



TROPICAL DERMATOLOGY

## **A STUDY ON ADHERENCE-PATTERNS TO ANTIFUNGAL TREATMENT IN DERMATOPHYTOSIS IN A TERTIARY CENTRE IN SOUTH INDIA, IN THE BACKGROUND OF RISING RECURRENT DERMATOPHYTOSIS AND ANTI-FUNGAL RESISTANCE.**

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**Introduction:** Dermatophytosis has a global prevalence and relevance besides a reported alarming increase in incidence in India. More challenging is the recurrence and wide-spread anti-fungal resistance encountered. There is an absolute dearth of studies looking into adherence-pattern of antifungals in dermatophyte infections worldwide and hence the present study is designed, considering possible consequences of non-adherence.

**Objectives:** To assess adherence-levels to oral and topical antifungals in patients with dermatophyte infections and to identify factors influencing medication adherence.

**Materials and Methods:** Patients attending dermatology out-patient clinic during the one-year study period with a clinical diagnosis of dermatophyte infection and prescribed anti-fungals were recruited. Relevant history, clinical and treatment details were recorded and adherence level to antifungals was measured at first follow-up-visit at 2 weeks using the 8-item Morisky-Medication-Adherence-Scale(MMAS-8) developed by Morisky et al., a well-validated tool.

**Results:** Of the 250 patients recruited, 236 were prescribed both oral and topical medications, 14 were prescribed topicals alone. Male/female ratio was 0.6; mean age was  $36.43 \pm 16.443$  years with a range of 7-83 years. 27.2% had recurrent dermatophytosis, 19.2% had disseminated infection. 33.6% reported history of topical steroid use. Of the 236 patients treated with both oral and topical medications, mean adherence scores(MMAS-8) were 6.41 for topical and 6.82 for oral medications, and significantly higher for oral medications ( $P < 0.001$ ). Overall, only 38.4% patients on oral medications and 33.6% on topicals had good adherence to the medications(MMAS > 6). Among the 236 patients who took oral antifungals(Fluconazole/Terbinafine/Itraconazole/Griseofulvin), there was no significant difference within mean adherence scores but was highest for Fluconazole( $7.06 \pm 1.082$ ).





Conclusions: As per the present findings, more than half the patients recruited were not following the proper dosage/schedule of the prescribed anti-fungal treatment which could potentially contribute to the menace of anti-fungal resistance and has implications on treatment-benefits and influences perceived efficacy of anti-fungals in clinical practice.

