

### SUMMARY

The aim of this work was to study the causal... association of enteric rotavirus with a random sample of infantile diarrhoea in Benha City and its rural areas as part of Egypt.

For this purpose 95 stool specimens were collected from (71) diarrhoeal cases in infants below 2 years of age and 24 non-diarrhoeal control group ~tool specimens were examined by polycionai (ELISA) Enzyme linked-immune-sorbent. Assay to detect rotavirus and define its quantity. Rotavirus diarrhoea like other causes of infantil diarrhoea were more frequent in the first year of life (43.8%) especially from 6 to 12 months (46.6%). Infant below 6 months (40.7%) may be protected by maternal antibody more in males (46.5) than females (37%) and more in infants fed on formula (40%) than those fed on breast feeding (35.2%) due to soluble and cellular compounds of breast milk. Also more in infants fed on a mixed diet (58.8%) due to introduction of virus with weaning food.

Most rotavirus cases presented with watery diarrhoea associatd with vomiting (44.6%) and mostly with fever (43.3%). It is present more in cooler months of year. The association of

rotavirus excretion with diarrhoeal cases and that in control, and the considerable difference between the rate of its detection in cases and that in control infants suggest that it has a pathogenic role in infantile diarrhoea in Egypt.

The result of this study showed that 42.2% of diarrhoeal cases and 8.3% of control have experienced a rotavirus infection. indicating a wide prevalence of this enteric pathogen in Egypt.