The Distribution of Fungal Seasonal Frequency in The Air of Zahedan, Iran

Qureshi, M.I.

Zahedan University of Medical Sciences

Zangiabadi, M.

Zahedan University of Medical Sciences

Ebrahimzadeh, A.

Zahedan University of Medical Sciences

Rezaee Firoozabadi, M.

Zahedan University of Medical Sciences

Rood bari, M.

Zahedan University of Medical Sciences

Corresponding Author: Qureshi, MI

E.mail:Mazhar-i-qureshi@yahoo.com

Abstract

Background and Objective: Airborne fungi have been proposed as the most common cause of some adverse health effects such as skin, eye and respiratory disorders; therefore, we carried out an aerobiological study to determine fungal seasonal frequency in the air of Zahedan, Iran.

Materials and Methods: The air samples (n=1080) of this descriptive cross sectional study were obtained, in different hours, from different urban places of zahedan in 2001, and studied via sabouraud dextrose agar(S.D.A).

Results: 1917 colonies were found in the 1080 studied plates and indicated that the most Common fungi were aspergillus(41%), penicillium(33%) and rhizopus(6.8%), based on chi square, The fungal frequencies in the evening(39.3%), at noon(38.2%) and in the morning(22.5%) were not statistically different. Highly contaminated area was down town (Bazar) and then hospitals. There was significant correlation (p<0.001) between fungal frequency and the seasons- winter (15.9%) and summer (31.4%).

Conclusion: Based on the results, we suggest strongly improving environmental hygienic condition of the buildings and passages and rapid waste material disposal. It seems that the most effective strategy in decreasing fungal disorder is performing some educational programs.

Keywords: Fungal agents, air, Zahedan.