



A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE REGARDING MUCORMYCOSIS AMONG B.SC NURSING STUDENTS AT DESH BHAGAT UNIVERSITY SCHOOL OF NURSING, MANDI GOBINDGARH PUNJAB.

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Abstract

Current descriptive study was conducted to assess the knowledge regarding Mucormycosis among the B.Sc Nursing students at Desh Bhagat University Mandi Gobindgarh, Punjab. Quantitative research approach and descriptive research design was used to conduct this study. Sample for the study was 60 B.Sc Nursing students. Purposive sampling technique was used to collect the data. Data was collected from B.Sc Nursing students through self structure knowledge questionnaire. Study results concluded that most of Students have Good Knowledge regarding mucormycosis.

Introduction

Corona virus is derived from the word “corona” meaning “crown” in Latin. It causes a range of human respiratory tract infections varying from mild cold to severe respiratory syndrome. Mucormycosis mostly affecting COVID -19 patients who have high levels of diabetes are at a higher risk of contracting covid-19. When this occurs, they are treated with steroids which compromises their immunity. A multicenter prospective observational study was conducted on the epidemiology, risk factors, management and outcomes of mucormycosis in India among 465 patients. The demographic profile, microbiology, predisposing factors, management and 90-day mortality were recorded; risk factors for mortality were analyzed. Study concluded that combined surgical and medical management was associated with better outcomes. Several gaps surfaced in the management of mucormycosis (A Patel et. al. 2020). A Study was done on Mucormycosis in India: unique features Mucormycosis remains a devastating invasive fungal infection, with high mortality rates even after active management. The disease is being reported at an alarming frequency over the past decades from India. This review focuses on these distinct features of mucormycosis observed in India (Arunaloke Chakrabarti et al. Mycoses. 2014).

Objectives of study

- To assess the knowledge regarding mucormycosis among nursing students.
- To find out the association between the knowledge regarding mucormycosis with the selected socio-demographic variables.
- To develop information booklet regarding mucormycosis.

Methodology

Quantitative research approach and descriptive research design was used to conduct this study. Study includes 60 B.Sc nursing students of Desh Bhagat University School of Nursing Mandi Gobindgarh, Punjab. Purposive sampling technique was used to collect the data through self structured knowledge questionnaire regarding Mucormycosis. The reliability of the tool was established by split half method. The tool was found to be highly reliable ($r=0.980$). Ethical permission granted from Institutional ethical committee. Data has been collected within in 15 days of time period in the month of august 2021.

Findings of the study: Major findings are:

Findings related to sample characteristics of nursing students:

The present study revealed that maximum Students were in age group 20-23 years i.e., 80.6%. 65. In respect of gender distribution of Students i.e., 71% % females and 29% males. The most of Students reside in rural area 67.7%. In respect parents education of the maximum No. of student's education of parents i.e., 48.4% is college/University. In respect of occupation maximum students have occupation of parents i.e., 48.4% as Government Job. In the next demographic characteristics of students source of information as Nursing Course i.e., 67.7%.

Table 1: Assessment of the knowledge regarding mucormycosis

Level of Knowledge (%)	Knowledge Score	
	Frequency	Percentage
Good Knowledge ($\geq 50\%$)	53	88.4
Poor Knowledge ($\leq 50\%$)	7	11.6

Maximum score- 20
Minimum score-0

Figure 1: Assessment of knowledge regarding mucormycosis

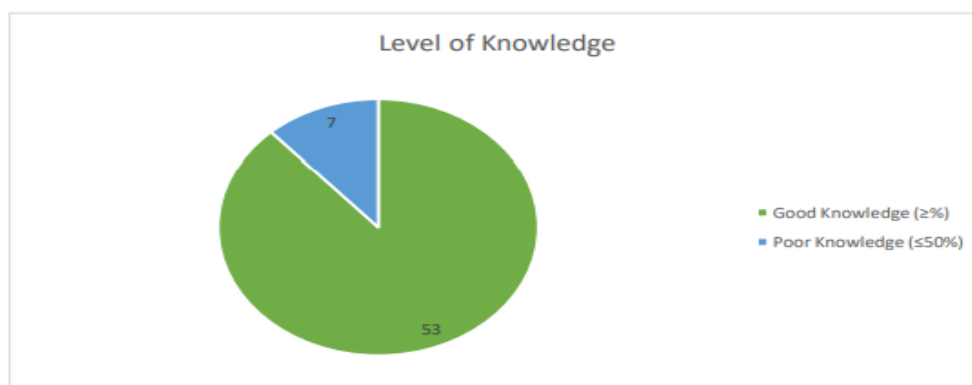


Table 2: Association between knowledge of Students with their selected demographic variables

N=60						
Variables	Options	N	Mean	Sd	Df	Result
Age	18-20 years	10	16.90	1.595	2	0.843
	20-23 years	40	14.23	3.745	1	
	Above 23	10	11.90	1.370	1	
Gender	Male	19	15.68	2.162	1	0.032
	Female	41	13.63	3.787	1	
Residence	Urban	15	14.00	3.965	2	0.159
	Rural	40	14.79	2.923	1	
	Others	5	11.50	0.707	1	
Education of parents	Primary level	20	15.10	3.032	3	0.293
	Secondary level	10	14.30	2.908		
	College/ university	25	12.75	4.372	1	
	Illiterate		14.35	3.534	1	
Occupation of parents	Government job	30	14.75	3.531	3	0.348
	Private job	12	13.95	3.735	1	
	Business	6	15.36	3.202	1	
	Peasant farmer	12	13.18	3.125	2	
Source of information	Nursing course	28	13.17	4.260	3	0.212
	Friends	2	15.33	2.550	1	
	Personal experience	20	15.78	3.492	1	
	Internet	10	14.50	2.229	2	

Table 1: represented that the sample of 60 Nursing students in which the association between demographic variable of age and Knowledge is significant by 0.843 the association between demographic variable of gender and Knowledge is significant by 0.032, the association between demographic variable of residence and Knowledge is significant by 0.159, the association between demographic variable of Education of parents and Knowledge is significant by 0.293, the association between demographic variable of Occupation of parents and Knowledge is significant by 58 0.348, the association between demographic variable of Source of information and Knowledge is significant by 0.212.

Discussion

Current study concluded that most of Students have Good Knowledge regarding mucormycosis. A study was conducted on the disease burden of mucormycosis in Japan and to evaluate outcomes, healthcare resource utilization, and costs associated with mucormycosis in inpatient settings in Japan. This study investigated the healthcare resource utilization and cost of medical resources caused by mucormycosis in Japan. Mucormycosis leads to high mortality, high healthcare resource utilization, and high cost. (Rie Ueno and Shinichi Nishimura et. al. 2020).

A longitudinal study on Mucormycosis caused by *Syncephalastrum* spp: Clinical profile, molecular characterization, antifungal susceptibility and review of literature. The present study provides a comprehensive overview of these aspects of this rare fungus. The study results shows that rare and emerging infections merit careful consideration and clinical attention Shreya Singh and Nupur pal and et.al. 2021).

A review study of Mucormycosis is a rare Angio invasive infection mainly recognized in immunocompromised patients which occurs due to the fungi Mucorales. With early intervention 34 with surgical debridement and therapeutic drugs condition of this deadly disease can also be improved (Dr. G. Nishanth et.al. European Journal of Molecular & Clinical Medicine 2020).

Limitations of study

The study sample was confined only to the B.Sc nursing students of Desh Bhagat University School of Nursing, Mandi Gobindgarh. A self structured knowledge questionnaire was used to collect the information regarding mucormycosis towards B.Sc Nursing students; the responses were therefore restricted to knowledge of B.Sc nursing students and only limited samples were studied as there was limited time available for data collection.

Conclusion

After the detailed analysis, this study leads to following conclusion:

In context of knowledge towards mucormycosis, study concludes that Nursing students has good knowledge about mucormycosis. The data presented that the sample of 60 Nursing students in which the association between demographic variable of age and Knowledge is significant in the study. For Pilot and main study results and reliability of tools found it feasible to continue to conduct the research study.

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