



Research Paper

"A study to assess the home remedies to prevent black fungus among post covid patients residing at selected community area, puducherry"

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I. INTROUCTION

"Don't forget that the flavours of wine and cheese depend upon the types of infecting microorganisms"

-Martin fuscher

INTRODUCTION:

Black fungus is a devastating infection with high mortality rates despite recent advances in its diagnosis and treatment. It is caused by the filamentous fungi of the Mucorales order of the class of Zygomycetes. Although it is classically defined as an opportunistic infection, preferentially affecting patients with diabetes mellitus (DM), neutropenia, malignancy, chronic renal failure, and acquired immunodeficiency syndrome and those who have received organ or hematopoietic stem cell transplants, it can affect immunocompetent hosts as well (such as trauma patients). The incidence of MCM worldwide appears to be increasing, particularly in oncological patients and those with DM. Along with aspergillus, it is one of the most common invasive fungal infections affecting immunosuppressed individuals.

II. REVIEW OF LITERATURE:

Sherouk Hussein sweilam et al.,(2022) conducted a study on the impact of black fungus on SARS-coV-2 infected patients. The emergence of various diseases during the COVID-19 pandemic made health workers more attentive, and one of the new pathogens is the black fungus. A recent analysis revealed that some COVID-19 patients were also coinfecting with a fungal disease called black fungus. The immune system is weakened by COVID-19 medication, rendering it more prone to illnesses like black fungus. COVID-19, which is caused by a B.1.617 strain of the SARS-CoV-2 virus, has been circulating in India black fungus is a rare fungal infection induced by exposure to a fungus called mucormycete. This current review will be focused on the etiology and virulence factors of COVID-19/black fungus coinfections in COVID-19-associated black fungus patients, as well as their prevalence, diagnosis, and treatment

STATEMENT OF THE PROBLEM:

"A study to assess the home remedies to prevent black fungus among post covid patients residing at selected community area, Puducherry."

OBJECTIVE:

- To evaluate the risk factors for black fungus infection.
- To identify the triggering factors for black fungus infection.
- To prevent the infection by home remedies.
- Summarize the preventive and protective measures.

HYPOTHESIS:

- H1-There will be significant assessment of knowledge regarding home remedies to prevent black fungus among post covid patients.

- H2-There will significant association between the level of knowledge regarding home remedies to prevent black fungus among post covid patients residing with their selected demographic variables.

ASSUMPTION

- This study will help community people to gain knowledge regarding black fungus
- A structured question may helped community people to gain knowledge regarding home remedies to prevent black fungus.

III. MATERIALS AND METHODS:

This chapter describes the research methodology followed to assess the home remedies to prevent black fungus among post covid patients residing at selected community area, Puducherry.

Section A: Demographic variables such as age, gender, religion, education, job type, marital status, types of family, having children, types of residence, previous history of covid 19 , having PPE, duration of steroid intake, any lifestyle diseases.

Section B: Multiple choice questionnaire to access the home remedies to prevent black fungus among post covid patient residing at silukaripalayam, puducherry.

SCORE INTERPRETATION:

| Classification | Poor response | Moderateresponse | Good response |
|----------------|---------------|------------------|---------------|
| Score | 1-10 | 11-20 | 21-25 |

Section C: It consist of 25 questions, the total possible maximum score is 25.

| Classification | Negative approach | Positive approach |
|----------------|-------------------|-------------------|
| Scores | 0-10 | 10-25 |

RESEARCH APPROACH:

A quantitative research approach was selected for this study.

RESEARCH DESIGN:

The descriptive research design was adapted for this study.

POPULATION

The population of the study is silukaripalayam village people.

SAMPLE:

The sample of the study is post covid patients.

SAMPLE SIZE:

The sample size of the study consists of 50.

IV. RESULTS:

Out of the 50 post covid patients who were interviewed, Majority of the patients 17(34%) of study population were in the age group are 30-40 years. Majority of the patients were female 29(58%). All of the patients were Hindu 50(100%). Majority of the patients were Secondary school education 22(44%). Majority of the patients were had Private job 29(58%). Majority of the patients were married 35(70%) .Majority of the patients were Nuclear family 33(66%).

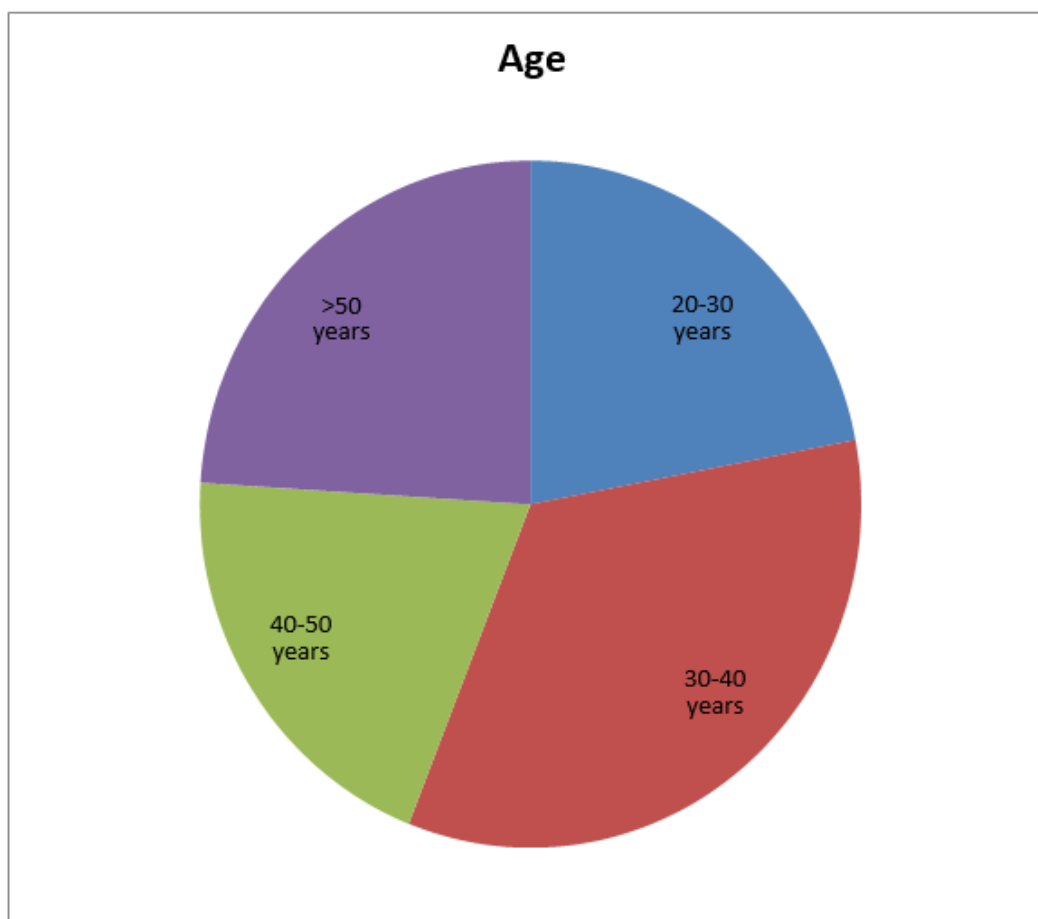
Majority of the patients were having 2 children 29 (58%). Majority of the patients were Rural 46(92%). Majority of the patients had previous history of covid 19, positive 35(70%). Majority of the patients had PPE, 42(84%) Majority of the patients were 14 days duration of steroid intake 43(86%) . Majority of the patients were had not any lifestyle diseases 35(70%).

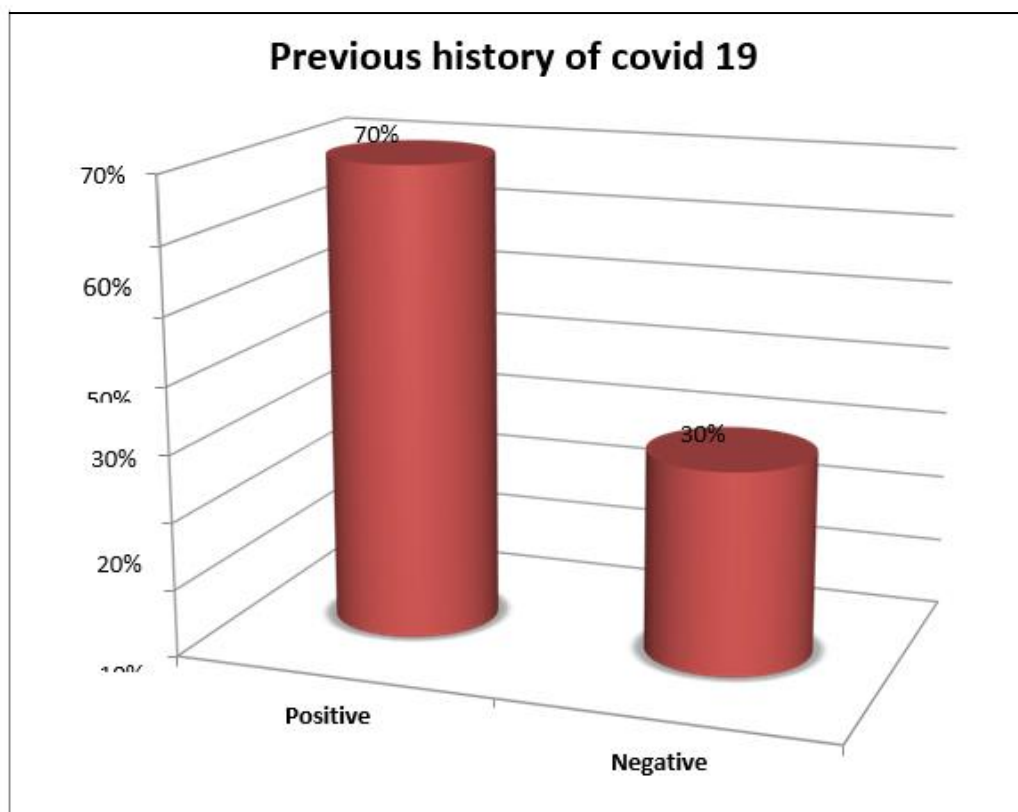
Majority of the patients 33(66%) had moderate level of knowledge, 12(24%) had adequate level of knowledge and 5(10%) had inadequate level of knowledge. The mean and standard deviation of level of knowledge regarding home remedies to prevent black fungus among post covid patients residing (17.08-4.31) respectively.

**Table 1:- Frequency and percentage wise distribution of demographic variables among post covid patients.
(N=50)**

| SL. NO | DEMOGRAPHIC VARIABLES | FREQUENCY (N) | PERCENTAGE(%) |
|-----------|-------------------------------------|---------------|---------------|
| 1 | Age | | |
| | A) 20-30 years | 11 | 22 |
| | B) 30-40 years | 17 | 34 |
| | C) 40-50 years | 10 | 20 |
| | D) >50 years | 12 | 24 |
| 2 | Gender | | |
| | A) Male | 21 | 42 |
| | B) Female | 29 | 58 |
| | C) Transgender | 0 | 0 |
| 3 | Religion | | |
| | A) Hindu | 50 | 100 |
| | B) Muslim | 0 | 0 |
| | C) Christian | 0 | 0 |
| | D) Others | 0 | 0 |
| 4 | Education | | |
| | A) Illiterate | 8 | 16 |
| | B) Primary school | 11 | 22 |
| | C) Secondary school | 22 | 44 |
| | D) Graduate | 9 | 18 |
| 5 | Job type | | |
| | A) Government job | 2 | 4 |
| | B) Private job | 29 | 58 |
| | C) Own business | 6 | 12 |
| | D) Unemployed | 13 | 26 |
| 6 | Marital status | | |
| | A) Unmarried | 10 | 20 |
| | B) Married | 35 | 70 |
| | C) Divorced | 5 | 10 |
| 7 | Type of family | | |
| | A) Nuclear | 33 | 66 |
| | B) Joined family | 14 | 28 |
| | C) Single | 3 | 6 |
| 8 | Having children | | |
| | A) One children | 5 | 10 |
| | B) Two children | 29 | 58 |
| | C) 2 or more children | 16 | 32 |
| 9 | Type of Residence | | |
| | A) Rural | 46 | 92 |
| | B) Urban | 4 | 8 |
| 10 | Previous history of covid 19 | | |
| | A) Positive | 35 | 70 |

| | | | |
|-----------|-----------------------------------|----|----|
| | B) Negative | 15 | 30 |
| 11 | Having PPE | | |
| | A) Yes | 42 | 84 |
| | B) No | 8 | 16 |
| 12 | Duration of steroid intake | | |
| | A) 14 days | 43 | 86 |
| | B) 30 days | 6 | 12 |
| | C) 15 days | 1 | 2 |
| 13 | Any lifestyle diseases | | |
| | A) Yes | 15 | 30 |
| | B) No | 35 | 70 |





ASSOCIATION BETWEEN THE LEVEL OF KNOWLEDGE REGARDING HOME REMEDIES TO PREVENT BLACK FUNGUS AMONG POST COVID PATIENTS RESIDING WITH THEIR SELECTED DEMOGRAPHIC VARIABLES

| SL. NO | DEMOGRAPHIC VARIABLES | LEVEL OF KNOWLEDGE | | | | | | Chi-square X ² and PValue |
|--------|-----------------------|--------------------|-----|----------|------|----------|------|---------------------------------------|
| | | INADEQUATE | | MODERATE | | ADEQUATE | | |
| | | N | % | N | % | N | % | |
| 1 | Age | | | | | | | X ² =13.2 Df=6 p =0.04 *S |
| | A) 20-30 years | 0 | 0 | 9 | 27.3 | 2 | 16.7 | |
| | B) 30-40 years | 2 | 40 | 11 | 33.3 | 4 | 33.3 | |
| | C) 40-50 years | 3 | 60 | 7 | 21.2 | 0 | 0 | |
| | D) >50 years | 0 | 0 | 6 | 18.2 | 6 | 50 | |
| 2 | Gender | | | | | | | X ² =2.40 Df=2 p =0.301 NS |
| | A) Male | 1 | 20 | 13 | 39.4 | 7 | 58.3 | |
| | B) Female | 4 | 80 | 20 | 60.6 | 5 | 41.7 | |
| | C) Transgender | 0 | 0 | 0 | 0 | 0 | 0 | |
| 3 | Religion | | | | | | | CONSTANT |
| | A) Hindu | 5 | 100 | 33 | 100 | 12 | 100 | |
| | B) Muslim | 0 | 0 | 0 | 0 | 0 | 0 | |
| | C) Christian | 0 | 0 | 0 | 0 | 0 | 0 | |
| | D) Others | 0 | 0 | 0 | 0 | 0 | 0 | |
| 4 | Education | | | | | | | X ² =12.02 Df=6 p =0.05 |
| | A) Illiterate | 2 | 40 | 2 | 6.1 | 4 | 33.3 | |

"A study to assess the home remedies to prevent black fungus among post covid patients ..

| | | | | | | | | |
|----------|---------------------|---|----|----|------|---|------|-----------------------------|
| | B) Primary school | 0 | 0 | 10 | 30.3 | 1 | 8.3 | *S |
| | C) Secondary school | 3 | 60 | 13 | 39.4 | 6 | 50 | |
| | D) Graduated | 0 | 0 | 8 | 24.2 | 1 | 8.3 | |
| 5 | Job type | | | | | | | $X^2=2.42$ Df=6 p =0.876 |
| | A) Government job | 0 | 0 | 2 | 6.1 | 0 | 0 | |
| | B) Private job | 4 | 80 | 18 | 54.5 | 7 | 58.3 | |

| | | | | | | | | |
|-----------|-------------------------------------|---|-----|----|------|----|------|--|
| | C) Own business | 0 | 0 | 4 | 12.1 | 2 | 16.7 | NS |
| | D) Unemployed | 1 | 20 | 9 | 27.3 | 3 | 25 | |
| 6 | Marital status | | | | | | | $X^2=4.33$ Df=6 p =0.632 NS |
| | A) Unmarried | 1 | 20 | 7 | 21.2 | 2 | 16.7 | |
| | B) Married | 4 | 80 | 24 | 72.7 | 7 | 58.3 | |
| | C) Divorced | 0 | 0 | 2 | 6.1 | 3 | 25 | |
| 7 | Type of family | | | | | | | $X^2=1.15$ Df=4 p =0.885 NS |
| | A) Nuclear | 3 | 60 | 23 | 69.7 | 7 | 58.3 | |
| | B) Joined family | 2 | 40 | 8 | 24.2 | 4 | 33.3 | |
| | C) Single | 0 | 0 | 2 | 6.1 | 1 | 8.3 | |
| 8 | Having children | | | | | | | $X^2=2.92$ Df=6 p =0.818 NS |
| | A) One children | 1 | 20 | 4 | 12.1 | 0 | 0 | |
| | B) Two children | 2 | 40 | 20 | 60.6 | 7 | 58.3 | |
| | C) 2 or more children | 2 | 40 | 9 | 27.3 | 5 | 31.7 | |
| 9 | Type of Residence | | | | | | | $X^2=1.91$ Df=6 p =0.928 NS |
| | A) Rural | 5 | 100 | 30 | 90.9 | 11 | 91.7 | |
| | B) Urban | 0 | 0 | 3 | 9.1 | 1 | 8.3 | |
| 10 | Previous history of covid 19 | | | | | | | $X^2=2.92$ Df=2 p =0.232 NS |
| | A) Positive | 5 | 100 | 21 | 63.6 | 9 | 75 | |
| | B) Negative | 0 | 0 | 12 | 36.4 | 3 | 25 | |
| 11 | Having PPE | | | | | | | $X^2=1.07$ Df=2 p =0.585 NS |
| | A) Yes | 5 | 100 | 27 | 81.8 | 10 | 83.3 | |
| | B) No | 0 | 0 | 6 | 18.2 | 2 | 16.7 | |
| 12 | Duration of steroid intake | | | | | | | $X^2=5.89$ Df=4 p =0.207 NS |
| | A) 14 days | 3 | 60 | 28 | 84.8 | 12 | 100 | |
| | B) 30 days | 2 | 40 | 4 | 12.1 | 0 | 0 | |
| | C) 15 days | 0 | 0 | 1 | 3 | 0 | 0 | |
| 13 | Any lifestyle diseases | | | | | | | $X^2=6.35$ Df=6 p =0.384 NS |
| | A) Yes | 0 | 0 | 11 | 33.3 | 4 | 33.3 | |
| | B) No | 5 | 100 | 33 | 66.7 | 7 | 66.7 | |

It shows the significant association between the level of knowledge regarding home remedies to prevent black fungus among post covid patients residing with their selected demographic variables.

The other demographic variable had not shown statistically significant association between the level of knowledge regarding home remedies to prevent black fungus among post covid patients residing with their selected demographic variables respectively.

V. DISCUSSION:

This chapter deals with Discussion. The present study was attempted to a study to assess the home remedies to prevent black fungus among post covid patients residing at selected community area, puducherry.

This study was conducted to assess the home remedies to prevent black fungus among post covid patients residing at selected community area, puducherry. A descriptive Research Design study was conducted among 50 silukaripalayam post covid patients. The nature and purpose of the study was explained to clients and get informed consent obtained from the participants. Each client was selected through purposive sampling method and assess the home remedies to prevent black fungus.

VI. CONCLUSION AND RECOMMENDATIONS:

The present study was conducted to a study to assess the home remedies to prevent black fungus among post covid patients residing at selected community area, puducherry. A descriptive Research Design was adopted in this study.

The nature and purpose of the study was explained to selected clients and get informed consent obtained from the participants. Each client was selected through purposive sampling method and assess the home remedies to prevent black fungus. The collected data were computerized and analyzed. The analysis was done using both descriptive and inferential statistics.

A study to assess the home remedies to prevent black fungus among post covid patients residing at selected community area at puducherry. The findings of the study revealed that majority of the patients 33(66%) had moderate level of knowledge, 12(24%) had adequate level of knowledge and 5(10%) had inadequate level of knowledge.

The mean and standard deviation of level of knowledge regarding home remedies to prevent black fungus among post covid patients residing is (17.08±4.31) respectively.

NURSING IMPLICATIONS:

The study had implications for nursing practice, nursing education, nursing administration and nursing research.

NURSING PRACTICE:

The community area nurses must have some knowledge about black fungus and take care of high risk population.

NURSING EDUCATION:

The nurse educated the general people about the black fungus in the community settings and handling of high risk clients. Provide a necessary health education, provide a activity therapy or routine works etc.,

NURSING RESEARCH:

Numbers of studies are being conducted to assess the home remedies to prevent black fungus among post covid patient residing at selected community area at puducherry. Nursing studies are comparatively less in this community field. Different studies have to be conducted further prevalence of infection.

NURSING ADMINISTRATION:

Nurse's administrators can make necessary steps to spread awareness about black fungus infection. Nurse's administration can organize awareness program or some participation events about black fungal infection.

RECOMMENDATIONS:

- A similar study can be conducted by large number of sample in future.
- The study was conducted to particular group of people at particular age.
- A prospective study can also be conducted.
- The study can do at the large number of samples.
- The study can done by using various practices.
- The study can be implemented at the various states of India.

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