



FACULTY OF CLINICAL SCIENCES
COLLEGE OF MEDICINE, UNIVERSITY OF LAGOS



13th Annual Scientific Conference & Gathering

THEME

**Environmental Virology,
Exposomics and Epigenetics**

VENUE

Old Great Hall, College of Medicine,
University of Lagos, Idi Araba,
Lagos State

DATE

WEDNESDAY 8TH JUNE 2016

TIME

8.00 am - 5.00pm

• PROGRAMME & BOOK OF ABSTRACTS •

FUNGAL NAIL INFECTIONS AMONGST CASSAVA (GARRI) PROCESSORS IN SOUTH WEST NIGERIA

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Background and Objectives: Farming and food processing are the predominant occupation amongst the rural dwellers in South West Nigeria. These processes are non-mechanized, and expose the hands and feet to trauma and infections. This study aims to determine the prevalence of onychomycoses amongst cassava processors and identify causative organisms.

Materials and Methods: Individuals engaged in processing of raw cassava into garri in Odogbolu local government of Ogun State were included. Questionnaires documented demographic details, clinical descriptions, classification and presence of fungal infections in other parts of the body. Nail clippings and skin scrapings were collected for direct microscopy using 40% potassium hydroxide solution to break down the nail keratin. Specimens were inoculated onto Sabouraud's dextrose agar with chloramphenicol and gentamicin incorporated, and incubated at 26°C and 35°C.

Results: Features of onychomycosis were found in 119 (68.4%) participants. Distal subungual onychomycosis (68 i.e. 57.1%) was the most common clinical type, followed by total dystrophic onychomycosis (49, 41.2%), candida onychomycosis (34, 28.6%), proximal subungual onychomycosis (14, 11.8%) and superficial white onychomycosis (9, 7.6%). 101 (84.9%) respondents with clinically described onychomycosis had positive results. The non-dermatophyte molds (*aspergillus* and *penicillium* spp.) were the most common organisms found in 130 samples (78.8%), followed by dermatophyte infections in 31 (18.8%) and yeast in 7 (4.2%).

Conclusion: High prevalence of onychomycosis was noted amongst garri processors. Non-dermatophyte molds, traditionally thought to be contaminants of nail cultures, were the causes of primary fungal nail infections.

Keywords: onychomycosis, cassava processors, non-dermatophytes, dermatophytes, yeasts.