INTRODUCTION AND AIM OF WORK

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Diarrheal diseases are very common and continue to be a major health hazards particularly in developing countries. In these countries , they have been recognized as the main killer of infants and young children.

Nelson (1960), reported that diarrhea is a major clinical manifestation of a variety of disorders which collectively constitute one of the principal causes of illness and mortality among infants and children throughout the world.

Gastroenteritis is a disease characterized by diarrhea which may or may not be associated with passage of mucous and blood. The clinical picture is dysentry, weakness, lassitude and loss of body weight, lastly death may occur as a result of water and electrolyte loss. **(Raffensperger et al., 1966).**

In the developing countries, diarrhea accounts for more fatalities than any other disease, however in the developed countries where people have easy access to good health care, and the community is under good care, the mortality is low. **(Van Zijl , 1966).**

Mortality and morbidity are greater under the age of two years than in older children. The commonest pathogens during this critical period of physical and intellectual development are E. coli, Salmonella and Shigella. Curiously V. cholera is rare in infants under the age of one year.**(Mosley et al., 1968).**

Kretchmer, (1969), reported that in the developing nations, there is a 50% chance of dying before the age of seven years primarily from a diarrheal disease.

In Egypt, diarrheal diseases constitute a major health problem being the principal cause of morbidity and mortality among infants and young children. This is due to the repeated attacks of diarrhea among infants and toddlers, their lack of resistance to overcome infectious pathogen and their liability to develop water and electrolyte imbalance.**(Douglas , 1975 and Gabr, 1976).**

Lifshitz, in (1980), classified diarrhea in infants and young children into infective and non-infective diarrhea . Infective diarrhea may be bacterial, viral, parasitic or fungal.

The bacteria that cause diarrhea may be invasive, non-invasive or combined. The invasive type is characterized by

the presence of polymorphnuclear leucocytosis and mucus in the stools. Clinically, it represents with vomiting, diarrhea, fever and crampy abdominal pain, examples of this type are Salmonella, Shigella and enteroinvasive E. coli. The non-invasive type usually produces enterotoxins which may produce disease by a process of activation of intestinal secretory processes that have been associated with activation of the intracellular cyclic adenosine monophosphate system , examples of this type are vibrio-cholera, entero-toxigenic E. coli and staphylococcal enterotoxins. **(Charles, 1980).**

The aetiologic causes and the incidence of specific agent in the aetiology of acute diarrheas will vary with the specific population, the geographic locality, the age of the patient, the seasonal variation and the methods used for identification. **(Gianella, 1981).**

Diarrhea was more prevalent among children aged 6-12 months. This is probably due to the introduction of food and the beginning of weaning by **(El-Rawaf, 1976, Black et al., 1982, and Nasser et al., 1985).**

Many specific pathogenic organisms including Salmonella , Shigella, E. coli, V. cholera, V., parahemolyticus, Yersenia, Campylobacter and B. coreus can cause diarrhea. Non specific

organisms as klebsiella enterobacter and staphylococci are important causative agents of diarrhea. **(Maxy, 1978).**

Kassem, (1983), studied in Alex. 500 children under 2 years of age with acute watery diarrhea. Pathogens were identified in 58% of the samples The isolated pathogens were Campylobacter (11.4%), Shigella (7.8%), E. coli (16.8%), Salmonella (3.8%), and Rota Virus (18.6%). More than one pathogen were detected in some cases. A similar study was carried out in Abu El Rich Children's Hospital and showed that: Enteric bacterial pathogens were diagnosed in 19.9% of cases. E. coli were the most frequent followed by Shigella. Rota virus was present in 16.7% of cases. **(El_ Saifi et al., 1985).**

In the developing countries, the infectious type of diarrhea is more common, while the virus type is more common in the developed ones. **(Gianella, 1981).**

Viral diarrhea is comprised of at least two entities with distinct epidemiological differences. Sporadic viral diarrhea or more properly Rota virus enteritis, affects mainly infants and young children as a diarrheal illness which may be severe enough to require hospitalization. Epidemic viral gastroenteropathy, a self limited mild illness that tends to occur in family, school, or community outbreaks affecting both adults and children. **(Benenson, 1985).**

The aim of the present work is to detect the most common causes of gastroenteritis in infants aged up to two years from out patient clinic in Benha University Hospital.

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REVIEW OF LITERATURE