

# International Conference on Parasitology

August 24-26, 2015 Philadelphia, USA



## Hassan K Bassiouny

Alexandria University, Egypt

### Validity of Polymerase chain reaction (PCR) versus coproscopic examination for diagnosing infection with *Schistosoma mansoni* in low intensity endemic area in Egypt

**Introduction:** Egypt is one of the most highly endemic countries with localized transmission foci of schistosomiasis, re-infection is continuing problem in rural areas due to lack of improvement in sanitation conditions.

**Aim of work:** This study assessed the validity of conventional PCR (cPCR) versus coproscopic techniques as gold-standard for diagnosing of *S. mansoni* infection in low intensity endemic area in Kafr El-Sheikh Governorate, Egypt.

**Methodology:** It was a cross-sectional study. The study examined faecal samples of 120 primary school children [74 (61.7%) males and 46 (38.3%) females] with mean age  $10.16 \pm 0.798$  years (range: 9-12 years). Three fresh stool samples were collected on three consecutive days from each study subject and examined by FECS (3 slides from one fecal sample of the first day), Kato-Katz (10 slides from 3 fecal samples on 3 consecutive days- 6 slides on the first day and 2 slides on 2<sup>nd</sup> and 3<sup>rd</sup> days samples respectively) and cPCR (one sample of the fecal specimen of the first day).

**Results:** The prevalence *S. mansoni* infection was 40.0%, 69.2% and 80.8% by the three techniques, respectively. All infected cases were of low intensity of infection. The Kappa index and diagnostic parameters showed a good diagnostic value of cPCR as compared to coproscopic examination.

**Conclusion:** cPCR demonstrated a good diagnostic performance for the detection of *S. mansoni* in low intensity endemic area versus coproscopic examination as gold-standard.

### Biography

Hassan K Bassiouny completed the Doctorate of PH degree from High Institute of Public Health (HIPH), Alexandria University, Egypt. He is a Professor of Medical Parasitology, Tropical Health Department., HIPH and Former Dean of the HIPH for 3 years. He has published more than 60 papers in reputed journals and has been serving as an Editorial Board Member of reputed journals as EMHJ (WHO), Saudi Medical Journal (SMJ), Bulletin of the HIPH. In addition, he supervised more than 40 Master's and Doctorate degrees in the field of Medical Parasitology and Tropical Medicine.

[h\\_k\\_bassiouny@hotmail.com](mailto:h_k_bassiouny@hotmail.com)