Abstract

Diarrhea is defined by the World Health Organization (WHO) as being 4 or more watery stools in a 24 hour period. Diarrhea is identified as a major health problem worldwide. The prevalence and incidence of the condition is much higher in tropical developing countries than in the developed countries. The major factors that contribute to the problem in developing countries are poor personal hygiene, poor water supply, and poor disposal of feces. The condition occurs either as acute diarrhea or chronic diarrhea. Acute diarrhea has more significance in the causation of mortality, but both types cause severe morbidity. Dehydration and loss of electrolytes is the direct cause of death in acute diarrheal disease. Diarrhea also causes death indirectly by causing malnutrition and reducing the body's resistance to infections. Chronic diarrhea is characterized by a prolonged course and is common in malnourished children. This type of diarrhea is more likely to contribute to failure-to-thrive than to death. Diagnostic investigations have revealed that many cases of acute diarrhea are caused by viruses. Rotavirus causes most of the cases of diarrhea in children aged 6 months to 2 years. There are also several bacterial causes and a few protozoal causes of diarrhea. The etiological agents of diarrhea, except for malaria, are transmitted by a fecal-oral route. The transmission occurs either by person to person or indirectly through contaminated food and water. Prevention of the disease is accomplished by interrupting transmission. Disease transmission can be interrupted on a community level through the use of latrines, a safe sterilized water supply, and improved environmental sanitation to reduce flies which spread germs. Transmission can also be interrupted on an individual level through good personal hygiene, improved food hygiene, and improved home nursing skills. Breastfeeding is also an effective way to prevent diarrhea. A vaccine is being tried for rotavirus, which is effective will be an important defense against diarrhea. Oral Rehydration Therapy (ORT), formulated by the WHO in 1968, has been confirmed for the treatment of diarrhea of all ages and of any cause. The WHO recommended composition of Oral Rehydration Solutions (ORS) is 3.5 grams of sodium chloride, 2.5 grams of sodium bicarbonate, 1.5 grams of potassium chloride, and 20.0 grams of glucose. This composition comes a powder and is reconstituted into a solving in a litre of clean drinking water. ORT is a simple, inexpensive, and effective intervention. It is estimated that ORT can save 90-95% of deaths from dehydration.