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A Study to Assess the Knowledge Regarding Fungal Infection Among MPH Workers in Selected Hospitals of Pune City.”

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Abstract

Title: Fungal infections are the infections caused by fungi. These infections can affect various parts of the body, including the skin, nails, mouth. Fungi are common organisms that is found in the environment. Knowledge regarding fungal infection is important to understand the detection and to prevent complications.

Study title: A descriptive study is to assess knowledge regarding fungal infections among MPH workers.

Material and methods: Quantitative research approach was used. The population utilised for the study is MPH workers from the hospitals of Pune city. The sample size is 100. The sampling technique which is non-probability purposive sampling technique. The inclusion criteria includes the workers present at that time, who can read, write and understand English or Marathi. The exclusion criteria was for the people who having no education status or illiterate. The tool was finalised with the suggestions of 5 experts from Bharati Vidyapeeth (Deemed to be university) College of Nursing, Pune. In order to established reliability of the tool we used test-retest method. According to Karl-Pearson Correlation coefficient 'r' value obtained for the reliability was 0.73 which indicated that the tool is reliable. The pilot study was also conducted to assess the feasibility and utility.

Results: The study was conducted with 100 samples through self-structured demographic and questionnaires regarding assess the knowledge regarding fungal infection. The result revealed that 39% had average knowledge31% had poor knowledge, 28% had good knowledge and 2% had excellent knowledge.

Keywords: Assess, Knowledge, MPH workers, Fungal Infection, Fungus

Introduction

A serious global health issue that affects a wide range of communities is fungal infections caused by various fungi. The skin, nails and in extreme situations, the internal organs can all be affected by fungus. 49 million people have tinea capitis, 3 million have chronic pulmonary aspergillosis to data compiled from 434 published studies. Fungal infection can be transmitted through direct contact with infected individuals, contaminated surfaces, or by inhaling fungal spores present in the environment. There are common signs and symptoms of fungal infections like itching, redness, inflammation. The systematic study indicates that around 4.1% Indian suffer from fungal disease. MPH workers are the group of people with a wide range of skills who can carry out a series of activities in the hospital. They help the nursing staffs and other staffs to take care of the patient, to provide support services like transportation of the patient, handling medical equipment, handling and disposing of waste which include infected and others, making a communication between healthcare professionals and patients and many more. MPH workers are the frontline health workers and are more susceptible to infection due to continuous exposure to the infected patients and hospital settings. The main reason of affecting fungal infections in MPH workers is due to lack of knowledge and awareness. Lack of awareness may include like not wearing the gloves and mask while doing the cleaning work and disposing wastes, contact with the infected patient and so on. Lack of knowledge may be of improper health education from the senior staffs. It is essential to make knowledgeable as MPH workers are at

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high risk of fungal infection due to frequent and close interaction with the patient as well as exposure to various environment. It is possible to reduce the risk of hospital acquired infections and enhance the general standard of patient care by researching the incidence of fungal infections among MPH workers.

Need of the Study

Here we are going to assess some relevant knowledge about the fungal infection among the MPH workers which includes common fungal infections as MPH workers are susceptible to some common fungal infection like Tinea (ringworm), candidiasis (yeast infection); mode of transmission as fungal infections can be transmitted through direct contact with infected individuals, contaminated surfaces, or by inhaling fungal spores present in the environment.) due to frequent interaction with the patient and environmental conditions; Symptoms as MPH workers should be able to recognize common symptoms of fungal infections to ensure early diagnosis and appropriate treatment for themselves. The symptoms may include rashes, redness, itching, discolouration of skin and many more; Proper use of PPE, including gloves and masks, can reduce the risk of fungal infections. MPH workers should also maintain good hand hygiene to prevent transmission; biomedical waste management helps in handling the biological waste effectively. It aids in stopping infectious diseases to spread. The used needles, syringes, tissues, cotton-swabs, and other medical waste which is infected are collected and disposed separately to prevent infections; preventive measures as MPH workers should have a knowledge regarding the preventive measures like wash your hands properly , wear gloves while separating the biomedical waste , proper disposal of waste. The related studies shows that, the fungal infection among MPH workers is due to the lack of awareness, insufficient knowledge and without proper use of preventive measures. So the need of study is necessary through which the measures can be improved and enhanced to increase the occupational and personal health.

Scholar View

MPH workers are at high risk of fungal infection due to frequent and close interaction with the patient as well as exposure to various environment. MPH workers who have fungal infection run the danger of passing the infection on to the susceptible patients in addition to having health problems of their own. It is possible to reduce the risk of hospital acquired infections and enhance the general standard of patient care by researching the incidence of fungal infections among MPH workers.

Aim of the Study

To assess the knowledge regarding the fungal infection among the MPH workers. To associate the findings with selected demographic variables.

Methodology

The study was design was non-experimental research. Total 100 MPH workers from different hospitals of Pune city was selected for data collection. A non-probability sample technique was used to collect the data from samples. Tools was constructed to identify the demographic variables and set of 20 self -constructed questionnaires regarding the knowledge was made. The reliability was done with test-retest method and obtained the score of +0.73 which was reliable. The pilot study was done among selected hospital of Pune city .

Results

Table 1: Analysis of Demographic Variables in Frequency and Percentage

Demographic	Frequency	Percentage
1.Gender		
A.Male	42	42
B.Female	58	58
2.Age		
A.18-30 year's	25	25
B.31-45 year's	59	59

C.46-60 year's	16	16
D.60 Above	0	0
3.Education		
A.Primary	75	75
B.Secondary	25	25
C.Higher	0	0
D.Graduate	0	0
4.Monthly income		
A.10k-15k	90	90
B.16k-20k	10	10
C.21k-25k	0	0
D.25 Above	0	0
5.Habits		
A.Smoking	17	17
B.Tabacco	37	37
C.Alcohol	13	13
D.Missery	33	33
6.Working hours		
A.5-7 hours	0	0
B.8-10 hours	84	84
C.11-13 hours	16	16
7.Diet		
A.Veg	32	32
B.Non veg	68	68
8. Had You few suffer from Fungal Infection		
A.Yes	7	7
B.No	93	93
9. Do You have any information about Fungal Infection?		
A.Yes	75	75
B.No	25	25
10. Source of Information.		
A.Mass media	10	10
B. Social media	11	11
C. Health workers	45	45
D.Family/friends	9	9

Table: 2 Finding Related to level of knowledge regarding Fungal Infection among MPH workers in selected hospitals of Pune city.

Level of Knowledge	f	%	Mean	SD
Poor (0-5)	31	31		
Average (06-10)	39	39		
Good (11-15)	28	28	7.89	6.27
Excellent (16-20)	2	2		
Total	100			

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Finding Related to level of knowledge regarding Fungal Infection among MPH workers in selected Hospital of Pune city. 39% were having Average Knowledge, 31% were having Poor Knowledge, 28% were having Good knowledge and 2 % were having excellent knowledge. The overall mean is 7.89 and Standard Deviation 6.27.
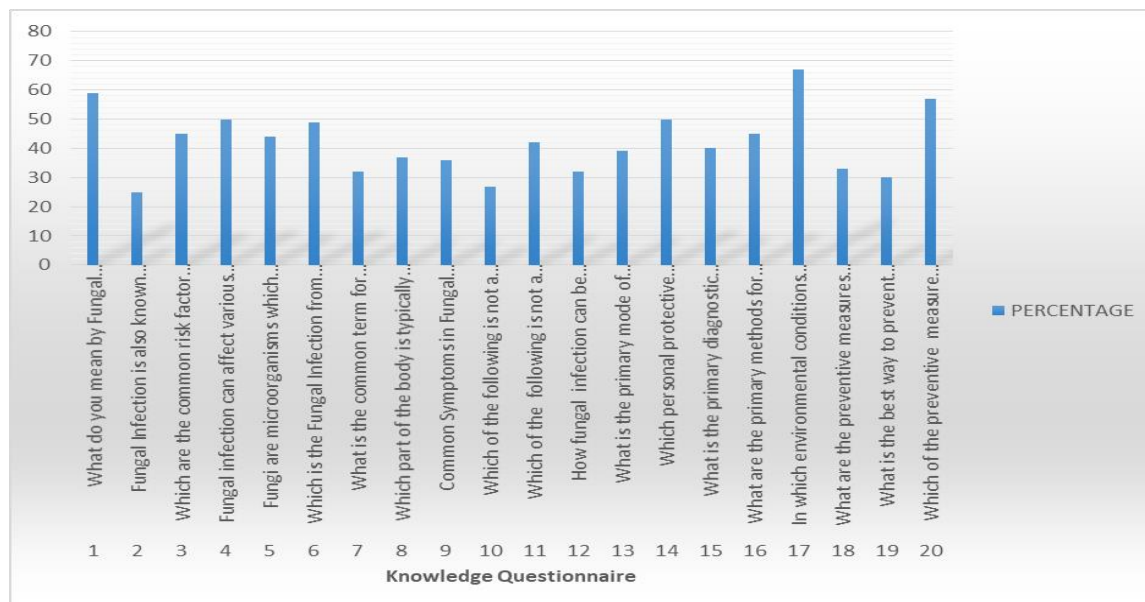

Table 4: Shows Graphical findings of knowledge questionnaire of Fungal Infection.

The association between selected demographic variables & knowledge regarding Fungal Infection of Gender, Age, Education, Habits, Working hours, Diet Pattern, Suffer from Fungal Infection, Information about Fungal Infection, Source of Information all are not associated with a significant level of 0.05.

Discussion

The main aim of the study is to assess the knowledge regarding fungal infection among MPH workers of the selected hospitals of Pune city. The study was done among 100 MPH workers and showed a result that that in gender majority was the female MPH workers with 58% , 68% MPH workers was from the age category of 31 – 45 years, 75% of the MPH workers are having the salary range between 10k to 15k, among the selected MPH workers having 37% having the habit of using tobacco , working hours 84% of the MPH workers having the working hours of 8 – 10 hours, about 68% of the MPH workers were non vegetarian, and Majority of MPH workers of 93% haven't suffered from the fungal infection and only 7% suffered from fungal infection , 75% of the MPH workers have the information regarding fungal infections , and only 2% having good knowledge, 28% having good knowledge, 39% having average knowledge and 31% having poor knowledge regarding the fungal infections. From the findings we concluded that 31% of MPH workers having poor knowledge about the fungal infection. A study was conducted regarding fungal contamination of medical students mobile phones from the university of Belgrade, Serbia. It was a cross-sectional study aimed to characterize fungal contamination of medical students, usage and cleaning habits.The questionnaire was prepared according to the objectives. The researcher found 32.11% of fungal contamination of mobile phones among 432 participants. Among that 28.5% of candida albicans, 11.4% of aspergillus niger and 9.55 of pencillium chrsogenum were found. According to the study, the male students are more often prone to contamination to fungi. The study shows that only a few of the students cleans the phones. This study shows that the students who use mobile phones in medical wards have a greater prevalence of fungal contamination. Active surveillance and preventive actions are required to limit the danger of cross contamination and raise the awareness about the fungal transmission due to usage of phones in clinical.

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Conclusion

The objective of this research study is to evaluate the level of knowledge concerning fungal infections among Multi-Purpose Health (MPH) workers. MPH workers, as frontline healthcare providers, frequently interact closely with patients, putting them at heightened risk of contracting fungal infections. The study identified a correlation between inadequate knowledge and awareness and the susceptibility of MPH workers to fungal infections. The analysis revealed that among MPH workers surveyed, only 39% possess some knowledge of fungal infections, while 28% exhibit good knowledge. Furthermore, 31% of MPH workers demonstrate poor knowledge, with only 2% displaying excellent comprehension of fungal infections. Therefore, it is imperative to equip MPH workers with comprehensive information to mitigate their risk of fungal infections.

The study underscores the necessity of enhancing MPH workers' awareness through targeted educational interventions. By improving their understanding of fungal infections, MPH workers can employ preventive measures effectively, reducing the likelihood of contracting and spreading fungal diseases. This research emphasizes the importance of tailored training programs and educational resources to enhance the knowledge base of MPH workers, ultimately enhancing their ability to deliver effective healthcare while minimizing occupational health risks.

Conflict of Interest:

The authors certify that they have no involvement in any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in this paper.

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