# PREVALENCE AND EPIDEMIOLOGY OF ONYCHOMYCOSIS IN FILIPINO PATIENTS OF A TERTIARY HOSPITAL IN THE PHILIPPINES

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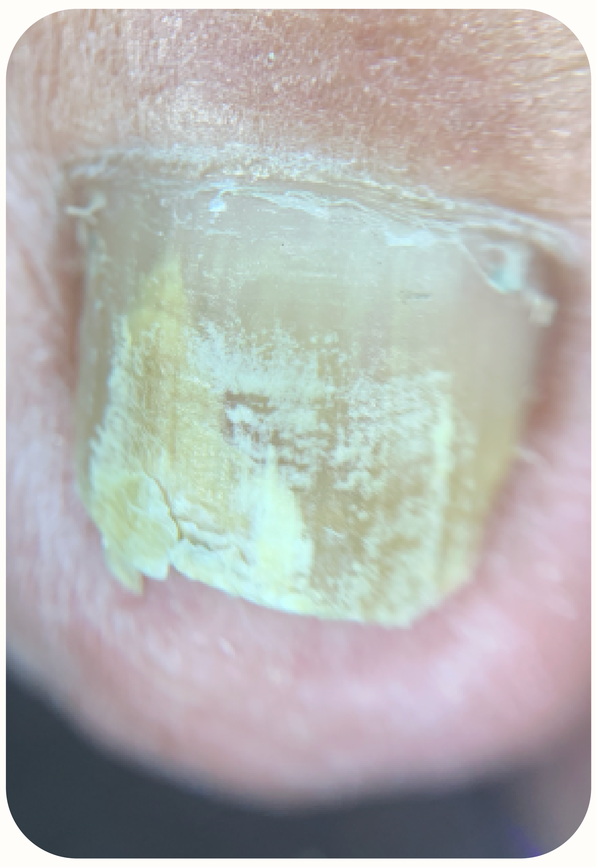
## Introduction

**Onychomycosis** is a **fungal nail infection** which results in discoloration, thickening, and detachment from the nail bed. Approximately 10% of the overall population and 50% of those over 70 years experience onychomycosis. **Dermatophytes** are responsible for 60–70% of infections.

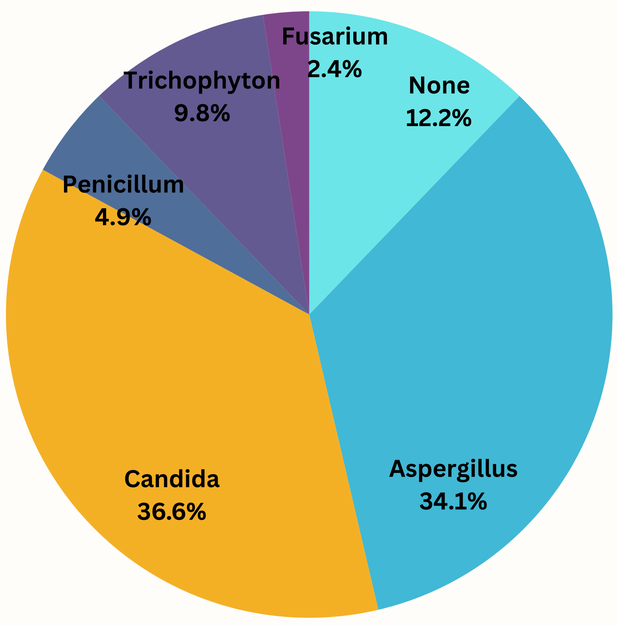


## Methodology

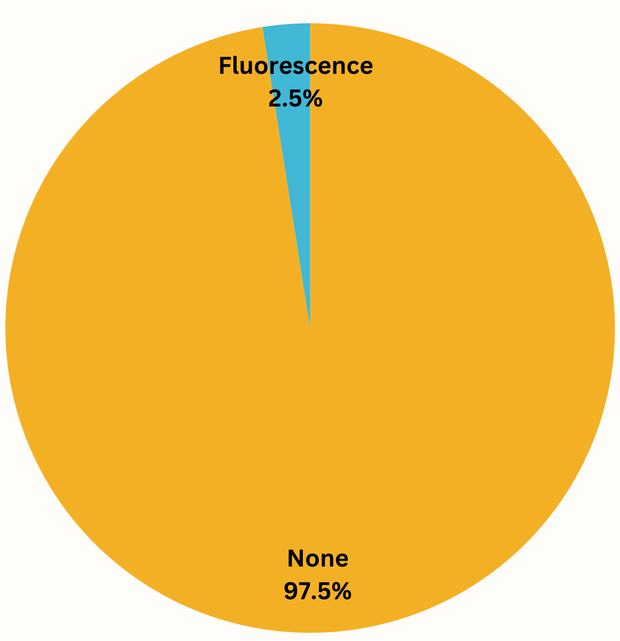
**Forty-one Filipino patients** with suspected onychomycosis, seen from **July 2024 to June 2025**, at the outpatient dermatology clinic of Jose R. Reyes Memorial Medical Center in the Philippines, underwent clinical evaluation, dermoscopy, Wood's lamp examination, potassium hydroxide (KOH) smear, and fungal culture. Clinical type, risk factors, comorbidities, and Onychomycosis Severity Index (OSI) were documented.

## Results

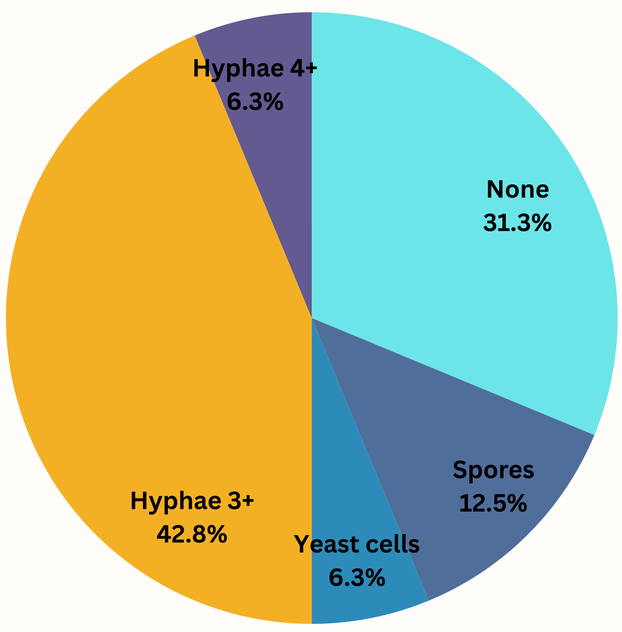
**Fungal Culture**



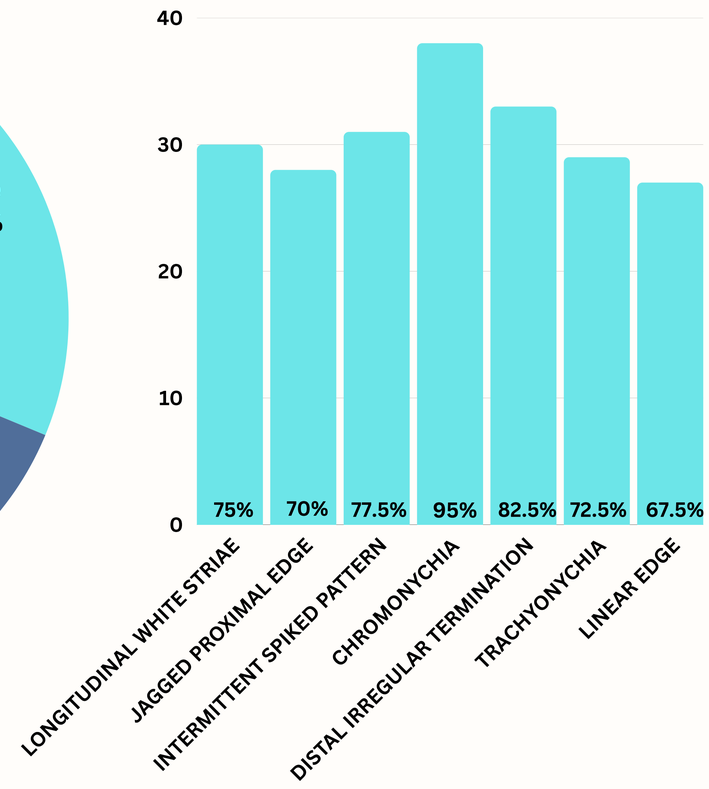

**Wood's Lamp**




**Potassium Hydroxide**




**Dermoscopy**




## Summary

- Mean age: **53.1 years**
- **Female (61%)** > Male (39%)
- **Urban residence (100%)**
- Comorbidities: **Hypertension (36.6%)**, Diabetes (14.6%)
- Risk factors: **Wet work (75.6%)**, open footwear (56.1%)
- Clinical type: **Distolateral subungal onychomycosis (58.5%)**
- Severity: **Severe (51.2%)** with mean OSI 16.3
- Wood's lamp: **Negative (97.6)** > Positive (2.4%)
- KOH smear: **Positive (68.3%)** > Negative (31.7)
- Culture: **Candida** (36.6%), Aspergillus (34.1%), Trichophyton (9.8%), Penicillium (4.9%), Fusarium (2.4%), None (12.2%)
- Dermoscopy: **Chromonychia(95%)**
- Distolateral subungal onychomycosis: **Inverse relation of duration and OSI**

## Conclusion

This study highlights a **predominance of non-dermatophyte fungal infections** among Filipino patients with onychomycosis in contrast to global studies. Neither clinical diagnosis, KOH smear, nor fungal culture alone is fully reliable for diagnosing onychomycosis. These findings underscore the **evolving epidemiology of onychomycosis** and the need for updated diagnostic strategies in local practice.

## References:

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