

WHAT IS A SCHISTOSOMIASIS HOTSPOT? A CRITICAL REVIEW OF PUBLISHED LITERATURE.

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Accurate identification of disease hotspots is essential for effective control and reducing the global burden of infectious diseases. Inconsistent use of the term "hotspot" in schistosomiasis research poses a significant challenge to collating informative study outputs for the evaluation and modification of effective control and/or elimination strategies. This review presents a comprehensive analysis of the evolution of the term "hotspot" in schistosomiasis research, the influence of different studies on its usage, and proposes standardised definitions to address the inconsistencies found in the literature.

Using a qualitative analysis, we assessed the World Health Organization's (WHO) new preliminary definition of a persistent hotspot, which refers to regions where prevalence persists despite control measures and could hinder progress to reaching the WHO goal of eliminating schistosomiasis as a public health problem by 2030. We provide a detailed overview of the WHO definition's key features, where potential limitations were identified by examining each of the criteria individually and measuring how restrictive or permissive they are to hotspot identification. Modifications were proposed to add clarity and ensure that regions requiring additional treatment due to persistence post-treatment are not missed in future control programs.

This review contributes to ongoing efforts to improve disease control and elimination strategies by providing a better understanding of the term "hotspot" and provides a framework for future operational research and implementation.