



Medication Errors

PNAE

Research Proposal

Two phases



■ Phase one

- Collection of information from each country based on national literature and databases
- Use of the same form for data collection
- Presentation of the findings
- Publication of a short communication paper

■ Phase two

- Formulation of a structured questionnaire based on the findings from phase one and the literature
- Completion of the questionnaire by nurses, doctors and other health professionals in each country

Phase one



Definition

- Medication errors are defined as “any preventable event that may cause or lead to an inappropriate medication use or patient harm while in the control of the health care professional, patient or consumer”.
- Such events may be related to professional practice, health-care products, procedures and systems, including prescribing; order communication; product labelling, packaging and nomenclature; compounding; dispensing; distribution; administration; education; monitoring and use’.

Rate the next sources of errors in order of appearance in your country

- Illegibly written orders
- Dispensing errors
- Calculation errors
- Monitoring errors
- Administration errors

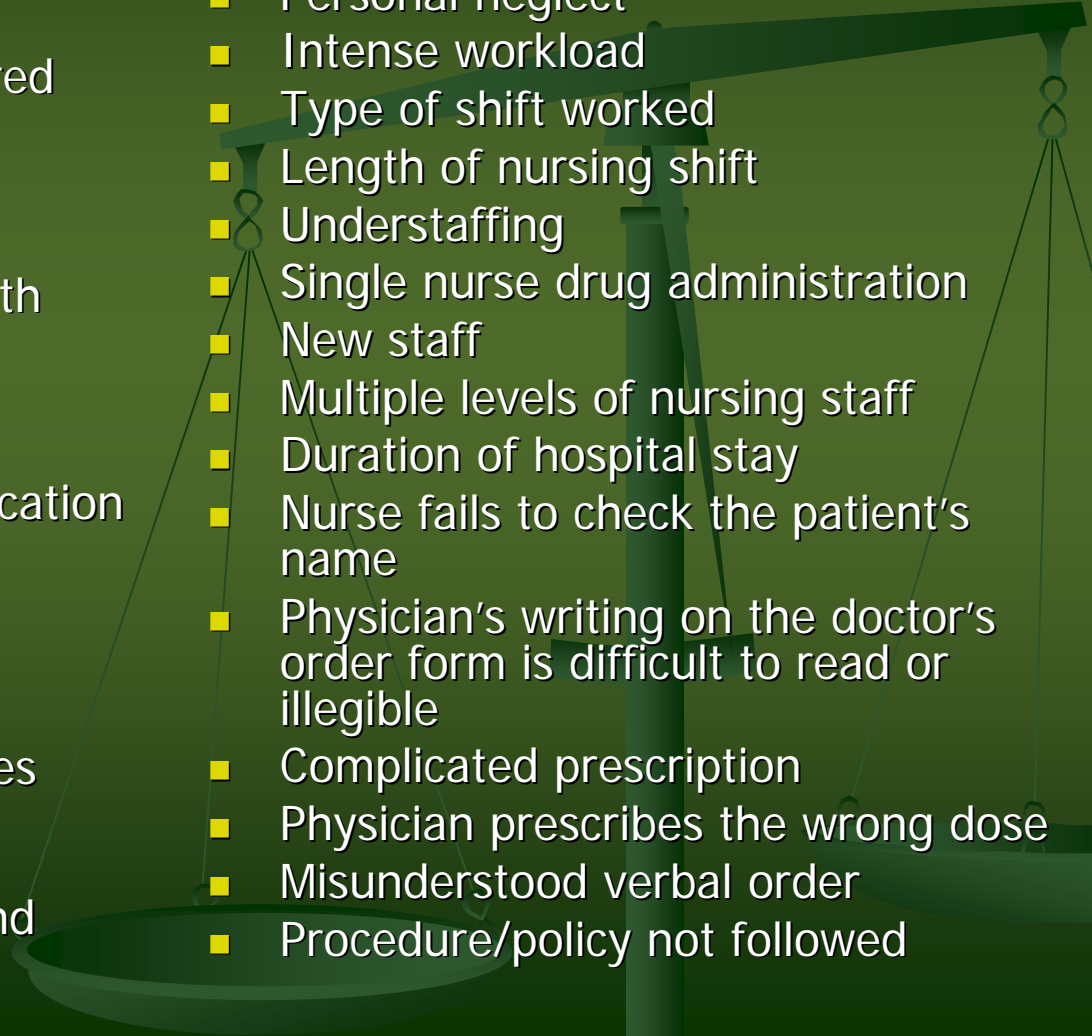


Name the leading factors concerning medication errors as considered by paediatric nurses

- Personal neglect
- Heavy workload
- Unfamiliarity with medication
- New staff
- Complicated order
- Complicated doctor-initiated order
- Unfamiliarity with patient's condition
- Insufficient training
- Insufficient hospital training
- ...

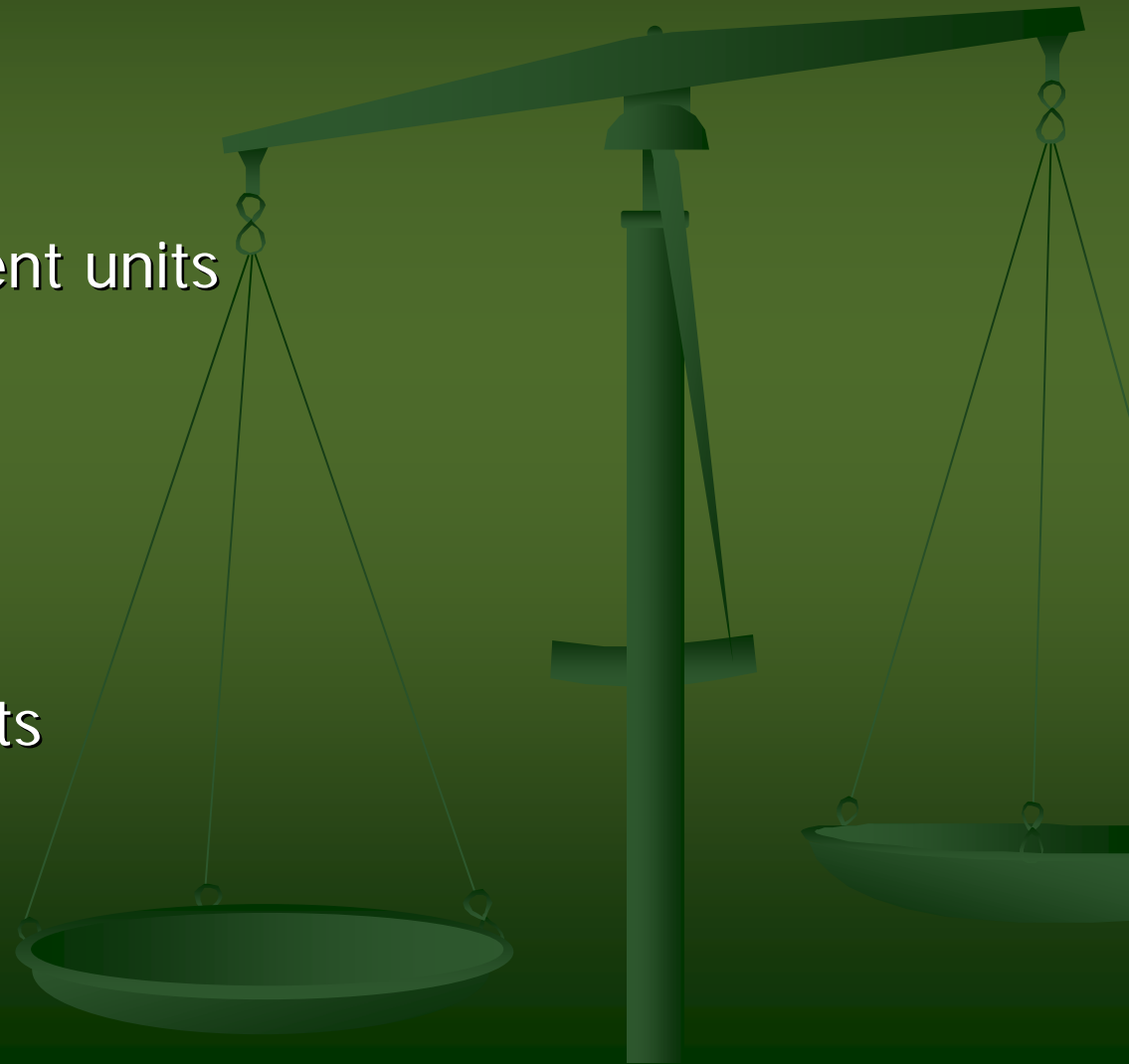


Name the leading factors concerning medication errors as considered by paediatric nurses

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- The need to solve other problems while administering drugs
 - Advanced drug preparation without rechecking
 - Number of medications prepared and administered
 - Interruptions/ distractions
 - Unfamiliarity with medication
 - Confusion between 2 drugs with similar names or similar labels
 - Medications with narrow therapeutic index
 - Poor quality or damaged medication labels/packaging
 - Unfamiliarity with patient's condition
 - Miscalculation of the dose
 - Confusion by the different types and functions of infusion devices/incorrect set up
 - Deficiencies in performance and knowledge
 - Stress
 - Burnout
 - Personal neglect
 - Intense workload
 - Type of shift worked
 - Length of nursing shift
 - Understaffing
 - Single nurse drug administration
 - New staff
 - Multiple levels of nursing staff
 - Duration of hospital stay
 - Nurse fails to check the patient's name
 - Physician's writing on the doctor's order form is difficult to read or illegible
 - Complicated prescription
 - Physician prescribes the wrong dose
 - Misunderstood verbal order
 - Procedure/policy not followed

Which are the most error-prone places of all hospital wards in a paediatric hospital?

- Pediatric wards
- Intensive care units
- Emergency department units
- Operating rooms
- Out patient clinics
- Medical Day Clinics
- Oncology departments
- Dialysis units
- Other



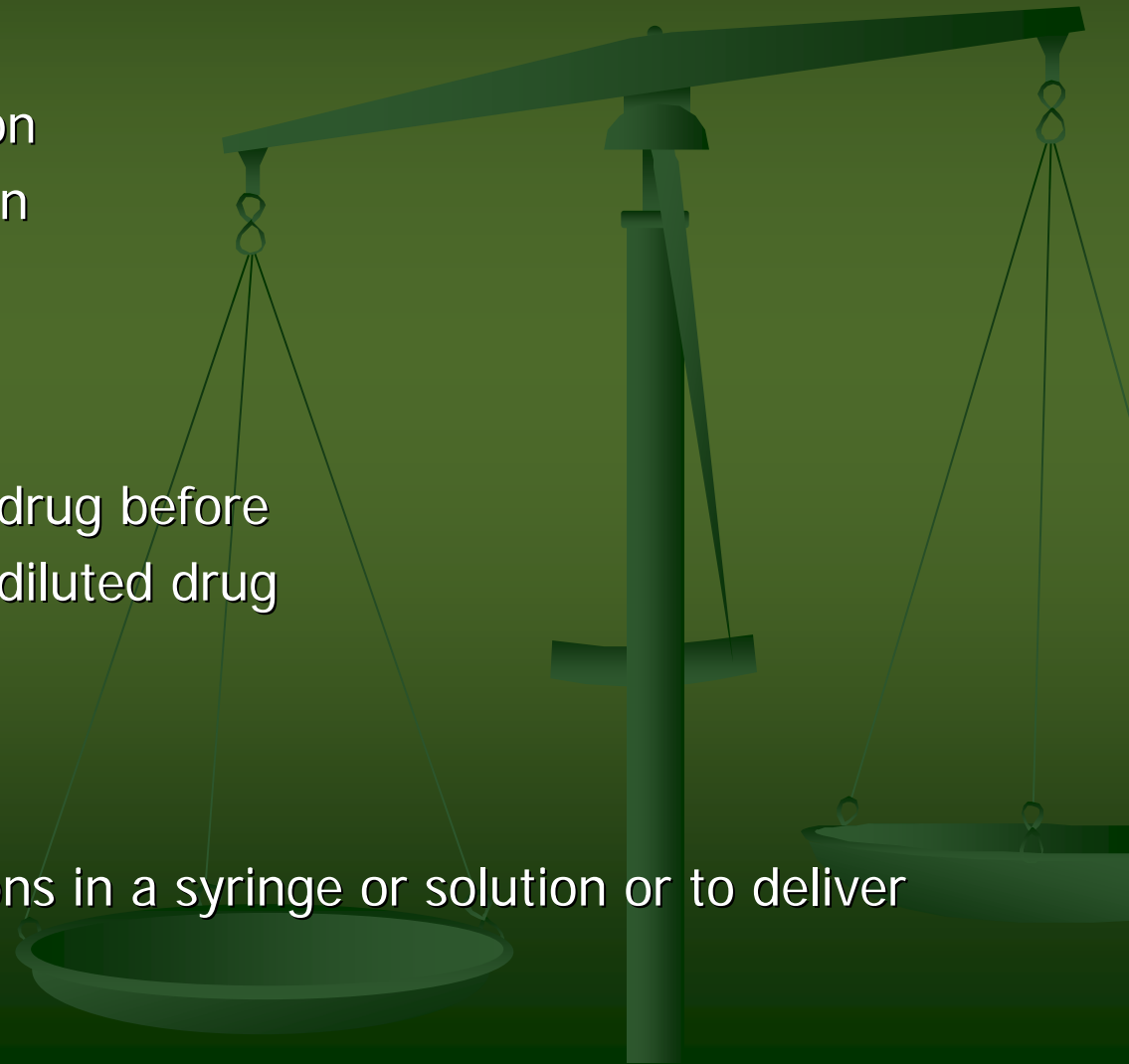
Which are the most common types of medication administration errors in paediatrics?

- Omission error
- Wrong dose
- Wrong route
- Wrong rate
- Wrong drug
- Wrong time
- Wrong duration of treatment
- Wrong patient
- Wrong preparation of a dose
- Incorrect administration technique



Which are the most common intravenous-related medication administration errors?

- Improper concentration
- Mistakes in calculations
- Wrong diluent's calculation
- Rapid bolus administration
- Wrong infusion rate
- Wrong dose
- Inappropriate diluents
- Inappropriate storage of drug before
- Inappropriate storage of diluted drug
- Incompatibility
- Expired drugs usage
- Patient identification
- Mixing multiple medications in a syringe or solution or to deliver drugs from one I.V. line

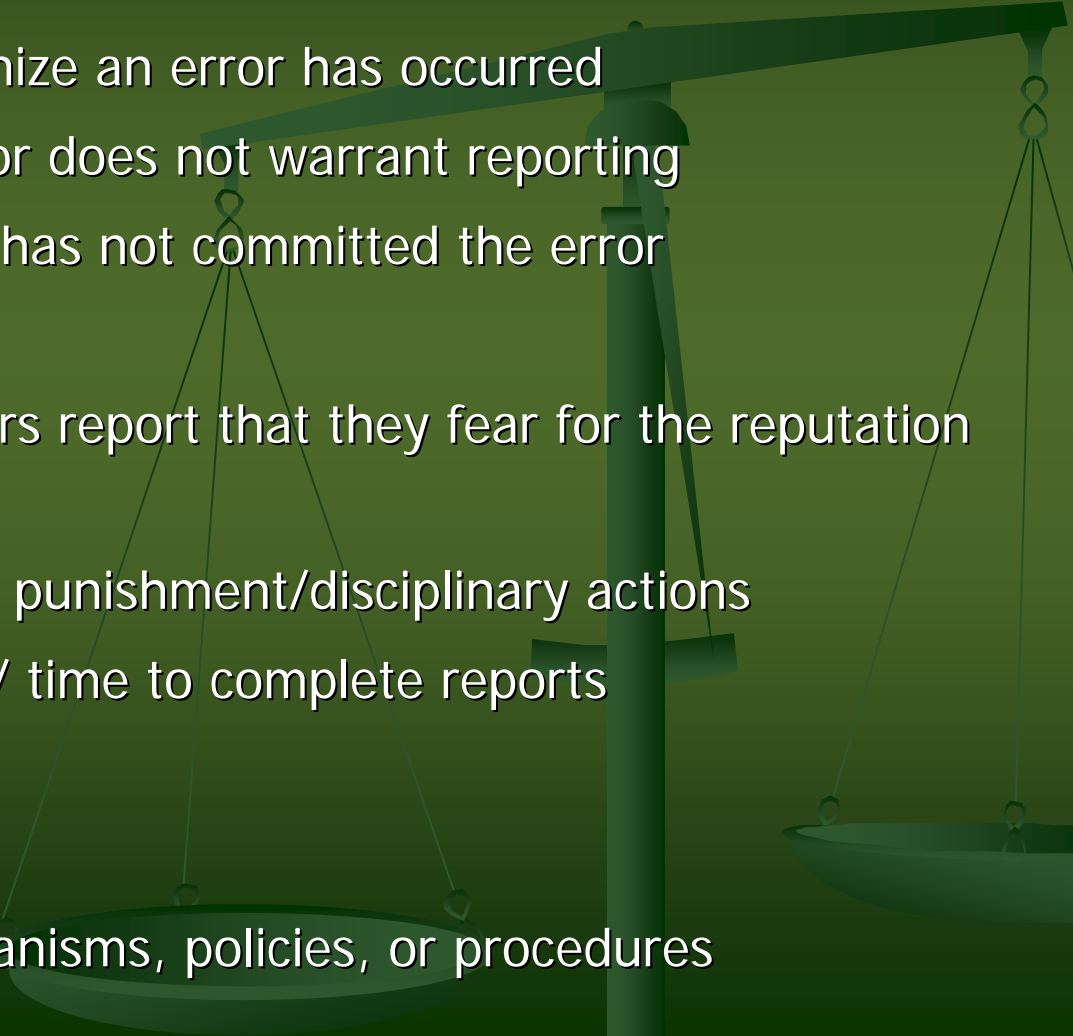




What is the estimated percent of medication administration errors?

What is the estimated percent of medication administration errors with harm resulting?

Which are the most important reasons for underreporting of medication errors among nurses?

- Disagreement over the definition of an error
 - Nurse's disability to recognize an error has occurred
 - Nurse's belief that the error does not warrant reporting
 - Nurse's belief that she/he has not committed the error
 - Nurse's embarrassment
 - Nurses and nurse managers report that they fear for the reputation of their service or unit
 - Nurse's fear of retaliation/ punishment/disciplinary actions
 - Degree of reporting effort/ time to complete reports
 - Wrong reporting time
 - Local/unit's culture
 - Confusing reporting mechanisms, policies, or procedures
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Which you think is the best tool for the estimation of actual number of medication errors?

- Previously validated tools (self assessment questions)
- Observation
- Chart review
- Incident reporting



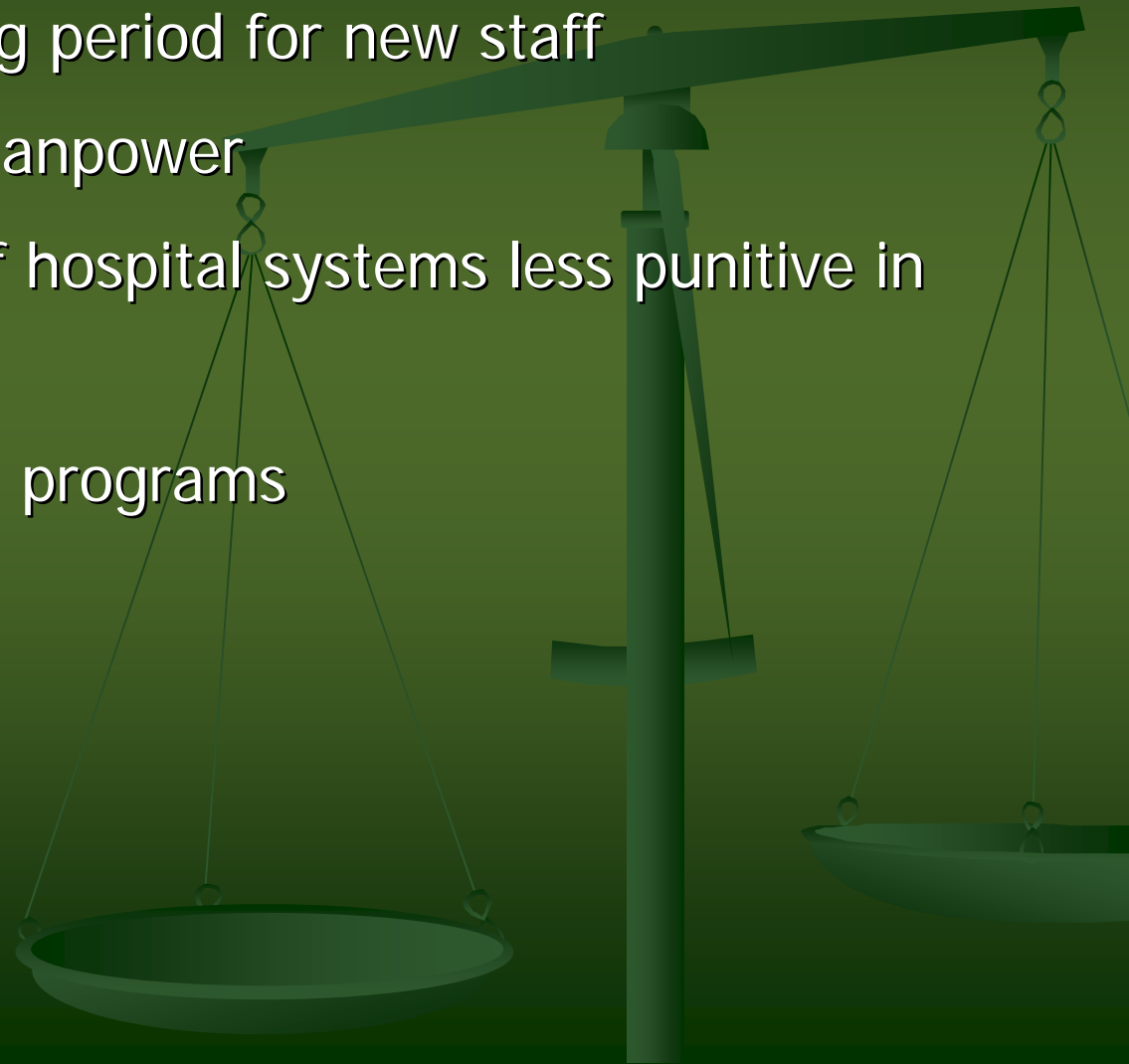
Rate the next stages from most often to less often responsible for medication errors:

- Prescription
- Transcription
- Dispensing
- Administration



Which do you think is the best way to minimize medication errors in paediatric care?

- Extending the training period for new staff
- Increasing nursing manpower
- Making the culture of hospital systems less punitive in nature
- Continuing education programs
- Use of technology
- ...



What have organizations done in your country to promote the reporting of medication errors and near misses?

- For example: discussions, educational programs, use of technology for instance automated dispensing cabinets, bar coding, more advanced infusion devices, computerized ways of signing out medications, hand-held personal digital assistants (PDAs), and wireless access to electronic medical records etc...

