

A Study To Assess The Prevalance Regarding Mucormycosis Among Staff Nurse Working In SMVMCH At Puducherry.

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Abstract:-

Mucormycosis is a rare opportunistic fulminant fungal infection caused by saprophytic fungi. According to Brown, mucormycosis ranked third among opportunistic deep fungal infections, after Candidiasis and Aspergillosis. It is frequently found in soil, residue plants, spoiled food and upper respiratory tract of healthy individuals. It becomes pathogenic when associated with predisposing factors such as immunocompromised states, most commonly (60– 81%) diabetes mellitus. The other predisposing factors are malignancies like lymphomas and leukemia's, renal failure, organ transplant, long term immunosuppressant therapy, cirrhosis, burns, protein energy malnutrition and acquired immunodeficiency syndrome.

It can manifest as any one of the different clinical forms such as Rhino Orbito- cerebral, Pulmonary, Gastrointestinal, Central nervous system, Cutaneous and Miscellaneous (bones, joints, heart, kidney, mediating). Early diagnosis, and prompt treatment can reduce the mortality and morbidity of this lethal infection.

Keywords: assess the prevalance rate of black fungus

I. Introduction:

Mucormycosis (formerly known as zygomycosis) is a rare infection caused by molds belonging to the subphylum Mucoromycotina in the order Mucorales. These fungi are ubiquitous in nature, particularly in soil, decaying wood, and other organic matter. In contrast to the wide spread distribution of these fungi, the infrequency of disease caused by these organisms attests to their low virulence potential in the human host. Mucormycosis is manifested by a variety of different syndromes in humans, particularly in the immunocompromised patients and those with diabetes mellitus. Almost all patients with invasive mucormycosis have some underlying disease that predisposes to the infection as well as influence the clinical presentation.

Mucormycosis is a rare but serious infection that can affect immunocompromised patients in healthcare settings. Investigations of possible mucormycosis outbreaks in healthcare settings have enabled critical insights into the exposures and environmental conditions that can lead to transmission. The purpose of this report is to compile resources and experiences that can serve as a guide for facilities and health departments investigating mucormycosis infections and suspected outbreaks in healthcare settings. We first provide an overview of mucormycosis outbreak investigations and then suggest how the typical steps of an outbreak investigation can be adapted and applied to mucormycosis infections in hospitals.

AIM OF THE STUDY:

The aim of the study was to assess the prevalence of black fungus among staff nurse.

OBJECTIVES OF STUDY

- To assess the level of prevalence regarding mucormycosis among staff nurse
- To assessment of the level of the prevalence regarding mucormycosis among staff nurse
- To associate between the prevalence regarding mucormycosis (domain wise) among staff nurse with selected the demographic variables.

II. METHODOLOGY

The resource approach used for this study was quantitative research approach. A descriptive research design was used to assess the prevalence regarding of mucormycosis among staff nurse .

By using convenience sampling technique, 30 sample was selected for the present study. The period of data collection was 2 weeks. The tool consists of demographic data, questionnaire. The outcome of study was evaluated by using descriptive and inferential statistics.

RESEARCH DESIGN:

The descriptive research design was adapted for this study.

RESEARCH SETTING:

The study will be conducted at SMVMCH , Puducherry. The population of this study is all staff nurse in SMVMCH. Sample size is the number of subjects involved in the study . sample size consist of 30 staff nurse. Sampling refers to the process of selecting a portion of the population to represent the entire population. Sampling technique chosen was purposive Sampling.

DEVELOPMENT AND DESCRIPTION OF THE DATA COLLECTION TOOLS:

Section A:

Demographic variables such as age, gender, religion, education, job type, marital status, types of family, types of residence, previous history of covid 19 , having PPE, any lifestyle diseases.

Section B:

Multiple choice questionnaire to assess the prevalence of black fungus among staff nurse residing at SMVMCH , puducherry.

It consist of totally 30 questions. Each questions carry one marks.

DATA COLLECTION PROCEDURE:

The data collection done with the permission to conduct the study was obtained from authorities of the concerned person Sri manakula Vinayagar medical College and hospital, puducherry. 30 staff nurse were selected by using purposive sampling technique and according to the inclusion and exclusion criteria and after introducing and explain the purpose of the study . The tool consist of demographic variables and knowledge questions were administered to respondents and data was collected.

III. RESULT:

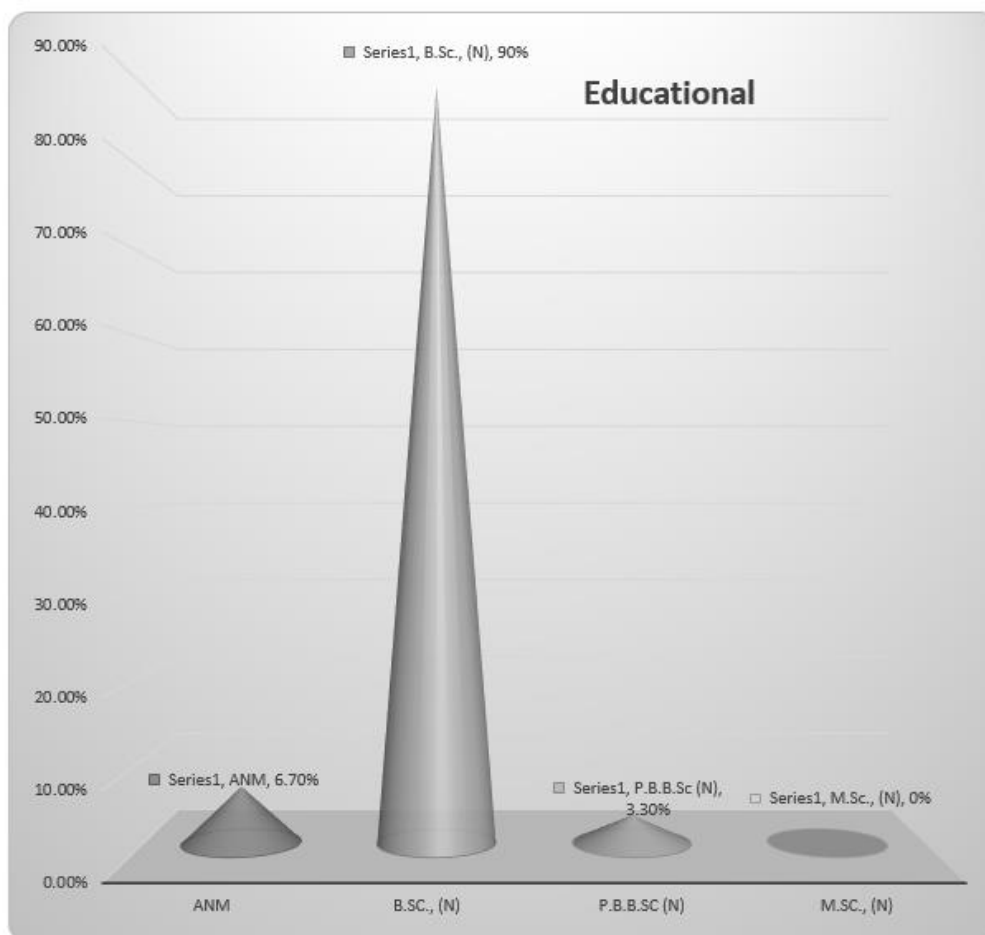
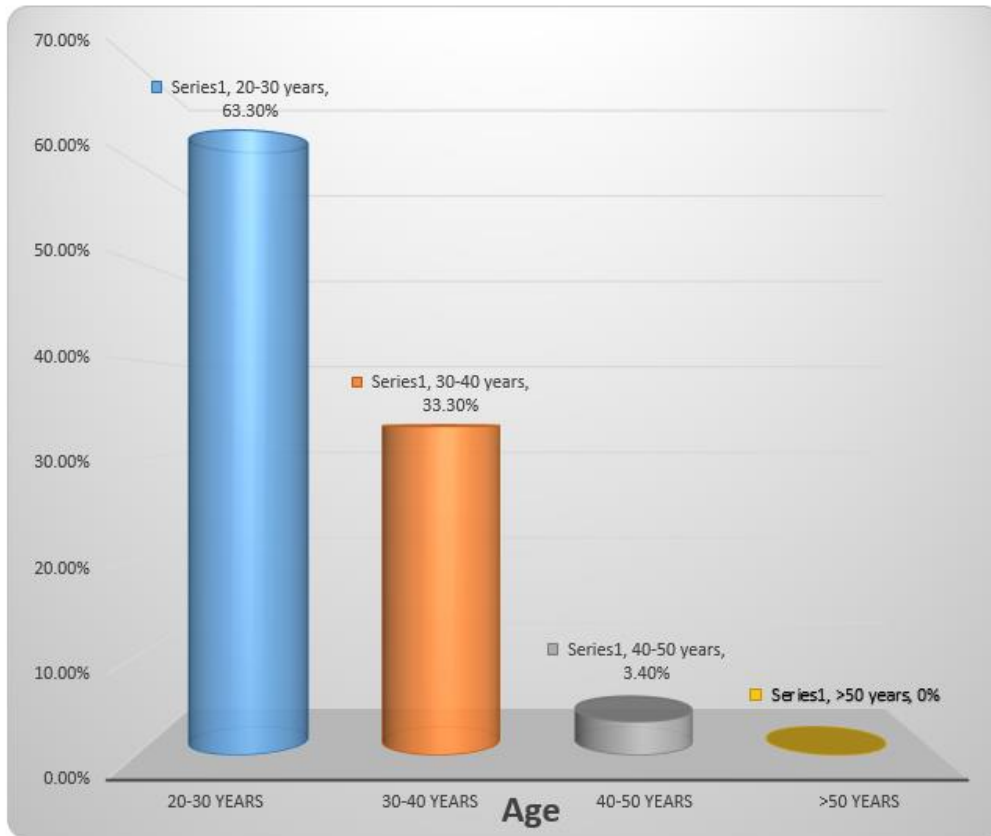
Majority of the staff Nurse 19(63.3%) of study population were in the age group are 20-30 years. Majority of the staff Nurse were female 26(86.7%). Majority of the staff Nurse were Hindu 27(90%). Majority of the staff Nurse were B.Sc., (N) 27(90%). Majority of the staff Nurse were Staff nurse 27(90%). Majority of the staff Nurse were married 21(70%). Majority of the staff Nurse were Nuclear family 16(53.3%). Majority of the staff Nurse were Rural 21(70%). Majority of the staff Nurse had previous history of covid 19, negative 21(70%). All of the staff Nurse had PPE,30(100%)

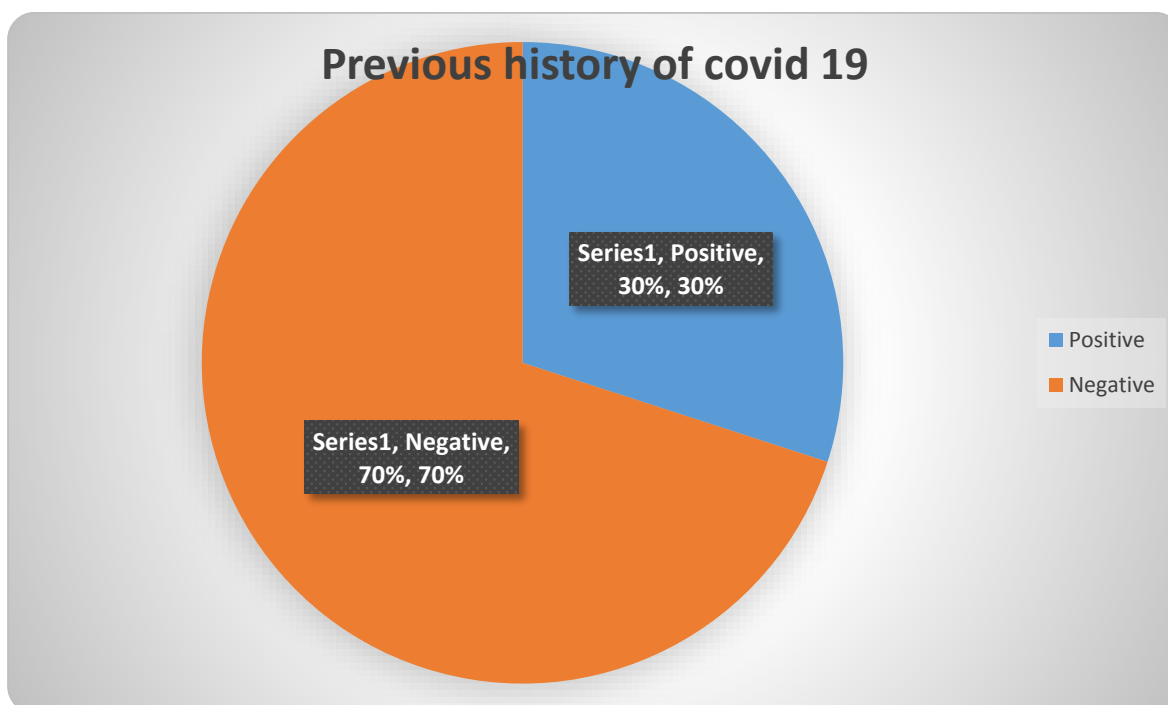
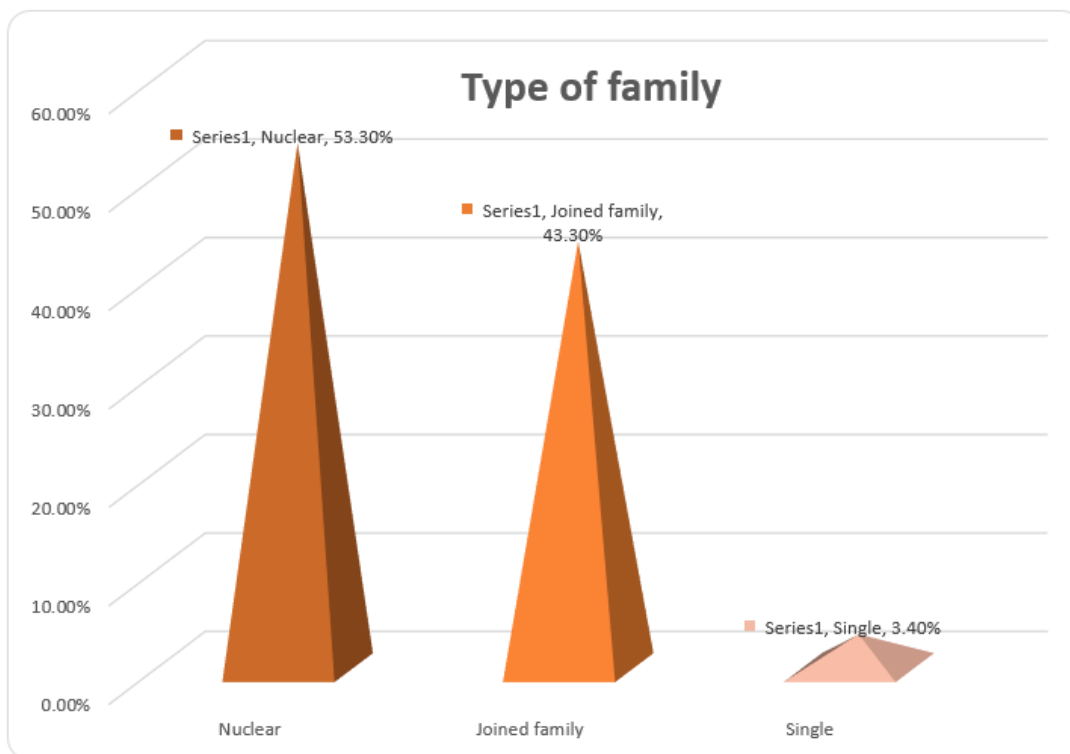
DESCRIPTION OF THE DEMOGRAPHIC VARIABLES AMONG STAFF NURSE. Table 1:- Frequency and percentage wise distribution of demographic variables among staff Nurse. (N=30)

SL. NO	DEMOGRAPHIC VARIABLES	FREQUENCY (N)	PERCENTAGE (%)
1	Age		
	A) 20-30 years	19	63.3
	B) 30-40 years	10	33.3
	C) 40-50 years	1	3.3
	D) >50 years	0	0
2	Gender		
	A) Male	4	13.3
	B) Female	26	86.7
	C) Transgender	0	0
3	Religion		
	A) Hindu	27	90
	B) Muslim	0	0
	C) Christian	3	10
	D) Others	0	0

4	Educational		
	A) ANM	2	6.7
	B) B.Sc., (N)	27	90
	C) P.B.B.Sc (N)	1	3.3
	D) M.Sc., (N)	0	0
5	Job type		
	A) Staff nurse	27	90
	B) ANM	2	6.7
	C) Head nurse	1	3.3
	D) Nurse educator	0	0
6	Marital status		
	A) Unmarried	9	30
	B) Married	21	70
	C) Divorced	0	0
7	Type of family		
	A) Nuclear	16	53.3
	B) Joined family	13	43.3
	C) Single	1	3.4
8	Type of Residence		
	A) Rural	21	70
	B) Urban	9	30
9	Previous history of covid 19		
	A) Positive	9	30
	B) Negative	21	70
10	Having PPE		
	A) Yes	30	100
	B) No	0	0

Table 1 shows frequency and Percentage wise distribution of demographic variables among staff Nurse. Out of the 30 staff Nurse who were interviewed, Majority of the staff Nurse 19(63.3%) of study population were in the age group are 20-30 years. Majority of the staff Nurse were female 26(86.7%). Majority of the staff Nurse were Hindu 27(90%). Majority of the staff Nurse were B.Sc., (N) 27(90%). Majority of the staff Nurse were Staff nurse 27(90%).Majority of the staff Nurse were married 21(70%). Majority of the staff Nurse were Nuclear family 16(53.3%). Majority of the staff Nurse were Rural 21(70%). Majority of the staff Nurse had previous history of covid 19, negative 21(70%). All of the staff Nurse had PPE, 30(100%).





Section B:

Assessment of the level of the Prevalence regarding mucormycosis among staff Nurse.

Table 2:- Frequency and percentage wise distribution of the level of the Prevalence regarding mucormycosis among staff Nurse.

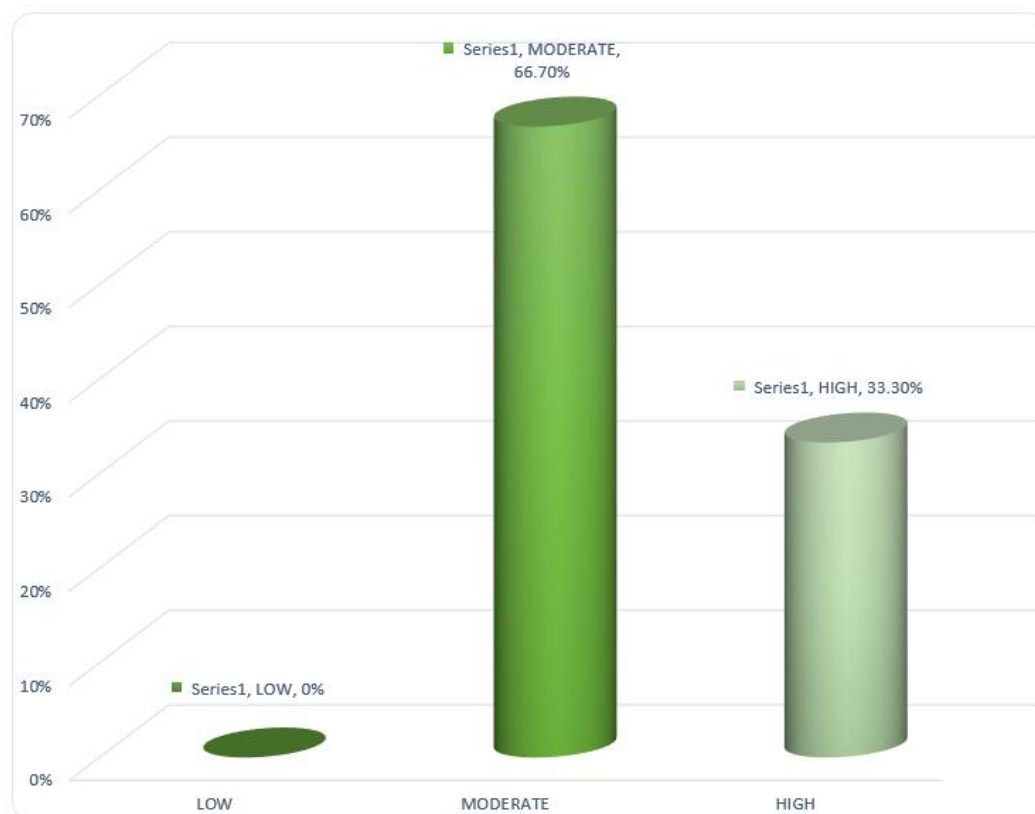
(N = 30)

OF PREVALENCE	FREQUENCY (n)	PERCENTAGE (%)
LEVEL LOW	0	0
MODERATE	20	66.7

HIGH	10	33.3
Total	30	100
Mean±Standard deviation	56.97±7.98	

Table –2 shows frequency and percentage wise distribution of the level of the Prevalence regarding mucormycosis among staff Nurse. Majority of the staff Nurse 20(66.7%) had moderate level of Prevalence and 10(33.3%) had high level of Prevalence. The mean and standard deviation of the level of the Prevalence regarding mucormycosis among staff Nurse is (56.97±7.98) respectively.

LEVEL OF THE PREVALANCE REGARDING MUCORMYCOSIS AMONG STAFF NURSE



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