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The *in vitro* effect of methanolic extract to the leaf of *Aloe otallensis* exudates on the *Leishmania ethiopica* and *Leishmania donovani* parasite

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Background & Objectives: Several plant products have been tested and found to possess antileishmanial activity. The present study was undertaken to evaluate antileishmanial activity of methanolic extract of *Aloe otallensis*, which is endemic plant to Ethiopia, on the promastigot stage of *Leishmania aethiopica* and *Leishmania donovani* comparing to standard drugs and also tried to screen its phytochemical constitute.

Methods: Phytochemical screening was done on methanolic extract of the exudates to the leaf of *Aloe otallensis*. The serial dilution of the Extract was also evaluated for *in vitro* antileishmanial activity against *Leishmania aethiopica* and *Leishmania donovan* on the strain of *L. aethiopica* (LDC/134) and *L. donovani* (AM 563), which is found from the black lion hospital parasitology unit and the result was compared to standard drug of Sodiumstibogluconate, milfostin and paramomycin.

Result: The extract has an antileishmaniacidal activity with an IC₅₀ of 141 µg/ml on *L. ethiopica* (LDC/134) and 123 µg/ml on *L. donovani* (AM 563). The experimental data shows that relatively it has better activity than paramomycin and milfostin, but, less activity than sodiumstibogluconate, which is given in Ethiopia as a first line drug. The data analyses was done by pad graph prison version 5 software after it was read by ELISA redder at the wave length of 650 nm. The phytochemical screening of the exudates of *Aloe otallensis* showed the presence of phenol, alkaloid and saponin.

Conclusion: The methanolic extract of exudates of *Aloe otallensis* has a good anti leishmaniasis activity relatively to paramomycin and milfostin and this activity may be attributed to phenol, Alkaloid and Saponin present in the plant. But it needs further analysis for the conformation of which constituent present in much concentration and to know which one have highest role.

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Appropriateness of written dosing instructions provided with dispensed medicines by Pharmacists – A hospital and community experience

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Poor communication of medicines information to patients may result in medication errors. We assessed the completeness, readability and overall knowledge of dosing instructions provided by pharmacists on dispensing labels to patients. The study settings were outpatient pharmacies of a selected teaching hospital, and a selected community pharmacy. Dosing instructions on labels were assessed against a checklist to determine completeness. Patients were asked to read dosing instructions to assess readability. Patient knowledge on given dosing instructions was determined through a set of predetermined questions. Completeness, readability and knowledge were scored out of 10 for each dispensing label. A total of 1200 and 1372 dispensing labels were assessed in the hospital and community settings respectively. Dispensing labels included refill (75%) and new (25%) prescriptions. The median score out of 10, for completeness, readability and patient knowledge of dosing instructions were 7.5, 8.5 and 7.5 respectively for hospital, and 7.5, 6.7 and 7.5 respectively for community settings. Only few dispensing labels specified route of administration (hospital, 0.5%; community, 0.8%) and duration of treatment (hospital, 0.25%; community, 0.65%). Name (hospital, 48%; community, 27.3%) and strength (hospital, 40.2%; community, 36.6%) of medicines on dispensing labels were frequently misread. The mean scores for readability ($P < 0.001$) and knowledge of dosing instructions ($P < 0.001$) significantly differed among different education levels, in both settings. Some important dosing instructions were missing in dispensing labels. Readability and knowledge of dosing instructions differed by education level. Hence pharmacists must develop a standard procedure to provide complete, clear and simple dosing instructions to patients.

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