

RESULTS

As regards our cases, we classified them into two groups.

Group I (Breast fed).

- Consisted of 500 cases; 234 males and 266 females; their ages ranged from 1 - 6 months.
- 402 cases, their mothers gave history of diarrhea; the remaining (98) did not.
- 174 (34.8%) cases were presenting with diarrhea; 148 cases of them had vomiting in addition.

Group II (Artificially fed)

- Consisted of 500 cases, 259 males and 241 females; their ages ranged from 1- 6 months.
- 489 cases were fed dried powdered milks and the remaining (11) were fed fresh animal milk.
- 455 cases, their mothers gave history of diarrhea; the remaining (45) did not.
- 241 (48.2%) cases were presenting with diarrhea; 217 cases of them had vomiting in addition.

Table (1)

Shows the prevalence of diarrhea among breast fed and artificially fed infants.

Out of the 500 breast fed infants, 174 (34.8%) presented with diarrhea; while out of the 500 artificially fed infants, 241 (48.2%) presented with diarrhea. This difference is statistically highly significant ($P < 0.001$).

Table (2).

Shows the number and percentage distribution of breast fed and artificially fed infants according to the number of diarrheal attacks; 98 (19.6%), 123 (24.6%), 81 (16.2%), 67 (13.4%) and 30 (6%) breast fed infants got 0, 1, 2, 3, 4 and 5 or more diarrheal attacks respectively; 45 (9%), 65 (13%), 82 (16.4%), 93 (18.6%), 146 (29.2%) and 69 (13.8%) artificially fed infants got 0, 1, 2, 3, 4 and 5 or more diarrheal attacks respectively.

Conclusively, breast fed infants got less attacks of diarrhea than artificially fed ones. ($P < 0.001$).

Table (3).

Shows the number and percentage distribution of breast fed and artificially fed patients according to the degree dehydration.

- Out of the 174 breast fed infants with diarrhea, 68 (39.1%), 51 (29.3%), 37 (21.2%) and 18 (10.4%) had no,

mild, moderate and severe dehydration, respectively; and out of the 241 artificially fed infants with diarrhea, 49 (20.3%), 60 (24.9%), 90 (37.3%) and 42 (17.5%) had no, mild moderate and severe dehydration, respectively.

- We noticed that when artificially fed infants got diarrhea, they had a more severe form of dehydration than breast fed ones. The difference is statistically highly significant. ($P < 0.001$).

Table (4).

Shows the mean weight and standard deviation of breast fed and artificially fed infants in Kgm in relation to their age in months.

- We notice that breast fed infants from the first up to the sixth months of age weighed 3.4 ± 0.45 , 3.9 ± 0.9 , 4.6 ± 1.2 , 5.2 ± 1.1 , 5.6 ± 1.35 and 6.1 ± 1.45 Kgm respectively.

Meanwhile, artificially fed infants from the first up to the sixth months of age weighed 3.2 ± 0.74 , 3.45 ± 0.9 , 4.0 ± 1 , 4.55 ± 1.4 , 5.0 ± 1.7 Kgm respectively.

- This difference in weight is not significant in the first month of age but it is statistically significant afterwards ($P < 0.05$).

Table (5).

Shows the relation between the number and percentage of breast fed and artificially fed patients and the stools' pH.

- We notice that 38 (21.9%), 134 (77%) and 2 (1.1%) of breast fed patients (174) had stools' pH of 5.5, 5.5 - 8 and 8, respectively; and 84 (34.5%), 148 (61.4%) and 9 (3.8%) of artificially fed patients had stools' pH of < 5.5 , 6 - 8 and > 8 , respectively. Conclusively, artificially fed infants experienced significantly more lactose intolerance (pH of stools less than 5.5) than breast fed infants ($P < 0.01$).

Table (6).

Shows the correlation between the frequency of diarrheal attacks and the prevalence of lactose intolerance among breast fed and artificially fed patients.

- In breast fed patients the 1st., 2nd., 3rd., 4th., and 5th. diarrheal attacks were associated with lactose intolerance in a percentage of 7.6, 17, 19.5, 30 and

34% respectively. While in artificially fed patients the 1st., 2nd., 3rd., 4th. and 5th. diarrheal attacks were associated with lactose intolerance in a percentage of 8.5, 19, 28, 35 and 40% respectively.

To conclude, the occurrence of lactose intolerance increases with the number of diarrheal attacks significantly ($P < 0.05$); which is more in the artificially fed group than in the breast fed one ($P < 0.05$).

Table (7).

Shows the relation between the number and percentage of breast fed and artificially fed patients and fecal leucocytes.

- We notice that 96 (55%) of breast fed and 157 (65.2%) of artificially fed infants had few leucocytes in stools. The rest had moderate to marked increase of fecal leucocytes. There is no statistical significant difference between the two groups.

Table (8).

Shows the relation between the number and percentage of breast fed and artificially fed patients and the consistency of stools.

We reported that 104 (60%) of breast fed and 156 (64.7%) of artificially fed patients had fluid stools; the rest had semifluid or slimy stools. The difference between breast fed and artificially fed patients is of no significant importance.

Table (9).

Shows the relation between the number and percentage of breast fed and artificially fed infants and the colour of stools.

We notice that 95 (54.65%) and 58 (33.3%) of breast fed patients and 125 (51.2%) and 92 (38.9%) of artificially fed patients had pale yellow and greenish stools respectively which is statistically not significant.

Table (10).

Shows the relation between the number and percentage of breast fed and artificially fed infants and the odour of stools.

We found that 131 (75%) and 43 (25%) of breast patients and 169 (70.1%) and 72 (29.9%) of artificially fed patients had stools of fecal and offensive odour respectively. There is no statistical difference between both groups.