## Can neutropenic cancer patients be nursed effectively nursing essay



On my clinical rotation I have observed that oncology patients are being nursed in wards which have patients with other conditions. Some of the oncology patients were severely neutropenic. This poses a greater risk for infections since the white blood cells needed to fight infection is very low. It has been noted that patients with infectious diseases such as tuberculosis are being nursed on the same ward, along with burn patients and HIV patients. It was observed however that the most neutropenic patients were being barrier nursed. However it was still observed that many times members of staff entered the room without wearing a mask or washing their hands and most of the times the patient also wore no mask. The cleaning staff also entered the rooms and cleaned without wearing masks and would sometimes clean an infectious person's room prior to cleaning the cancer patient room. These observations have led me to ask the question whether neutropenic cancer patients can be effectively nursed on a ward with others patients of contagious illnesses.

This issue is significant to oncology nursing and cancer care since it addresses the practices of nursing and also plays an important part in patient outcomes.

It has been estimated that each year in the United States there were sixty thousand cases of cancer patients hospitalized with neutropenia. About two thirds of that number has reported infections and the estimated inpatient mortality rate of those patients is seven percent (Segal, 2008).

Infections also cost hospitals a lot of money that could be spent on other health issues. It was estimated that infections have added thirty billion

dollars to the US hospital cost while consumers also have to pay part of the cost (McCaughey, 2005).

A search was carried out using internet data bases and articles were found which lends support to the use of barrier nursing and other methods as effective tools in infection control.

Barrier Nursing is nursing a patient so as to " erect a barrier to the passage of infectious pathogenic organisms between the contagious patient and other patients and staff in the hospital, and thence to the outside world" (Last, 2010). It involves the use of having the patient isolated in a separate room and if not possible they are screened on an open ward. The nurse would wear a gown, mask and gloves when attending to the patient and observe strict hand washing and aseptic techniques (Last, 2010).

Reverse barrier nursing or protective isolation is where the susceptible patient is isolated to prevent them from getting infections. It involves limiting the number of staff and visitors that interact with the patient especially if they are ill. It also involves limiting attending to a contagious patient then attending to the immunocompromised patient. All staff should be aware of the precautions and the doors should be appropriately labeled (The Leeds Teaching Hospital, 2003).

According to the American Cancer Society (2009), neutropenia is described as a deficiency of neutrophils. Neutrophils are the largest number of white bloods cells in the body and are crucial to the body's defense system. Some cancers such as the lymphomas and some leukemia's directly affect the treatment received such as chemotherapy and radiation results in damage to the immune system (American Cancer Society, 2009).

When the immune system is damaged or suppressed it is referred to as immunosupression. When this occurs the white blood cells especially neutrophils are unable to fight off infections and the person is highly susceptible to getting an infection. Infections can be caused by bacteria, viruses, parasites or fungi (American Cancer Society, 2009).

Some studies have suggested that proper hand hygiene by the patient and the nurse along with immunization, antifungal and antibacterial prophylaxis have show to be the most effective methods of infection control. Avoiding contact with persons who are ill with respiratory illnesses has also been suggested (Zitella, Friese, Hauser, Gobel, Woolery, O'Leary and Andrews, 2006).

The Center for Disease Control recommends hand washing as the most important means of spreading infection especially in susceptible populations such as the immunocompromised. It is also important between different patients in high risk units such as between cancer patients and HIV patients (LeTexier, 2000).

Other studies have suggested that barrier nursing is needed for all immunocompromised patients. Some infections are seen mostly in certain disease populations for example Candida infections are found in many HIV patients. However the question of whether neutropenic patients should be housed close to HIV patients needs to be further researched. Rather strict hygiene practices along with prophylactic treatment have been suggested (Lortholary& Dupont, 1997).

It is suggested that all clinical staff and other health care workers are periodically trained in infection control and there should be consistent evaluation of techniques being used. The nurse is in a unique position to ensure that infection spread is reduced by carrying out and monitoring aseptic practices; ensuring the environment is clean to prevent spread of micro organisms and to protect the patient from ill staff and visitors (Collins, n. d).

Some studies have also indicated that there is little evidence that reverse barrier nursing is effective especially where there is no laminar air flow or HEPA-filtered rooms available. However some studies indicate that the filtered rooms can reduce morbidity and mortality in patients with leukemia (Seshadri& Baumann, 2008).

The use of reverse isolation of any type for patients with solid tumors who are neutropenic is discouraged since there are no studies to prove it is helpful rather it can cause anxiety and confusion for patients, their families, and healthcare workers (Seshadri& Baumann, 2008).

After reviewing the literature the question can be answered that neutropenic patients can be effectively nursed on these wards with the collaboration of all the members or the health care team in carrying out proper hygienic methods.