

## **Knowledge and Practices of Oncology and Bone Marrow Transplant Nurses in the Management of Neutropenic Fever in Patients Undergoing Chemotherapy**

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## Knowledge and Practices of Oncology and Bone Marrow Transplant Nurses in the Management of Neutropenic Fever in Patients Undergoing Chemotherapy

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**Introduction:** Febrile neutropenia is a significant complication from chemotherapy, often being the initial indication of infection in cancer patients. Neutropenic fever requires efficient management. Objectives: To determine knowledge and infection control practices of oncology and Bone Marrow Transplant Nurses in managing neutropenic fever in chemotherapy patients.

**Methodology:** A cross-sectional survey was conducted from April to June 2024 to assess nurses' knowledge and infection control practices regarding neutropenic fever. A sample of 105 oncology and bone marrow transplant nurses was recruited from four tertiary care hospitals in Rawalpindi and Islamabad. Convenient sampling was employed for enrolling participants. The data were collected using a structured questionnaire comprising three sections: demographic information, a 30-item true/false neutropenia knowledge questionnaire, and a 16-item practice-based questionnaire developed. Data were analyzed using SPSS version 26.0. Results were presented as frequencies and percentages, and associations were tested using the chi-square test.

**Results:** The study revealed a significant correlation between knowledge scores and infection control practices. Nurses had an average knowledge score of  $23.04 \pm 4.0$ , with 50.5% demonstrating good knowledge. Infection control adherence averaged  $11.91 \pm 2.37$ , with 44.8% showing good practices.

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The correlation was significant (Pearson Chi-Square=20.975,  $p<0.001$ ).

**Conclusion:** It was concluded that nurses showed a solid understanding of neutropenia and generally followed infection control procedures, though improvements in efficiency and consistency are needed. Targeted training, ongoing education, and regular workshops can reinforce knowledge and promote best practices among nursing staff, ultimately enhancing infection control measures and improving patient outcomes.