Knowledge regarding mucormycosis among staff nurses

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***Abstract*: Mucormycosis commonly known as black fungi is a universal fungi present everywhere in the environment. Even though the first case was identified in 1855, its harmful presence was highlighted in this 21st century. At Covid 19 pandemic, corona virus has occupied the top most position as respiratory illness, adding spice to that, life threatening mucormycosis is declared as epidemic by the central government on May 2021. Staff nurses, being first line caregiver should have adequate knowledge regarding mucormycosis which ensures better quality patient care. The present study is carried out to assess the knowledge regarding mucormycosis among the staff nurses. A Quantitative research approach with a descriptive design was adopted in this study. A structured knowledge questionnaire was used to assess the knowledge regarding mucormycosis.**

The findings revealed that 53 % of the nurses had moderate knowledge, 24% of the participants had adequate knowledge and 23 % of them had inadequate knowledge regarding mucormycosis. Adequate awareness regarding mucormycosis among staff nurses helps to improve the quality care as well halt its further spread.

Keywords: Knowledge, Mucormycosis, Staffnurse

INTRODUCTION

Mucormycosis, a rare life threatening fungi, made the universe to turn back to read its existence since 1855. It is a dirty omnipresent virus causing fatal illness among the immunocompromised individuals. It travelled noiselessly nearly 66 years and at this century because of its fatality, government of India has declared it as a notifiable disease. According to the data published by WHO (2021) in India, approximately 140 per million population were affected by mucormycosis, which is about 80 times higher than the developed countries[1].

Various causes like patients undergoing immunosuppressive therapy, steroid therapy, immunocomprised patients, patients with co-morbidities and covid patients are affected with mucormycosis. Low immunity people are at greater risk of developing mucormyciosis when they inhale fungal spores from the air. The type and symptoms of mucormycosis depends upon the organ affected. During pandemic, India has reported nearly 45,374 cases of death due to mucormycosis[2].

Staff nurses occupy pinnacle position in the health care delivery system. They are in direct contact with patients and responsible for prevention of illness. Identifying and controlling the predisposing factors among the critical ill patients is the core responsibility of nurses. Hence they can reduce the mucormycosis morbidity rate. Assessing their level of knowledge is prime in order to improve their competencies while providing care for patients with mucormycosis. Hence the researcher conducted a study to identify the current knowledge regarding mucormycosis. Among staff nurses working in the selected hospitals at Kanyakumari district.

STATEMENT OF THE PROBLEM

A Descriptive Study to Assess the Knowledge regarding Mucormycosis among Staff Nurses in hospitals at Kanyakumari District.

OBJECTIVES

- To assess the knowledge regarding mucormycosis among staff nurses
- To find out the association between the selected demographic variables among staff nurses with their knowledge score regarding mucormycosis.

RESEARCH METHODOLOGY

A Quantitative research approach with a descriptive design was adopted in this study. A total of 100 staff nurses between 20-50 years of age in the selected hospitals of Kanyakumari district were selected by using a non-probability convenient sampling technique. Permission was obtained from the Institutional Ethical Committee and the chief Medical officer of the respective hospitals. The purpose of the study was explained and obtained informed consent from the participants. Data were collected using structured knowledge questionnaire to assess the knowledge regarding mucormycosis.

MAJOR FINDINGS

The findings of the study were discussed based on the objectives of the study.

Table 1: Demographic Variables N=100

S.No	Sample Characteristics	Frequency(f)	Precentage(%)
1.	**Age**		
	• 20 to 30 years	44	44%
	• 31 to 40 years.	37	37%
	• 41 to 50 years.	19	19%
2.	**Gender**		
	• Male	9	9%
	• Female	91	91%
3.	**Type of family**		
	• Nuclear family	43	43%
	• Joint family	57	57%
4.	**Educational status**		
	• Diploma in Nursing	24	24%
	• Bachelor in Nursing	67	67%
	• Master in Nursing	9	9%
5.	**Working area**		
	• Ward	58	58%
	• Critical Care	8	8%
	• Casualty	11	11%
	• Operation theatre	16	16%
	• Post op ward	3	3%
	• OPD	4	4%

The frequency and percentage distribution of demographic variables among staff nurses, majority 44 (44%) were between the age of 20 – 30 yrs, 91(91%) were females, 57 (57%) belonged to joint family. 67(67%) of them completed bachelor degree in nursing, 58 (58%) of them were working in wards (multispecialty).

The first objective of the study was to assess the knowledge regarding mucormycosis among staff nurses

The study findings showed that the majority 53% of the participants had moderately adequate knowledge**,** 24% of the participants had adequate knowledge and the remaining 23% of the participants had inadequate knowledge regarding mucormycosis among staff nurses.

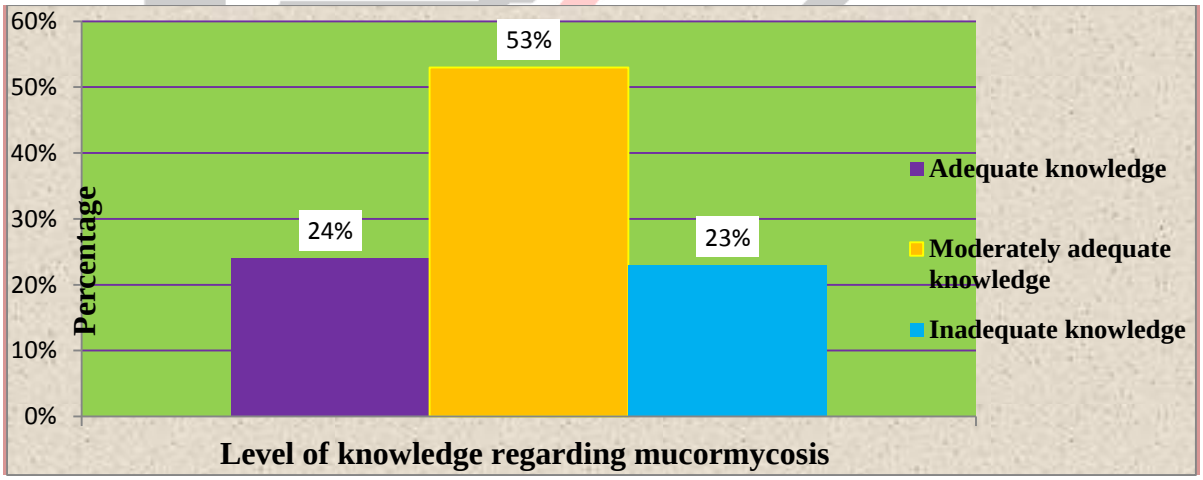

Fig-1: Level of Knowledge among staff nurses regarding mucormycosis

The study findings were congruent with the cross-sectional study conducted by **Humayun Kabir etal (2021)** among Bangladesh health care workers from May to June 2021. Among 422 respondents, 45.26% were doctors; 38.15% were nurses and 16.59% were other health care workers. This study findings revealed that the mean scores of black fungus knowledge among health care workers were significantly associated with seniority (p=0.001), gender (p-value = 0.012), profession (p <0.001), death of friends and family members due to COVID-19 (p=0.049)[3].

The second objective of the study was to find out the association between the selected demographic variables of staff nurses with their knowledge score regarding mucormycosis among staff nurses.

The findings revealed that there was a statistically significant association between demographic variables such as age (χ^2=38.32,p<0.001), education status (χ^2=50.69,p<0.001), working area (χ^2=22.03, p<0.001), and there was no association between gender and type of family with their level of knowledge among staff nurses**.**

The study findings were supported by the cross sectional conducted by Humayun Kabir etal[3] (2021) revealed that gender, income, job type, and marital status of the participants were found to be significantly associated with the knowledge scores of health care workers.

CONCLUSION:

The research findings revealed that staff nurses have a moderate level of knowledge regarding mucormycosis. There was a significant association found between knowledge and age, education status and working area which directly pinpoints the importance of upgrading knowledge through continuing education program. At this peak incidence of mucormycosis, staff nurses should be trained efficiently to combat the epidemic. They should be a mentor to all health care workers in prevention of fungal infections. They should follow precautionary measures to all patients irrespective of their illness. Adequate awareness regarding mucormycosis among staff nurses is essential which may bring change in their attitude and skills. Tender loving quality care reduces the mortality rate and thereby controls the incidence of mucormycosis. Staff nurses play an important key role in providing quality care. Due to emergence of different diseases, updating their knowledge ensures prevention and protection from the terrible deadly diseases. They should improve their competency in order to compete fatal illnesses. Due to scarcity of research studies related to mucormycosis, the researchers empirical facts will be an added evidence to support the staff nurses knowledge regarding mucormycosis.

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