Improving safety-related knowledge, attitude and practices of nurses handling cytotoxic anticancer drug: pharmacists’ experience in a general hospital, Malaysia.

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Source

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Abstract

BACKGROUND:

An increasing trend of cytotoxic drug use, mainly in cancer treatment, has increased the occupational exposure among the nurses. This study aimed to assess the change of nurses’ safety-related knowledge as well as attitude levels and subsequently to assess the change of cytotoxic drug handling practices in wards after a series of pharmacist-based interventions.

MATERIALS AND METHODS:

This prospective interventional study with a before and after design requested a single group of 96 nurses in 15 wards actively providing chemotherapy to answer a self-administered questionnaire. A performance checklist was then used to determine the compliance of all these wards with the recommended safety measures. The first and second assessments took 2 months respectively with a 9-month intervention period. Pharmacist-based interventions included a series of technical, educational and administrative support measures consisting of the initiation of closed-system cytotoxic drug reconstitution (CDR) services, courses, training workshops and guideline updates.

RESULTS:

The mean age of nurses was 32.2±6.19 years. Most of them were female (93.8%) and married (72.9%). The mean knowledge score of nurses was significantly increased from 45.5±10.52 to 73.4±8.88 out of 100 (p<0.001) at the end of the second assessment. Overall, the mean practice score among the wards was improved from 7.6±5.51 to 15.3±2.55 out of 20 (p<0.001).

CONCLUSIONS:

The pharmacist-based interventions improved the knowledge, attitude and safe practices of nurses in cytotoxic drug handling. Further assessment may help to confirm the sustainability of the improved practices.

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