Effects of Eliminating Distractions during Medication Administration

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Background

Ranking 8th in the leading cause of death in the United States is medication errors with over 250,000 mediation errors resulting in the cause of death.[1]

Literature Review

Databases
- CINAHL
- EBSCO
- Google Scholar

Key Words
- Nursing
- Distractions
- Medication Errors
- Cause
- Interventions
- Vests
- Quiet Room

Article Selection Criteria:
- Peer Reviewed Article Journal
- Years: 2013-2018

PICOT Question

During medication administration, how does having a "no distraction" protocol compare with the standard protocol and what is the influence on medication errors?

Synthesis of Findings

Distractions
- F2F conversation, phone calls, call lights, bed alarms, missing supplies, malfunctioning equipment, & emergency situations[2]
- Interruption from other staff/ talking about other things[3]
- ↑ interruptions ↑ error %. Procedural errors 100% when there are 2-3 interruptions[4]

Interventions
- **"Do Not Disturb" Signs**
  - Door signs useful for nurses, patients, & relatives; nurses "showed signs on door when patients interrupted"; ↓ in patient interruptions; corresponding ↑ in time efficiency[5]
  - Signs ↓ interruptions in general, but had little effect on physicians, who ignored them[1]

- **Wearing a Vest**
  - Staff interruptions (32.7%), phone calls (13%), and gathering of supplies (8.2%), all ↓ with wearing a vest[6]
  - Interruption rates ↓ from 36.8 pre to 28.3 post[7]

- **Separate Medication Room/Quiet Zone**
  - Mean interruption rate ↓ from 51.8 to 30 interruptions/hour; interruption free time ↑ from 1.4 to 2.5 minutes. Mean med error rate/day↓ after implementation from 1.3 to 0.9 errors/day[8].
  - ↓ interruptions during med admin by 40.9% in 3-week period & nurses reported that zones↑ awareness of med safety[1]

Education
- Medication administration by pharmacist or APNs is a simple way to ↓ med admin error rates[9].
- ↓ in rates of med admin errors and related adverse drug events reported with nurse educational training[10]

Patient Safety
- Leadership is critical as medication safety will not evolve without a strong nursing administration emphasis on patient safety, focusing on the quality of the medication administration process[11]

Decision to Change

Decrease medication errors by:
- Implementation of Quiet zones
- Implementation of vests during medication administration
- Protected time for passing medications w/out interruptions
- Education seminar for implementation regarding new protocols
- Nursing Administration support

Evaluation

- ↓ in Interruption Rate
- ↓ in Medication Error
- Increase in nurses focus during medication preparation and administration
- ↑ Knowledge of Medication Error Causes
- In practice vests are unpopular with nurses; they doubt their effectiveness & don't feel comfortable wearing them.

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