

References

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Oral Rehydration Practices : Hong Kong

EAS NELSON

Department of Paediatrics, The Chinese University of Hong Kong, Prince of Wales Hospital, 30-32 Ngan Shing Street, Shatin, Hong Kong SAR, CHINA

Mortality from acute gastroenteritis in Hong Kong is uncommon. For the 10 year period 1985 to 1994 there were only 9 deaths from gastroenteritis in Hong Kong (Figure 1). The dramatic fall in these deaths has been coincident with a rapid rise in Hong Kong's economic status (Figure 2). However gastroenteritis remains a leading cause of morbidity in Hong Kong, accounting for 1 in 6 paediatric admissions.¹ In addition it should be remembered that these admissions will represent only a small percentage of total diarrhoea cases treated within the community.

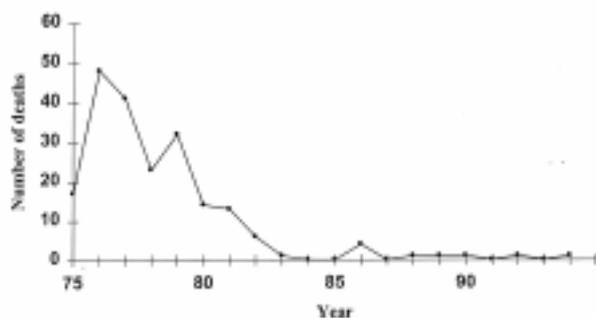


Figure 1 Diarrhoeal deaths for Hong Kong 75-94

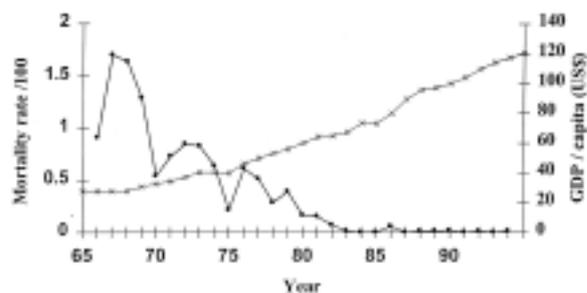


Figure 2 Diarrhoea mortality rate & GDP for Hong Kong 65-94

The World Health Organisation (WHO) has made the correct management of diarrhoea a high priority. Although WHO treatment protocols are aimed primarily to developing countries, the basic principles are universal and are particularly useful for teaching the correct home management of diarrhoea.² Essential aims in the correct treatment of diarrhoea are to first prevent dehydration from occurring and failing this, initiate appropriate and prompt rehydration therapy. Emphasis is given to continued enteral nutrition during a diarrhoeal illness. Frequent breast feeding should continue for breast-fed babies, as breast milk alone, without additional water, is usually adequate during most episodes of diarrhoea. Breast feeding may also reduce duration of rotavirus diarrhoea. Formula fed children should continue to receive the usual formula but if diarrhoea is prolonged a lactose-free formula is commonly substituted. However significant lactose intolerance in acute diarrhoea is uncommon and lactose-free feeds should not be used as a first line therapy for diarrhoea. The past practice of giving diluted formula during and after an episode of diarrhoea is not beneficial, even for infants less than 6 months of age³ and may delay gut recovery.

Ideally dehydration can be prevented in the home by ensuring that the child drinks extra fluids as soon as diarrhoea starts. Although most fluids, including plain water, can be given, recommended "home fluids" are often a food-based fluid such as rice water. There is still debate as to the best composition of oral rehydration fluids but cereal-based ORS and reduced osmolarity glucose-based ORS are probably equally effective.⁴⁻⁵

Of greater concern is the frequent use of drugs in the management of acute diarrhoea.⁶ Caregivers often do not understand the relationship between diarrhoea and dehydration, and their main concern, shared by many health workers, is to see the diarrhoea stop. This probably accounts for the continued widespread use of antibiotics and antidiarrhoeal drugs in many countries. Antibiotics for acute diarrhoea should be limited to use in dysentery and suspected cholera. Adsorbent drugs (such as kaolin, attapulgite, activated charcoal), antimotility drugs (such as codeine, tincture of opium, diphenoxylate, loperamide), or drugs to treat vomiting (such as chlorpromazine or phenergan) should not be given to treat children and infants with diarrhoea.^{6,7} Antimotility drugs in particular can cause ileus, neurological complications and fatalities.

There have been no household surveys undertaken in Hong Kong. However a small hospital study assessed the treatments recommended by primary care practitioners, and evaluated caregivers' perceptions of appropriate management of diarrhoea.⁸ Interview of caregivers of 105 paediatric in-patients with gastroenteritis revealed that many caregivers expected a child with diarrhoea to be

prescribed medication to stop the fever (92%), the diarrhoea (71%) and the vomiting (78%). The prime importance of preventing dehydration did not appear to be fully appreciated and a quarter of the sample did not understand the importance of giving extra fluid.

73% of caregivers consulted their local practitioner before attending hospital but 36% could not recall receiving advice on fluid management and the advice given to others was not always in accordance with WHO criteria. Unnecessary advice included: change formula; dilute formula; give lactose-free formula; stop milk temporarily. Of concern was that the one mother, exclusively breast-feeding a one month old infant, had been advised to stop breast feeding. Also of concern was that 93% (70/75) of infants had been prescribed one or more drugs by the primary care practitioner (median number of drugs = 3.0). 40 received an antidiarrhoeal agent; 21 an antibiotic; 22 an antiemetic; 38 an antipyretic.

Although Hong Kong has very good health indicators and low mortality from gastroenteritis, it would appear that there is still room for improvement in the management of diarrhoea within the community. Unnecessary prescribing for gastroenteritis increases the risk of iatrogenic side-effects and promotion of antibiotic resistance, as well as causing economic wastage. Further information on the management of diarrhoea in Hong Kong should be obtained. If these preliminary findings

are confirmed then education of the community on the appropriate management of diarrhoeal diseases could help reduce the expectation for medications. This would enable practitioners to reduce prescription of inappropriate medication without losing the trust of the family.

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