# Introduction & Aim of The Work

# INTRODUCTION

The most common causes of serious illness and death in intensive care unit (ICU) patients are bacterial infections ***(Nathens et al., 1992)***. Infection continuos to be a major cause of morbidity and mortality in ICU patients and in other immunosuppressed patients ***(Civetta, 1997)***. Viruses and protozoa can also cause lethal infections in ICU patients ***(Greenberg, 1997)***.

Many of fungal infections arise from an endogenous source as ICU patients are susceptible persons as they are under antibiotics and steroids treatment ***(Kremery et al., 1999)***.

Also those under immunosuppressive drugs such as cancer patients particularly those with leukemia and transplant recipients are more prone to fungal infections ***(Andruits et al., 2000)***. However, a proportion of infections are found to be caused by contaminated equipment or transmitted on the hands of staff ***(Wilson, 2000)***.

Antifungal drug resistance together with the emergence of novel species or species previously not associated with human disease as potential pathogens, have also greatly contributed to the drastic increase in fungal infections ***(Jabra-Rizk et al., 2000)***.

Fungal infections are important causes of morbidity and mortality in ICU patients. The predominant fungal pathogens are *Candida* species, *Aspergillus* species, *Cryptococcus neoformans,* the *Phymocytes*, *Trichosporon* species, *Fusarium* species and *Malassezia* species ***(Ozalp et al., 2001)***.

*Candida* species cause a variety of diseases which can be classified into infectious disease and allergic disease. Infectious diseases included mucocutaneous candidiasis cutaneous, candidiasis and systemic candididasis ***(Jawetz et al., 2001)***.

*Aspergillus* species that cause human infection includes *Aspergillus fumigatus, Aspergillus flavus* and *Aspergillus niger*. They can cause asymptomatic infection, hypersensitivity pneumonitis or disseminated, overwhelming infection in immunocompromised hosts ***(Jawetz et al., 2001)***.

The centers for disease control (CDC) conducted a large study to determine the efficacy of infection control programs. These programs should focus on devices used in elderly patients as well as adequate hygiene and nutrition ***(Smith et al., 1991)***.

# AIM OF THE WORK

The objective of this work is to screen the Intensive Care patients in an attempt to describe the prevalence of fungal infection. And to test the efficacy of some diagnostic laboratory techniques.