

## Cytotoxic Drugs: Handling Practices and Clinical Manifestations among Hospital Staff

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**Abstract :** Objectives : To determine the handling practices of cytotoxic drugs and to describe clinical manifestations expressed by hospital personnel of Sidi Bel Abbes during the year 2014. Methods: Sectional descriptive study conducted in 3 center university hospital units (Hematology, Oncology and Urology) and Gynecology of EHS Sidi Bel Abbes. A questionnaire was administered to hospital workers regularly exposed to cytotoxic drugs. A work-place visit was performed to have an overview about working conditions. The Cytotoxic Contact Index (CCI) was calculated for each nurse on a period of 15 working days. Treatment of the results was done using SPSS software. Results: The survey reveals that 22 men and 58 women are exposed to cytotoxic drugs for an average of 7 years. Many symptoms such as ocular irritation (38,75%), throat irritation (56,25%), headache (68,75%), dizziness (43,75%), nausea (37,5%), metallic taste (30%), were reported with high frequency. Are noted in the offspring, 3 congenital anomalies, 2 diaphragmatic hernia and a cleft palate. The Cytotoxic Contact Index (CCI) was higher than 3 among Oncology nurses and higher than 1 for most of the nurses of Hematology and Gynecology service. The wearing of personal protective clothing was not respected by all workers: (22/23) wear gloves and (20/23) wear a mask, (5/23) wear a cap, (2/23) wear glasses. Only 3 nurses have benefited from continuous training on handling cytotoxic drugs. Conclusion: This study shows a high occupational exposure risk to cytotoxic drugs among persons handling these drugs and the necessity to apply rigorously all measures related to personal protection awareness and training of personnel to minimize these exposure.

**Keywords :** cytotoxic drugs, handling, clinical manifestations, hospital staff

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