Diarrhea among children below 5 years of age admitted to Al_Salam Teaching Hospital
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Introduction:

Diarrheal disease is the main cause of death among children below 5 years of age in the developing countries, the main causes of death are:

1- Dehydration
2- Dysentery
3- Persistent diarrhea

Definition of diarrhea:
Passing watery stool 3 times or more in 24 hrs., it include 3 types:

1- Acute diarrhea: which last less than 2 weeks
2- persistent diarrhea: which last more than 2 weeks
3- Dysentery: presence of blood in stool
Causes of diarrhea:

1- Viruses: the most important is Rota virus
2- Bacteria:
   A- E. coli: which causes 25% of all cases
   B- Shigella: which causes 10-15% of all cases
   C- Campylobacter
   D- Cholera: it affects age group between 2-9 years of age
   E- Salmonella: which causes 1-2% enteritis
3- Parasite
   A- Giardia
   B- Amoebiasis
   C- Cryptosporidium
Aim of the study:

- Epidemiological study of diarrhea among children below 5 years of age admitted to the pediatric ward in Al_Salam Teaching Hospital in the period between 1\6\2012 till 1\12\2012
Patients and Methods:

- The study done on 329 patients admitted in the pediatric ward during 6 months and we considered the following criteria:
  - age, sex, weight, duration of illness, GSE, type of feeding (breastfeeding, bottle feeding, mixed, others), antibiotic used.
Results
Number of male patients with diarrhea were 186 - female patients were 143 - the ratio is 1.3:1
Number of patients with acute diarrhea were 298 - patients with persistent diarrhea were 31 - the ratio is 9.5:1
Number of patients with dysentery were 64 - the ratio between the number of patients with dysentery to the total number of diarrheal cases is 1:5
Number of patients with diarrhea who are on bottle feeding were 172 - on breastfeeding were 58 - the ratio is 3:1
Number of patients with mixed feeding (breastfeeding and bottle feeding) were 47

Number of patients who fed on adult food were 52
GSE has been done on 212 patients - GSE has not been done on 117 patients - the ratio is 1.8:1
Number of patients given antibiotics and anti-parasitics were 240 patients - Number of patients not given antibiotics were 89 - the ratio is 2.6:1
Number of patients with normal body weight according to the age were 226 - number of patients who are under weight were 92 - the ratio is 2.4:1.
Patients with diarrhea given antibiotics and anti-parasitics commonly used in the hospitals.

<table>
<thead>
<tr>
<th>No.</th>
<th>Antibiotic used</th>
<th>No. of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ceftrixon</td>
<td>114</td>
</tr>
<tr>
<td>2</td>
<td>Cefotaxim</td>
<td>45</td>
</tr>
<tr>
<td>3</td>
<td>Gentamicin</td>
<td>34</td>
</tr>
<tr>
<td>4</td>
<td>Ampiclox</td>
<td>21</td>
</tr>
<tr>
<td>5</td>
<td>Amoxicillin</td>
<td>15</td>
</tr>
<tr>
<td>6</td>
<td>Amikacin</td>
<td>12</td>
</tr>
<tr>
<td>7</td>
<td>Ceftazidim</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>Ampicillin</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>Cotrimoxasole</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>Cefixim</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>Nalidixic acid</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>Chloramphenicol</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>Antiparasitic Metronidazole</td>
<td>124</td>
</tr>
</tbody>
</table>
Conclusions:

- Male patient with diarrhea slightly higher than female patients
- Patients with acute diarrhea higher than patients with persistent diarrhea
- Patients with dysentery constitute 1/5 of the total number of patients with diarrhea
- Absence of breast feeding is considered as a risk factor in the causation of diarrhea especially in infancy
• Large number of patients have been given antibiotics where as the causative agents of diarrhea were viruses and antibiotics were not beneficial in this case.

• and it was noticed that Metronidazole has been given to a large number of patients whom not been affected by dysentery or their GSE has not been done

• The patients whom under weight is not considered a risk factor for diarrhea
We are very grateful to our supervisor Dr. Ali M. Ayoub and we particularly wish to thank Dr. Nabeel Najib for their tolerance, support and encouragement.

And we would like to thank the administration of Al-Salam Teaching Hospital in conducting the research.
Thank you!