

# *Summary*

In this study, 140 diarrhea cases (70 persistent and 70 acute), were studied for the detection of the possible risk factors causing the prolongation of the diarrheal episode. We found the following results:

## ***1- Host factors :***

- a- The results showed that there was no significant difference regarding age and sex in both types of diarrhea.
- b- The malnutrition was predominated significantly in persistent diarrhea cases.

## ***2- Environmental factors :***

- a- There was no significant difference between persistent and acute cases about residence (rural, urban) and mother's education.
- b- Bad socioeconomic and housing conditions in addition to increased number of house holdings were significantly more observed in persistent cases.

## ***3- Preillness nutritional history :***

- a-Feeding pattern prior to illness showed no significant difference in both types of diarrhea; although the acute diarrhea cases showed increased cases who were breast feeding.

b-The mean duration of breast feeding was significantly longer in acute cases than persistent ones.

c-Persistent diarrhea cases received formula milk and semisolid earlier in their life than did acute ones, but the differences were not significant statistically.

#### ***4- Treatment before coming :***

a-Early administration of ORS (at onset of illness) was observed more with acute diarrhea cases, but the difference was insignificant.

b-The majority of acute cases did not receive antibiotics and/or antiprotozoal and the difference was significant statistically.

#### ***5- Preillness history of diarrheal episodes (in last 2 months) :***

The results showed that there was no significant relation between the preillness history of diarrheal episodes (either acute or persistent) and the occurrence of persistent diarrhea.

#### ***6- Stool pattern (Macroscopic/Microscopic/Biochemical/ and cultures) :***

##### ***a- Macroscopic examination:***

1- Stool frequency and appearance (bulky or scanty) showed no significant difference in both types of diarrhea.

### ***7- Feeding pattern before and during illness :***

There were no significant differences about feeding pattern before and during illness in both types of diarrhea, i.e., the changes in feeding pattern during illness had no significant role in the prolongation of the diarrhea episode.

### ***8- Prognosis :***

All the studied cases (acute or persistent) were improved except 5 cases of acute group changed to persistent diarrhea, and 8 cases of persistent group died due to severe malnutrition and coming too late to our hospital.

# *Conclusion*

*From the previous results, we conclude the following:*

- 1- A great care should be focused on acute diarrhea in malnourished infants, since malnutrition appeared to be one of the most common risk factors for prolongation of the diarrheal episode.
- 2- The importance of breast feeding promotion and mother's education about the safe methods for weaning practices, are very important factors for decreasing episodes.
- 3- We must clarify the hazards of early introduction of formula feeding to the mothers.
- 4- For physicians, we must stress again about the importance of early ORT administration and, in the same time, the dangerous effects of drug misusing (antibiotics, sulfa and antiprotozoal) for acute diarrhea cases.
- 5- We know that acute diarrhea is self-limited disease. Its duration ranged from 3-5 days in most cases. In turn, we must pick up the cases which will become persistent as early as possible, i.e., at the end of the 1st week of acute

diarrhea through stool examination for underlying lactose intolerance, fecal leukocytes and stool cultures to detect some possible offending organisms Salmonella, K. pneumoniae and others.