

## **A Systematic Review and Meta-Analysis of Prevalence of Intestinal Parasitic Infections in Iran**

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### **ABSTRACT**

**Background and objective:** There are many descriptive studies on Intestinal Parasitic Infections in Iran, mostly assessing the prevalence of the disease and its associations with various risk factors. In order to gain a better insight into the epidemiology of Intestinal Parasitic Infections in Iran and its heterogeneity around the country, we systematically reviewed all available studies and analyzed their findings using meta-analysis methods.

**Materials and methods:** All published papers in Iranian and international journals, final reports of research projects, papers presented in relevant congresses, and also all dissertations of medical students were reviewed using standard and Sensitive keywords. Studies published during 1991-2009 which met the eligibility criteria, after Quality Assessment, Main Results Extracted and Combined with Random Effect Model, were entered into meta-analysis.

**Results:** on the basis of random effect model, the overall and final prevalence rate of intestinal parasitic infection calculated 38.29% with  $Q=59.63, t^2=13.11, I^2=22.85$  and  $CI95\%=24.4-52.18$ . ( $P<0.0001$ ) also variables of sample size, age mean and place of studies in the meta-regression analysis were main factors for heterogeneity in study results.

**Conclusion:** With Respect to that already prevalence of intestinal parasitic infections is high, it should increase hygiene level with science and research-based works and go to perspective health path and would be advanced.

**Keyword:** intestinal parasitic infection-meta analysis-epidemiology-heterogeneity-random effect model-iran.