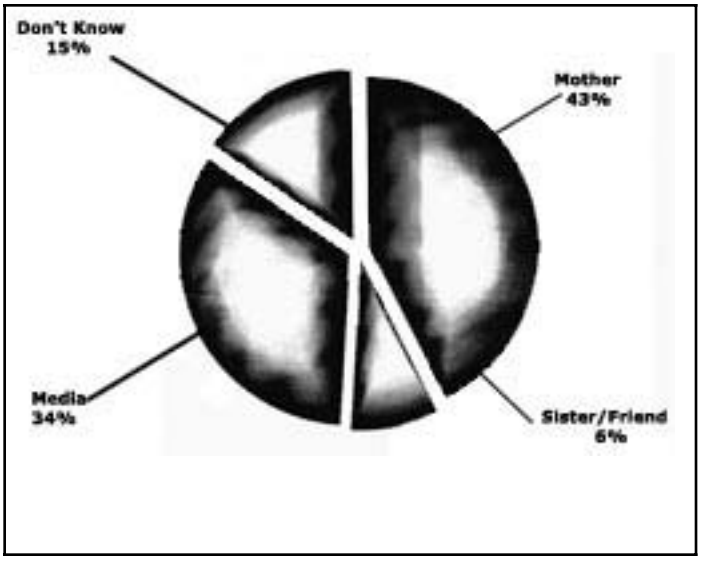

Figure 1. Sources of knowledge regarding breast feeding.

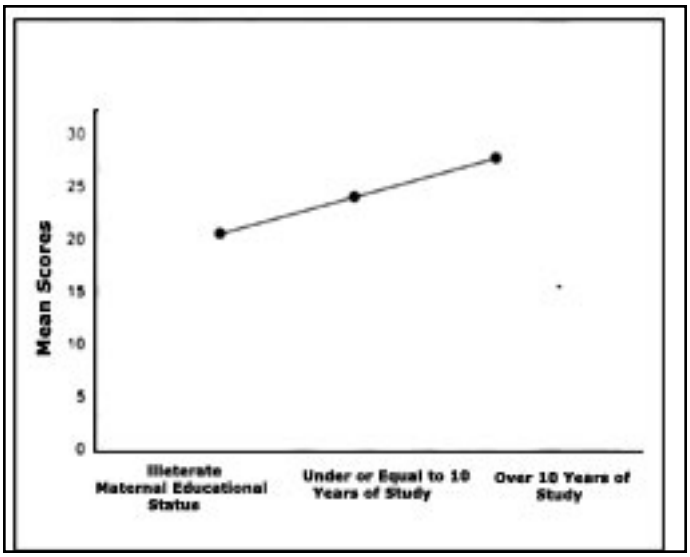

Figure 2a. Relationship of maternal educational status with mean scores.

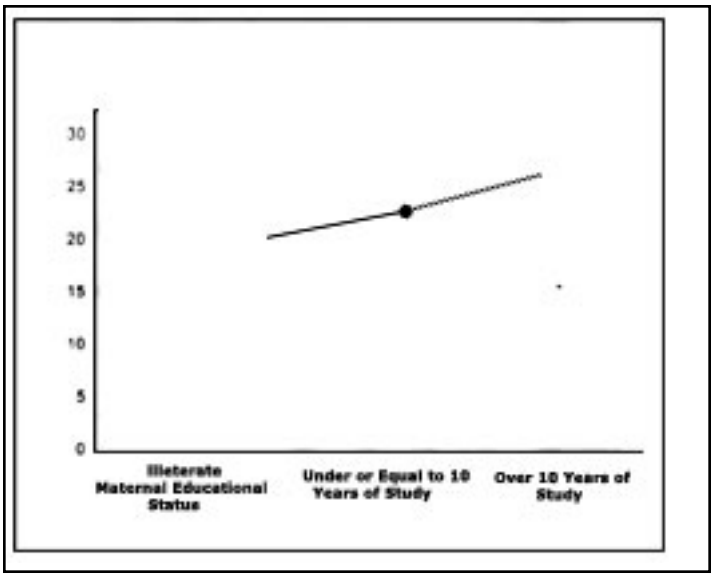

Figure 2b. Relationship of paternal educational status with mean scores.

found to be another predictor of their score, girls within age group 21 to 23 had higher scores than those falling on either side (p value = 0.002).

Paternal and maternal education were also correlated with assessment score, the p value being 0.001 for father's educational level and 0.007 for mother's educational level. This trend is highlighted in Figures 2a and 2b. It was found that there was no significant difference between scores of girls who had different sources of knowledge (p value 0.29). Regarding their level of knowledge of breast-feeding, following were elucidated:

Only 56% of girls would increase their diet during breast-feeding, 38% were uncertain. The newborn should be put to breast within 30 min according to 82% of girls. The first feed that should be given to baby should be infant formula according to 6%, animal milk 4%, ghutti 22%, honey 21%, water 2% and breast milk according to 41%. Only 36% of girls felt that colostrum should be given to the baby, 55% didn't know. Regarding exclusive breast-feeding, 28% thought it should continue for 3-4 months, 43% did not know. Eighty-two percent of girls opined that weaning should start by 4-6 months. About 50% of girls wrote that water should be given along with breast milk. Regarding lactation's contraceptive role, only 48% on girls were aware of it. Fifty-six percent of girls were of the opinion that lactation doesn't allow any medications to be taken. When it was asked that breast fed babies still need vitamin and mineral supplements, 39% said yes, 31% said no, 26% did not know. Regarding the role of breast-feeding in preventing diarrhea, only 46% of our sample had awareness about it. Thirty-six percent of girls knew about the association of bottle-feeding with malnourishment.

Discussion

Knowledge of mother regarding breast-feeding has important implications for the health of the newborn infants. Some of the basic trends of the 'future mothers' regarding their knowledge of breast-feeding were investigated. Overall trend towards the knowledge of breast-feeding was poor as evaluated from the assessment scores. A statistically significant difference was found when scores were correlated with class, age and parental education. It was quite evident that girls whose parents, especially mothers were more educated had higher scores than those whose parents were not regardless of the institution. This finding when coupled with another that 42% of the girls got their knowledge of breast-feeding from mothers calls for a health intervention programme targeted at mothers in order to educate them. It should be noted, however, that this finding goes in contrast with that of Perez's study done in rural women of Mexico.[12] A trend that is also evident from the results shows that fathers tend to be more educated than mothers. This is in conformity with the true state of affairs of our society where boys are more likely to be sent to school than girls.

Majority of the subjects didn't know whether they would breast feed their children or not. We believe it to be due to the future uncertainty in the married life. It is also evident that in-laws are more likely to affect the decision whether a girl breast-feeds her child or not. Since the subjects cannot predict the future panorama of their lives it is explicable why their decision to breast-feed or not to breast feed their children is not a final one. In this regards, it would be interesting to know that what proportion of the girls were engaged or married in the sample but the questionnaire did not take that into account. Because such girls have a better idea regarding their post-marital status, their statement would have been more realistic and authentic. Results also show that girls are more likely to listen to their mothers when they are told to adopt breast-feeding. The second in this list are husbands, then mother-in laws. Doctors come at fourth position. The key is not only to concentrate on girls who are going to become mothers in the near future but to modify the society's thinking regarding breast feeding as a whole and to generate an environment which is conducive for breast feeding.

Looking at results showing different sources of knowledge and insignificant difference between the level of knowledge acquired gives us the impression that those major contributors have not been sufficiently exploited to preach the benefits of breast-feeding. This result is in accordance with the result of Connolly et al[13] who studied behaviour of school going boys and girls on breast feeding and found that media had a powerful directing effect on those students' knowledge regarding breast-feeding.

When asked about practices, a significant number of girls were found to have wrong ideas regarding breast-feeding. Some of these misbeliefs have previously been reported[10] but there are others that are important. At times, majority proved to have the right information, it is clear that misbeliefs are there and need to be addressed. Even those with some right concepts, it cannot be said with certainty that those "right" concepts will be practiced, as it is also known that in this respect nutritional beliefs and practices differ.[14] Reviewing all the results, it was seen that there was not a single subject who did not have any misbeliefs regarding breast-feeding. During the survey, it was noted that the girls were reluctant to talk about it and many forms had to be rejected on the grounds that they were either incomplete or every question was answered as "don't know".

It is therefore concluded that the knowledge about breast-feeding is not adequate. Breast-feeding is on continuous decline and health professionals need to take a stand on that. The population studied had many misbeliefs, which need to be taken into account. The major sources of knowledge of breast-feeding were mothers and media although none seemed to be an effective one. The fact gives us a clue regarding whom to target in programs of mass education for breast-feeding. Literacy is directly associated with health awareness and induces a positive influence on the society towards breast-feeding. It is recommended that media should be used to its full potential in order to promote breast-feeding. Preventing early marriages and improving literacy rates along with access to good antenatal care are the key to a more favorable outcome. Our study presents the baseline data in a selected population that needs to be considered before any intervention is applied and points towards key variables, the modulation of which would improve the scenario.

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