4. Lactate or acetate if substituted for bicarbonate has great advantage over bicarbonate as both of them can be autoclaved and stored. The disadvantage of lactate solution is due to its high cost and variable shelf life. Fungus can easily grow in this solution. Recent study in P-SCRL has shown that acetate as base precursor has several advantage. It is inexpensive, can be autoclaved and has long shelf life.

Severely acidotic patients clinically judged from profound hyperventilation and rales suggestive of pulmonary oedema will require infusion of isotonic bicarbonate.

Children who need more water than electrolyte may be successfully treated with hypotonic solution with more potassium and less sodium than the adults. Moreover, children are prone to become hypoglycaemic and may need glucose added to the intravenous fluid or given orally.

Intravenous fluid replacement can be easily estimated withot laboratory data from good clinical observation. In severe dehydration rapid infusion of fluid is needed of 10-15% of body weight to correct initial dehydration. Tetracycline administered either orally or intravenous will kill the vibrio thus reducing the volume of intravenous fluid required by shortening the duration of diarrhoea and the volume of stool.

## SOME PROBLEMS OF CHOLERA THERAPY IN CHILDREN

## M. M. Rahman and Waliur Rahman

The majority of admissions at the Pakistan-SEATO Cholera Research Laboratory consists of children below 12 years of age. The rate of mortality in children is slightly higher than in adults. Similar experience has been gathered in all the centres for the treatment of chlolera. It seems that children are some what more difficult to treat than adult. Also they are more prone to various complications due to loss of fluids and electrolytes.

During the stage of shock there is collapse of peripheral veins, making it very difficult to start an infusion in children when scalp vein needles are often essential. Quite frequently one needs to make venepuncture at unconventional sites like groins, neck, scalp, wrists etc. Acidosis is very common in children necessitating infusion of isotonic bicarbonate solution. Convulsions are also frequent in children which is often due to hypoglycemia and/or electrolyte disturbance. Almost all children with brisk purging develop hypokalemia manifested by lethargy, distension of the abdomen and partial ileus. The paper to be presented will deal with the practical difficulties encountered in treating children suffering from acute diarrhoea and cholera.

