

Improving Adherence to Safe Handling of Oral Hazardous Drugs and Contaminated Wastes

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Background

- Healthcare workers exposed to hazardous drugs are at increased risk for adverse reactions.
- The Oncology Nursing Society's (ONS) guidelines recommend using personal protective equipment (PPE) when administering chemotherapy and hazardous drugs (HD) and when disposing of wastes from patients receiving these drugs.
- Registered nurses (RNs) working on the Inpatient Oncology Unit in our Magnet-designated community hospital followed guidelines for administering intravenous (IV) but not oral chemotherapy and other hazardous drugs. Additionally, registered nurses and patient care assistants (PCAs) did not use PPE when disposing of hazardous wastes.

Purpose and Objectives

 To increase staff knowledge of and adherence to ONS guidelines related to safe handling of chemotherapy and other hazardous drugs and contaminated waste through an evidence-based educational intervention.

Target Population

 Registered nurses and Patient Care Assistants working on the Oncology Unit at our Magnet-Designated Community Hospital





Measurements

Adherence to safe handling guidelines was measured before and after the educational and Chemo Cart intervention

- Objectively using an observation check list
- Subjectively, using a 5-item survey adopted from the Hospital Safety Climate Scale (Gershon et al, 2000).

Iowa Model of Evidence-Based Practice Used as a Guide

Identify riggers/ opportunities

- RNs use HD/Chemo PPE when administering IV chemo, but not oral chemo or disposing of HD/chemo contaminated waste/bodily fluids
- PCAs do not have access to HD/Chemo PPE (locked in med room)
- Current ONS guidelines recommend using PPE when handling chemo/HD and disposing of waste

Question/Purpose

priority?

Will educating RNs & PCAs about the ONS guidelines for safe handling, and increasing accessibility to PPE through the implementation of a chemo/HD cart improve compliance with using PPE when administering oral chemo/HD administration and disposing of HD-contaminated waste?

Increasing nurse and nursing assistant safety is a priority our institution

Form a team

Obtained approval/support from Manager and formed a team of 6 RNs, including representation from nightshift and dayshift, as well as the clinical nurse educator and the in-house Nurse Research Scientist

Assemble, appraise and synthesize evidence

Is there sufficient 2 team leaders assembled, appraised and synthesized current literature consulting with the Nurse Research Scientist

Evidence suggests that exposure to hazardous drug contaminated bodily fluids

results in acute and long-term adverse health outcomes to healthcare workers

- Team meetings to discuss problem and plan intervention and implementation procedures
- Developed a survey and observation checklist to measure adherence to safety guidelines
- Collected pre-intervention data using survey and observation checklist
- Obtained chemo cart and supplies
- Educated/trained all the Oncology Unit's RNs and PCAs
- Collected post implementation data using surveys and observations
- Evaluated process and outcomes

Is change appropriate?

Integrate and Sustain

Practice Change

Design and Pilot Practice

Change

- Team members continued to use observation checklist for RNs and PCAs after implementation to reinforce practice change
- Team members created a strategy to reinforce the practice change by designing and giving a "I'm Protected" pin to staff members who were observed wearing required PPE.
- $\ensuremath{\blacksquare}$ Include the education on chemo cart to new hires during orientation

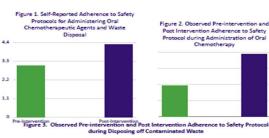
Disseminate Results

Disseminated internally (within hospital) and submitted for dissemination at the AANC 2023 Magnet Conference

Data Analysis

- We compared self-reported and observed adherence to safe handling guidelines for oral administration of hazardous drugs and disposal of contaminated wastes.
- All comparisons were performed using independent t- tests with Bonferroni correction; significance level set at P <0.05.</p>

Results





Implications for Practice

Increasing awareness of nurses and PCA about guidelines related to safe handling of chemotherapy/HD along with increasing accessibility to PPE increased adherence to safety guidelines.

