

An Emerging- Food-Borne Parasitic Zoonoses

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Abstract—WHO in 2004 has recognized Food-Borne Parasitic Zoonoses as an important health problem in Asia. The infections are prevalent in developing countries and are closely related with 3Ps: Poverty, pollution, population growth and also associated with cultural determinants like food, behavior and tradition. Amongst 1,500 known infectious agents for human being, 66 are protozoa, 287 are helminths and amongst them 60.3% of the emerging infectious diseases are zoonotic. Water is one of the major sources for parasites and their different environmental stages, which contaminate the food stuffs. Total global registered aquaculture production in 2000 was 45.7 million tons, of which 91.3% was farmed in Asia. Emerging waterborne parasitic infections are mainly caused by *Cryptosporidium* spp., *Fasciola hepatica*, *F. gigantica*, *Fasciolopsis buski*, *Paragonimus westermani*, *Opisthorchis tenuicollis*, *Clonorchis sinensis*, *Heterophyes* spp., *Gnathostoma spinigerum*, *Anisakis* spp., *Diphyllobothrium latum* and *Spirometra* spp.

Globally, meatborne parasitic zoonoses are important cause of illness and economic loss. *Toxoplasma gondii*, *Taenia saginata*, *T. solium*, *Sarcocystis* spp., and *Trichinella spiralis* are of significant socioeconomic importance. Man get infection by eating raw or undercooked meat infected with cyst of these parasites. Pentastomids, causes zoonotic infection, when consumed raw or poorly cooked infected liver or lymph nodes infected with nymphal *Linguatula serrata* which causes severe symptoms that are well recognized as “halzoun syndrome”. The increase demand for animal products, especially in developing countries will lead to an increase of fish and livestock production. There is requirement of public health awareness about zoonotic parasitic diseases, hygiene, comprehensive and inclusive control strategies to control the food born parasitic zoonosis.