

## ASSESSMENT AND MAPPING OF INTESTINAL PARASITIC INFECTIONS AND ITS ASSOCIATED RISK FACTORS FROM DIFFERENT HEALTH CENTERS IN RWANDA

*Cedrick Izere & Lakshmi Agarwal*

*Research Scholar & Supervisor, Department of Medical Laboratory Technology, Faculty of Health Sciences, Career Point University*

**Received: 13 Feb 2021**

**Accepted: 20 Feb 2021**

**Published: 28 Feb 2021**

### **ABSTRACT**

*Intestinal parasitic infections (IPIs) rarely cause death but because of the size of the problem, the global number of related deaths is critical. Intestinal parasitic infections are among the most common infections in the world, being responsible for considerable morbidity and mortality. The objective of this study involved the assessment and mapping of intestinal parasitic infections from different Health Centers in Rwanda. In this study, Different health centers from different districts in Rwanda were targeted. For each suspected patient was given a labeled stool container to collect stool sample. The stool samples were carried in parasitological laboratory for parasitological examination. Macroscopic examination was performed and direct smears prepared with normal saline and/or iodine for parasites analysis under microscope (objectives 10 × and 40×). Risk factors associated to intestinal parasites were assessed using structured questionnaires given to patients. Obtained cross sectional results of intestinal parasites prevalence and associated risk factors from different health centers in Rwanda were used, analyzed by SSPSS version 16, Microsoft Excel and Arc Map and records were incorporated into a geographical system for mapping. The overall prevalence of intestinal parasitic infections from different health centers in Rwanda according to 3139 patients who answered well the questionnaire was 56.99%. *Entamoeba histolytica* was found to be more prevalent followed by *Ascaris lumbricoides* with the prevalence of 35.1% and 30.69% respectively. Associated risk factors were normally poor utilization of water, poor food hygiene and poor body hygiene and with the prevalence of 56.97%; 53.88% and 52.26% respectively. With regard to the obtained results, improvement of body hygiene, household and environmental sanitation, provision of safe water and treatment of infected individuals could reduce the prevalence of intestinal parasitic infections.*

**KEYWORDS:** *Protozoans, Helminths, Intestinal Parasitic Infections*