

# Onychomycosis and its risk Factors in Patients Coming to RHC Chawinda, Sialkot

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## ABSTRACT

**Aim:** To study the risk factors associated with Onychomycosis in People coming for treatment to RHC Chawinda.

**Methods:** Total 50 patients of the disease were included in this study. The study was conducted among patients coming to get treatment for their disease in RHC Chawinda from Dec 2017 to May 2018. All male and female patients having age between 15-70 years were included. For data collection, patient's face to face interviews were taken with closed ended questions. Sampling method was Non-probability sampling. Cross sectional observational study technique was used. The study was conducted with prior permission of SMO/IC and the patients.

**Results:** 9(18%) were in between 15-30 years, 19(38%) were in between 31-50years, 22(44%) were in between 51-70 years. Among them Onychomycosis was more prevalent in people of age groups 51-70years. Low socioeconomic status at home was found in most patients. 76% Patient were having DM and 44% Patients were Farmers by Profession.

**Conclusion:** After discussion and comparison of results it is concluded that Onychosis is more prevalent in Old Patients having Diabetes Mellitus and agricultural occupation. Soold age, DM & occupation are important risk factors for Onychomycosis.

**Keywords:** Onychomycosis, Nail Infection, Fungal Infection, Diabetes Mellitus, Old Age, Farmer.

## INTRODUCTION

Onychomycosis is a fungal infection of nail. Mostly toenail infections are common but this may affect fingernails as well. It is also called Tinea Unguim.

The Objective of this study is identification of risk factors associated with onychomycosis among Patients coming to RHC Chawinda for Treatment.

## PATIENTS AND METHODS

The study was conducted among patients coming to get treatment for their disease in RHC Chawinda from Dec 2017 to May 2018. Method was cross sectional observational study. Total 50 patients of the disease were included in this study. All male and female patients having age between 15-70 years were included. For data collection, patient's face to face interviews were taken with closed ended questions. Sampling method was Non-probability sampling. Cross sectional observational study technique was used. The study was conducted with prior permission of SMO/IC and the patients. All the collected data will be entered and analysed through SPSS version 20.

## RESULTS

It is evident from the results that 9(18%) were in between 15-30 years, 19(38%) were in between 31-50 years, 22(44%) were in between 51-70years. Among them Onychomycosis was more prevalent in people of age groups 51-70 years (44%). Low socioeconomic status at home was found in most patients. 38 out of 50 patients

(76%) were having DM and 12 patients (24%) were without DM. By profession 44% Patients were Farmers, 22% were Shop Keepers, 12% Females were Housewives, 4% were Drivers. 18% were belonging to Other Professions.

Table 1: Distribution of age

Age	n	%age
15-30	09	18
31-50	19	38
51-70	22	44
Total	50	100

Table 2: Diabetes mellitus

	n	%age
DM	38	76
Without DM	12	24
Total	50	100

Table 3: Professions

Profession	n	%age
Farmers	22	44
Shop Keeper	11	22
Housewives	06	12
Driver	02	04
Others	09	18
Total	50	100

## DISCUSSION

Onychomycosis is the well-known and common disease around the world. It is a fungal infection of nail which causes destruction of nail plate. The reasons for this disease are multifactorial. Predisposing factors for onychomycosis are DM, Old Age, Humid & Warm climate<sup>1,2</sup>. It's main cause is dermatophytes. Trichophyton Mentagrophytes and Trichophyton Rubrumare commonly involved. It also has association with Tinea pedis<sup>3</sup>. Yeast & Non-dermatophyteare also responsible for toe nail

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infection especially in psoriatic nail as secondary growth. HIV, immunosuppression and few cases have genetic predisposition to T. Rubrum infection due to autosomal dominant inheritance<sup>4,5</sup>. According to results, Old age, DM and Occupation are more common causes of this Disease. This Disease is more common in Old aged people, Farmers and Patients having Diabetes Mellitus. In previously reported findings in diabetic patients, the prevalence of onychomycosis is 22%<sup>6,7</sup>. In another study done regarding this disease shows that it is related to DM, Old Age and Profession<sup>8</sup>.

### CONCLUSION:

It is concluded after comparison and discussion of results that old aged people, Diabetics and Farmers the prevalence of onychomycosis is high.

### RECOMMENDATIONS

For introducing onychomycosis preventing policies, seminars should be conducted. We should do our level best to decrease the prevalence of Onychomycosis and do health education of people.

### REFERENCES

1. Gupta AK, Gupta MA, Summerbell RC et al. The epidemiology of onychomycosis: possible role of smoking and peripheral arterial disease. J Eur Acad Dermatol Venereol 2000; 43:130-134.
2. Sigurgeirsson B, Steingrimsdottir O. Risk factors associated with onychomycosis. J Eur Acad Dermatol Venereol 2004; 18:48-51.
3. Gill D, Marks RA. Review of epidemiology of Tinea Unguium in the community. Australas J Dermatol 1999; 40:6-13.
4. Gupta AK, Konnikov N, Lynde CW et al. Onychomycosis: predisposed populations and predictors of suboptimal response to oral antifungal agents. Eur J Dermatol 1999; 9:633-638.
5. Faergemann J, Baran R. Epidemiology, clinical presentation and diagnosis of onychomycosis. Br J Dermatol 2003; 149(suppl 65):1-4.
6. Dogra S, Kumar B, Bhansali A et al. Epidemiology of onychomycosis in patients with diabetes mellitus in India. Int J Dermatol 2002; 41:647-651.
7. Gupta AK, Konnikov N, Macdonald P et al. Prevalence and epidemiology of toenail onychomycosis in diabetic subjects: a multicenter survey. Br J Dermatol 1998; 139:665-671.
8. Javeria Jamil, Risk Factors of Toe Nail Onychomycosis in Population of Sharaqpur, Sheikhupura, District Punjab P J M H S Vol. 11, NO. 2, APR – JUN 2017:671-672.