

# NUTRITION OF



308 Lasani Town, Sargodha Road, Faisalabad - Pakistan Mob: +92 300 3008585, Fax: +92 41 8815544 E-mail: editorpjn@gmail.com

# Comparative Study of Breast-Feeding State among Fars (Native) Torkman, and Sistani Ethnic Group of Rural Areas in Gorgan District

G.R. Veghari

Golestan University of Medical Sciences, School of Medicine, Gorgan, Iran

Abstract: This study is a epidemiological description study that has been carried out for determining the status of breast feeding and extra feeding in the children of the Gorgan rural. Three race of the Gorgan rural such as Fars (native), Torkman and immigrants of sistani have been compared. Among 118 Gorgan rural, 20 of them were chosen by systematical simple random way. All children of 0-6 years old were studied. On the whole, 2890 children were studied. Results showed that 1) in the first six-month after birth, 86.1% children are nourished by breast milk. The Torkman races have significant statistical differences with Fars (native) and Sistani races (p<0.05), 2) 34.6% children of Gorgan rural have begun extra feeding from six-month age. The highest and the lowest ratio have been observed in sistani (40.1%) and Fars (native) children (30.5%) respectively, 3) in the Gorgan children, the rate of the breast-feeding is higher than that was reported for whole the country. The children of the sistani race who live in Gorgan rural should be more supported from the nutritional viewpoint and the education of the breast-feeding must be considered more than the others. According to the results of this study, it can be conclude that social and cultural factors could change in the patterns of the children' nutrition.

Key word: Race, extra feeding, breast-feeding, Gorgan, Iran

### Introduction

Human health is formed nonage and nutrition is one of the important factors on it. Therefore breast-feeding and extra-feeding in child is considerable.

Breast-feeding, Extra-feeding and age of extra-feeding and food habit in children is affected by culture, customs, social economic and ecological factor in family. Golestan province is beside of Caspian sea and near Torkmenestan, and Gorgan district in the center of it. The people of the Sisstan and Blochestan province, Sharoud city, Afghanestan etc. have migrated to this place last years, are living with Torkman's people in this state. Tree groups (Fars"native"-Torkman-Sisstani) have the most population in villages of Gorgan district. This study was carried out in villages Gorgan district to determine nutritional status among children under 6 years and comparison it among three above groups.

### **Materials and Methods**

At first, 118 villages of Gorgan district were sorted on base of ethnic, and 20 villages were chosen by simple sampling. All of the children under 6 year are statistical sample. In addition 2980 cases (Fars 'native' = 491, Torkman = 1264 and Sistani = 1111 individual) were chosen the areas. 28 case are missing because they aren't in these groups. Twenty questioners completed the question form for 30 days. Data saved in computer and analyzed by SPSS software.

### Results

In addition, 89.1% of children intake the mother's milk up

to 6 month age. The least breast-feeding was observed in Fars 'native' group (84.8%) and the most breast-feeding in Turkman group (94.2%) up to 6 month age. With regard to breast-feeding in 6 month age, there is statistical different significant between two groups of Fars and Turkman and between Sistani and Turkman groups (p<0.05).Intake of Cow and powder milk in Fars group is the higher than the other groups(Table 1).

Extra-feeding begins from 4<sup>th</sup> month age in villages of Gorgan district and children of Fars (30.5%), Turkman (31.1%) and Sistani (40.1) to start own extra-feeding from 5<sup>th</sup> month age.

### Discussion

The rate of breast-feeding up to 6th month age is significant among three groups, therefore ethnicity factor could affect on breast-feeding pattern. This study showed that high consumption of mother's milk is with low intake of powder milk. Similar study in Quzvin reported that consumption of mother's milk and intake of it with other milks up to 6th month is 86.4% and 11.3% respectively (3). Exclusive of mother's milk feeding reported 35.5% in clientele to health centers of Zanjan (Kosha, 1999) city from 3-6th month next after birth. Iranian Ministry of Health and Medical Education (1997) announced that exclusive breast-feeding or most breastfeeding villages of Iran, cities and all of Iran is 82%, 74.5% and 79% respectively. Nickniaz (Nikniaz, 1993) reported that rate of breast-feeding in western Azarbaijan province is 97.5% in 1993. This ratio in this study is 95.7%.

### G.R. Veghari: Breast-Feeding

Table 1: Frequency of cases on base of sex and ethnicity among child under 6 year in rural of Gorgan

| Age group | Ethnic       |     |         |     |          |     |       |    |  |  |  |
|-----------|--------------|-----|---------|-----|----------|-----|-------|----|--|--|--|
|           | Fars(native) |     | Torkman |     | Sisstani |     | Other |    |  |  |  |
|           | <br>M        | F   | <br>М   | F   | <br>М    | F   | <br>M | F  |  |  |  |
| 0-12      | 47           | 47  | 107     | 126 | 98       | 107 | -     | 1  |  |  |  |
| 12-24     | 53           | 43  | 110     | 93  | 103      | 110 | 1     | -  |  |  |  |
| 24-36     | 46           | 55  | 114     | 85  | 100      | 106 | 3     | 3  |  |  |  |
| 36-48     | 41           | 42  | 111     | 106 | 102      | 109 | 5     | 2  |  |  |  |
| 48-60     | 56           | 55  | 128     | 107 | 99       | 133 | 4     | 2  |  |  |  |
| 60-72     | 1            | 5   | 87      | 83  | 24       | 19  | -     | 3  |  |  |  |
| 72<       | 5            | -   | 2       | 5   | 1        | -   | -     | -  |  |  |  |
| Total     | 244          | 247 | 695     | 605 | 527      | 584 | 13    | 11 |  |  |  |
|           | 491          |     | 1264    |     | 1111     |     | 24    |    |  |  |  |

Missing =280 M=male F=female

Table 2: Frequency of type food among child under 6 year in rural of Gorgan

|                | Ethnic        |      |         |      |          |      |              |      |  |  |
|----------------|---------------|------|---------|------|----------|------|--------------|------|--|--|
|                | Fars (native) |      | Torkman |      | Sisstani |      | Total (line) |      |  |  |
| Diet           | <br>F         | %    | <br>F   | %    | <br>F    | %    | <br>F        | %    |  |  |
| 1-Mother' milk | 419           | 84.8 | 1099    | 94.2 | 944      | 85.8 | 2478         | 89.1 |  |  |
| 2-Cow's milk   | 14            | 28   | 6       | 0.5  | 12       | 1.1  | 34           | 1.3  |  |  |
| 3-Powder milk  | 20            | 4    | 24      | 2    | 38       | 3.5  | 82           | 2.9  |  |  |
| 1 and 2        | 12            | 2.4  | 6       | 0.5  | 19       | 1.7  | 38           | 1.4  |  |  |
| 2 and 3        | -             | -    | -       | -    | 2        | 0.2  | 2            | 0.1  |  |  |
| 1 and 2 and 3  | 2             | 0.4  | -       | -    | 1        | 0.1  | 3            | 0.1  |  |  |
| 1 and 3        | 27            | 5.5  | 31      | 2.7  | 84       | 7.6  | 143          | 5.1  |  |  |
| Total          | 494           | 100  | 1166    | 100  | 1100     | 100  | 2780         | 100  |  |  |

Missing =135. Z test Torkman and Fars'native' Z=6.2 p<0.05. Z test Torkman and Sisstani Z=8.68 p<0.05

Table 3: Frequency of cases on base of start to extra-feeding age and ethnicity among child under 6 year in rural of Gorgan

| Age (month) | Ethnic        |      |         |      |          |      |              |      |  |
|-------------|---------------|------|---------|------|----------|------|--------------|------|--|
|             | Fars (native) |      | Torkman |      | Sisstani |      | Total (line) |      |  |
|             | <br>F         | %    | <br>F   | %    | <br>F    | %    | <br>F        | %    |  |
| =<3         | 12            | 2.7  | 10      | 0.9  | 9        | 0.9  | 31           | 1.2  |  |
| 4           | 138           | 30.5 | 332     | 31.1 | 404      | 40.1 | 874          | 34.6 |  |
| 5           | 112           | 24.7 | 310     | 29.1 | 204      | 20.3 | 626          | 24.8 |  |
| 6           | 169           | 37.3 | 402     | 37.7 | 308      | 30.6 | 879          | 34.8 |  |
| 7           | 21            | 4.6  | 10      | 0.9  | 69       | 6.8  | 100          | 3.9  |  |
| 8=<         | 1             | 0.2  | 3       | 0.3  | 13       | 1.3  | 17           | 0.7  |  |
| Total       | 453           | 100  | 1067    | 100  | 1007     | 100  | 2527         | 100  |  |

The other results of this study are start of extra-feeding from 4<sup>th</sup> month among 34.6% of children. Sisstani group has the highest ratio (40.1%) and Fars (native) group has the lowest ratio. 95% of children begin extra-feeding from 6<sup>th</sup> month of age or before it.

The study was carried out among the clientele of health center in Ahvaz (Ansari, 1996) city reported that children begin extra-feeding from  $4^{th}$  month. Ministry of Health and Medical Education of Iran (1997) report that 76% of citified and 70.7% of rural children begin extra-feeding from 4-  $6^{th}$  month.

On the whole, this study shows that rural children in Gorgan district begin extra-feeding before than all over on Iran. Breast-feeding in rural children of Gorgan district from  $6^{\rm th}$  month age district is over than the all over on Iran in same age.

According to this result Sisstni's children should be cared more than the other children and education related to breast-feeding is necessary. Ecological factors affect on food habit among 3 groups children in a small area as Gorgan district. Therefore these factors should be used in food planning and nutritional education.

# G.R. Veghari: Breast-Feeding

## References

- Ansari, S., 1996. The study of breast-feeding and antheropometery in child with 4 month age that to client health center of Ahvaz city. 3<sup>rd</sup> nutritional congress of Iran.
- Kosha, A., 1999. The study of nutritional status between child under 1 year that to client to health center (No 1) of Zanjan. J. Med. Univ. Zanjan, 20: 5-10.
- Ministry of Health and Medical Education, 1997. The cluster study for determine criteria in Iran. Unicef pub.
- Nikniaz, A., 1993. The study of nutritional status among child under 5 year in eastern Azarbaijan province in 1993. 2<sup>nd</sup> nutritional congress of Iran.