Prevalence of cryptosporidiosis in animals in Iran: A systematic review and metaanalysis

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Abstract

Objective: To review the prevalence of cryptosporidiosis among animal population of Iran. **Methods:** Data were systematically gathered from 1 January 2000 to 1 January 2020 in the Islamic Republic of Iran from the following electronic databases: PubMed, Springer, Google Scholar, Science Direct, Scopus, Web of Science, Magiran, and Scientific Information Database (SID). According to the preferred reporting items for systematic reviews and meta-analyses (PRISMA) and inclusion criteria, 88 eligible studies were obtained. **Results:** The pooled prevalence of cryptosporidiosis using random and fixed effects model according to heterogeneity among animals was as follows: rodents 18.8% (95% *CI* 12.6%-25.0%), camels 17.1% (95% *CI* 8.6%-25.7%), cattle 16.8% (95% *CI* 13.4%-20.1%), goats 14.1% (95% *CI* 5.2%-23.0%), horses 12.2% (95% *CI* 8.3%-16.2%), birds 10.5% (95% *CI* 7.6%-13.4%), sheep 9.9% (95% *CI* 2.4%-4.9%), cats 8.8% (95% *CI* 4.8%-12.8%) and dogs 3.7% (95% *CI* 7.0%-12.8%). **Conclusions:** Cryptosporidiosis has been reported and present in a wide range of animals in Iran over the years and has a high prevalence in most of these species.

Keywords: Cryptosporidiosis; Animals; Prevalence; Iran