

# **Helminth Infection among Children Living in an Urban Area in Tropical Countries: A Systematic Review**

## **ABSTRACT**

**BACKGROUND:** Neglected tropical diseases are a group of preventable and treatable diseases, in which soiltransmitted helminth (STH) infections are among the most common infections worldwide. **AIM:** Most affected are the children and this review aims to identify the prevalence, risk factors, and impact of STH in an urban area. **METHODS:** This review was guiding using preferred reporting items for systematic reviews and meta-analyses review protocol incorporating the research question of "What is the prevalence, risk factors, and impact of Helminth infection among urban children in tropical countries?" The databases used in this review include SCOPUS, WEB OF SCIENCE, OVID MEDLINE, and PUBMED. The articles used include observational and interventional studies conducted among children aged 18 years and less from 2010 to 2020. The main outcome measure was risk factors of STH infection seen in urban children include social backgrounds, sanitation, and policy. **RESULTS:** From the initial 973 articles found in the database searching, only 13 articles selected for qualitative synthesis after exclusion and screening for eligibility done. The overall prevalence of helminth infection among urban children ranges from 4.8% to 48.9%. The associated factor that influences helminth infection among children living in an urban area are age, male more common than female, low socioeconomic status, low parents' education level, living in an urban slum or crowded area, low water quality and sanitation practice, and poor hygiene practice. The deworming tablets consumption acts as protective factors for helminth infections. The medium hemoglobin value was significantly lower in helminth-infected children compared to uninfected children and the stunting, underweight as well as moderate acute malnutrition were attributable to helminth infections. **CONCLUSION:** The prevalence and intensity of helminthiasis were heterogeneous among urban areas of developing countries; however, the endemicity is still high. Further efforts including healthy policies, continuous national deworming programs, and multi-sectorial partnership are required to reduce the prevalence of helminthiasis in the urban area.