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Laboratory diagnosis of *Cryptosporidium parvum* and *Giardia intestinalis* in children with diarrheoa; a hospital based study.

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Objectives: This study was conducted to determine the proportion of *Cryptosporidium parvum* and *Giardia intestinalis* among children less than 12 years old with diarrhoea and to study the socio demographic aspects including the source of drinking water, level of hygiene in food preparation and hand washing practices of mothers/caretakers of children with diarrhoea

Methods: Children who attended the Lady Ridgeway Hospital for children with diarrheoa during August to October 2012 were enrolled into the study. We collected stool samples from 145 children with diarrhoea and tested them using Modified Ziehl Neelson stain for *C.parvum* and microscopy of saline and iodine wet mount and formal ether sedimentation technique for G. intestinalis infections in the laboratory. Interviewer administered questionnaire was administered to gather information on food preparation and hand washing practices of the mothers/caretakers of the children with diarrhoea.

Results: *C.parvum* was detected in 48(33%) out of 145 stool samples. There were no positives for *G.intestinalis*. Children who were more than 12 months of age were more infected with *C.parvum* compared to children who were less than 12 months in age (p=<0.05).The level of hygiene in preparing food was excellent in 74% of the mothers/caretakers. Correct hand washing practices had been adopted by 91% of mothers/caretakers.

Conclusions: *C.parvum* showed a higher proportion (33%) in stool samples collected from children with diarrhoeal illness compared to the other studies conducted locally decades ago. In the absence of an effective treatment to eradicate *C.parvum* from the patient, attention should be paid for preventive measures.