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Poster Abstracts:

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COS 4

ETHNOPHARMACEUTICALS FOR THE TREATMENT OF CUTANEOUS LEISHMANIASIS

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Introduction: Toxicity, expense, and accessibility limit treatment success in cutaneous leishmaniasis (CL), a neglected parasitic disease caused by members of the genus Leishmania. Better drugs are urgently needed, however, drug discovery is hampered by limited funding given geographic restriction of highly endemic CL to LMICs. Plant-based compounds with potential anti-leishmanial effects found in and around local endemic communities present an opportunity to overcome the aforementioned therapeutic challenges, and many such interventions are supported by evidence of efficacy.
Objective: We aim to synthesize existing evidence around available ethnopharmaceuticals to promote drug discovery for the prevention and treatment of CL.
Methods: PubMed (NCBI), Medline (OVID), Embase (OVID), Web of Science (BioSIS) and LILACS (VHL) were searched for from inception to July 26, 2018 using combinations of the search terms "cutaneous leishmaniasis" and "ethnopharmaceuticals". Iterative inclusion and exclusion of search terms was employed to maximize relevant article extraction. For the systematic review, we will include molecular, mechanistic, and observational studies, case reports, case series, cohort studies, as well as clinical trials reporting therapeutic outcomes, if possible. The GRADE approach will be used to assess quality of studies reporting therapeutic interventions. 3057 PubMed, 2818 Medline, 4200 Embase, 3183 Web of Science and 490 LILACS articles were retrieved for title and abstract screening; after duplicate removal, 5492 remained. Data will be grouped and summarized by geographic location and species.
Results: The top 5 ethnopharmaceuticals identified in title and abstract screening are as follows: Piper spp. “Pepper” (2.0%), Artemisia spp. (1.8%), Pentalion spp. “Ficus” (1.3%), Curcuma spp. “Turmeric” (0.9%), and Callophyllum spp. “tropical tree or shrub” (0.8%). Conclusion: Synthesizing the current evidence surrounding ethnopharmaceuticals for the treatment of CL may contribute to drug discovery pipelines and potentially lead to novel therapeutics in a field that has not seen any new drug development for over half a century.

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