Leishmaniasis in Nigeria: Unraveling the Past, Navigating the Present, and Charting the Future

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Background:

Leishmaniasis, a parasitic disease transmitted by sandflies, poses significant public health challenges in Nigeria. This study undertakes a comprehensive differential analysis of leishmaniasis research in the country to unravel trends, identify gaps, and address challenges encountered in existing research. Given the neglected tropical nature of the disease, understanding the current state of leishmaniasis research becomes crucial for enhancing future investigations and public health strategies.

Methods:

Leveraging Bibliometrix, a R-based software tool, and Research Rabbit, a curation tool, we systematically gathered and analyzed a corpus of 62 articles on leishmaniasis in Nigeria. The articles, including preprints and published works spanning decades, utilized diverse methodologies and thematic areas. This thorough review allowed for examination of the multifaceted aspects of leishmaniasis research in the country.

Results:

Geographical distribution analyses revealed a patchwork of leishmaniasis cases across Nigeria, extending from the arid plains of the Northern states to the lush vegetation of the South-South. Identified hotspots in Plateau, Kwara, and Oyo states underscored the pervasive impact of the parasite on both humans and dogs. Recent studies hinted at a potential increase in cases, particularly in previously less-affected regions like the South-South, indicating a shifting transmission dynamic. Trend analysis demonstrates, emphasizing leishmaniasis' longstanding presence in Nigeria dating back to 1924. Current research highlighted the potential for further spread, calling for vigilance and proactive measures to curb its spread. The multifaceted nature of leishmaniasis in Nigeria was evident through 4 epidemiological, 9 clinical, 6 entomological, and 4 immunological studies.

Conclusions:

However, gaps remain. Data inconsistencies, limited surveillance in certain regions, and the need for robust and standardized diagnostic tools hinder our grasp of the true burden of leishmaniasis. Addressing these challenges demands intersectoral collaboration, encompassing diverse stakeholders – researchers, clinicians, public health officials, and communities affected by the disease.