

## A brief review on *Echinococcosis* and its perspective in public health point of view

Gautam Patra<sup>\*a</sup>, Subhamoy Ghosh<sup>a</sup>, Biswadeep Behera<sup>b</sup>, Pinaki Bhattacharyay<sup>b</sup>, Rahul Singh Arya<sup>b</sup>, Seikh Sahanawaz Alam<sup>c</sup> and Ishita Maity<sup>b</sup>

<sup>a</sup> Department of Veterinary Parasitology (G. Patra ORCID id: <https://orcid.org/0000-0002-0093-5995>; S. Ghosh ORCID id: <https://orcid.org/0000-0003-0688-345X> ; College of Veterinary Sciences and Animal Husbandry, Central Agricultural University, Selesih, Aizawl, Mizoram, India.

<sup>b</sup> Department of Veterinary Pathology; College of Veterinary Sciences and Animal Husbandry, Central Agricultural University, Selesih, Aizawl, Mizoram, India.

<sup>c</sup>Department of Botany, Garhbeta College, Paschim Midnapore, West Bengal, India

\*Corresponding author e-mail: *GautamPatra, Department of Veterinary Parsitology, College of Veterinary Sciences and Animal Husbandry, Selesih, Aizawl, India. Tel: +91 8582859415; E-mail: [dr.gautampatra@yahoo.co.in](mailto:dr.gautampatra@yahoo.co.in)*

### 1. Abstract

Echinococcosis is a zoonotic parasitic disease caused by the larval stages of taeniid tapeworm of the genus *Echinococcus*. Four out of six species have been considered as a public health concern: *Echinococcus granulosus* (which causes cystic echinococcosis), *Echinococcus multilocularis* (which causes alveolar echinococcosis), and *Echinococcus vogeli* and *Echinococcus oligarthus* (which causes polycystic echinococcosis). Two new species have recently been identified: *Echinococcus shiquicus* in small mammals from the Tibetan plateau and *Echinococcus felids* in African lions, but their zoonotic transmission potential is equivocal. Several studies have shown that this disease is of increasing public health concern and that it can be regarded as emerging or re-emerging disease. The disease is found in many parts of the world specifically in the agricultural inclined regions in the northern part of Africa, the southern part of South America, Europe, Australia, and the Middle East and Southern West part of Asia (Eckert and Deplazes, 2004). This short review is intended to underscore the general aspect of the disease with particular reference to public health importance.