



*INTERNATIONAL
ASSOCIATION OF
PEDIATRIC
NURSES*

Paediatric Nursing Associations of Europe Network

PAEDIATRIC AND NEONATAL MEDICATION ERRORS - QUESTIONNAIRE

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PARTICIPATED COUNTRIES

- **Austria**
 - **Martha Böhm (President)** Professional Organisation of Paediatric Nurses
- **Belgium**
 - **Bangels Anne-Marie (President of Pediatric Nurses)** NVKVV
- **Croatia**
 - **Dragica Bestak (President of Pediatric Nurses)** Croatian Nurses' Association
- **Italy**
 - **Immacolata Dall'Oglio, Simona Calza (Members)** Italian Pediatric Nurses' Group
- **Serbia**
 - **Dijana Otašević (President of Pediatric Sector)** Association of nurses, medical technicians and midwives of Republic of Serbia
- **Slovenia**
 - **Majda Oštir (Member of Pediatric Sector)** Nurses and Midwives Association of Slovenia
- **Switzerland**
 - **Schlüer Anna-Barbara (Nursing scientist + clinical nurse specialist)** Schweizerischer Berufsverband für Krankenpflege SBK
- **Greece**
 - **Petsios Konstantinos (President of Pediatric Sector)** Hellenic Nurses' Association
- **The Netherlands**
 - **M Van Haken (President of Dutch nurses pediatric section)** Dutch Nurses Association
- **United Kingdom**
 - **Fiona Smith (Adviser in Children and Young People's Nursing)** RCN

REPORTING AND RECORDING SYSTEMS

- **Does your country have an official national record of all medication errors?**
 - **Yes**
 - **Switzerland**
 - **United Kingdom**
 - **Belgium** (Under development)
 - **No**
 - **Austria**
 - **Slovenia**
 - **Serbia**
 - **Croatia**
 - **Italy**
 - **The Netherlands** (Many hospitals have their own reporting system)
 - **Greece** (Many hospitals have their own reporting system and there is a national drug organisation that keeps records of all drug side effects nationally)

IS IT POSSIBLE TO DISTINGUISH WHICH ERRORS RELATE TO NEONATES, CHILDREN AND YOUNG PEOPLE?

- **Yes**

- Switzerland

- UK

- Serbia (although there is no national record)

- **No**

- Belgium

IS IT POSSIBLE TO DISTINGUISH WHICH PROPORTION OF ERRORS ARE MADE BY:

× Doctors

Yes []

No []

+ Switzerland

+ UK

▪
▪

Belgium
Slovenia

× Nurses

Yes []

No []

+ UK

▪
▪
▪

Switzerland
Belgium
Slovenia

× Pharmacists

Yes []

No []

+ Switzerland

+ UK

▪
▪

Belgium
Slovenia

FACTORS INFLUENCING REPORTING OF MEDICATION ERRORS I

- Anonymity / Non anonymity (Austria, Switzerland, Belgium, Greece)
- Fear/Concerns of punishment (Slovenia, Serbia, UK, The Netherlands, Greece, Italy)
- Education level of nurses (Slovenia, Switzerland, Serbia, Greece)
- Fault management /lack of support (Austria, Belgium, Slovenia)
- “Safety” and “Professional” Culture (Austria, Belgium, Greece)
- Awareness of recognition of drug error including what constitutes a medication error (Slovenia, UK, Greece)

FACTORS INFLUENCING REPORTING OF MEDICATION ERRORS II

- Workload - Time (Switzerland, Slovenia, Greece)
- Staff ratio (Slovenia, Serbia, Greece)
- Awareness of reporting mechanisms (UK, Greece)
- Patient's harm (The Netherlands, Greece)
- Prevention/safety measures (Belgium)
- Responsibility level of nurses (Slovenia)
- Guilt and fear from public response (Slovenia)
- Ease of reporting mechanisms (UK)
- Hospital policy (Greece)
- Frustrations are reported (Belgium)

WHAT MEASURES HAVE BEEN INTRODUCED IN YOUR COUNTRY TO REDUCE MEDICATION ERRORS?

AUSTRIA

- Four eyes principle when using highly effective drugs
- The physician has to write down the correct name of generics (not only the active pharmaceutical ingredient)
- Computer system is used
 - The physician can use the name of the active pharmaceutical ingredient and the computer automatically finds the correct generic
- Use of Standards for preparing drugs, infusion, etc.
- Alert system
 - To report something like similar packages of drugs
- Checklists
 - eg For the use of drugs which are used infrequently (preparation, application, special details)

WHAT MEASURES HAVE BEEN INTRODUCED IN YOUR COUNTRY TO REDUCE MEDICATION ERRORS?

Switzerland

- Critical incident monitoring

Slovenia

- Recommendations from Ministry of health about safety measures
- Safety conference every year

Serbia

(Results from a national survey)

- Standards and normative in nursing
- Making good nursing practice guide
- Nursing education, with narrower specialization
- National evidence on nursing professional mistakes

BELGIUM

- Questionnaire to all hospitals by government about actions and culture in their hospital when an error took place.
- The next step was to organise an incident report programme in the hospitals (majority)
- Evaluation to a national reporting system within 2 years (the goal)
- University hospitals started two years ago and they are the leaders of the national programme on safety together with the government

- A list of high alert medication (A list of medication to be counted by two nurses)
- All calculations are written down
- Various syringes for IV and PO (purple)
- Locked anaesthetic drugs
- Identification of all drug prepared for the children (name, drug, administration,etc)
- Bracelet identification and systematic control right patient
- Dangerous medications have a warning and an extra cover (KCI)
- No medications in the rooms
- Locked nursing wards
- Every nurse prepares her own medications
- Control of home medication (parents will bring them to the hospitals)
- Discharge means all medication are given to the patient or throw away in pharmacy, nothing is kept on the ward
- List of firm name and generic name available
- T° control refrigerator for medication
- Systematic control of expiry date
- Reacar is sealed
- Time to use a medication after opening is listed
- Nothing is prescript in MEQ, the doctor will add the calculation in ML

ITALY

- Many hospitals have introduced the incidence reporting system and the root causes analysis.
- Moreover many hospital has procedures for prescribing, preparation and administration of medication, to prevent errors.
- *Culture of risk management is developing in Italy*

UNITED KINGDOM

- Wearing of red tabard to reduce interruptions and distractions
- Posters to educate patients, visitors and other professionals not to interrupt the nurse when wearing red tabard
- Introduction of care bundles
 - i.e. in relation to administration of gentamycin in neonatal care
- NPSA alerts, directives, tools and guidance
 - <http://www.npsa.nhs.uk/nrls/medication-zone/>
 - i.e. mistake proofing medication processes, rapid response reports, reviews of medication incidents and quarterly summary reports for individual hospitals, and specific medication safety research
- UK wide medication safety forum to share good practice and ideas
- Education and training including learning materials around safe use of injectable medicines and drug calculations
- Annual drug calculation test for all registered nurses
- Computerised prescribing programmes
- British National Formulary specifically for children
- Policies and protocols for single and double checking

UNITED KINGDOM

- Medication audit trails
- Different syringes for oral medication administration
- Different syringes for intrathecal administration
- Ward and unit based pharmacists
- Streamlining type of infusion devices used within hospital settings
- Training for use of infusion devices
- Ensuring registered nurse staffing levels are appropriate to enable focused time for medication administration
- Creation of learning organisation culture
- Electronic patient records along with electronic administration and pharmacy dispensing
- Patient own bedside medication lockers
- Improvements in labelling and packaging of medication
- Introduction of single use medication devices, safer connection devices
- Nursing and Midwifery standards and guidance for the administration of medications – www.nmc-uk.org
- Standards and guidance from the Royal College of Nursing www.rcn.org.uk

THE NETHERLANDS

- Pediatric prescription awareness
- Computer software/checks
- Drug preparation by specialists (pharmacists)
- Evaluation of health professionals' ability to calculate doses

GREECE

- Different levels of control before the drug administration
- Double check of the drug dialysis and documentation by two nurses
- Special drugs prepared by pharmacists
- Protocols for drug administration
- Training on drug administration (TEI, University, Hospitals' Education programmes, Staff training programmes)
- National record of drug effects
- Incident reports in each hospital but not in a national record

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???



Paediatric and Neonatal Medication Errors

A Position Statement by the Paediatric Nursing Associations of Europe (PNAE)

Introduction

The Paediatric Nursing Associations of Europe Network (PNAE) conducted a survey throughout 2009. The aim was to identify common practise concerning medication errors among different European countries and to share measures aimed at reducing medication errors.

This document represents a consensus position of the organisations representing paediatric nurses across many European countries (see http://www.rcn.org.uk/development/communities/specialisms/children_and_young_people/forums/other_forums_and_groups/paediatric_nursing_associations_of_europe).

Definition of errors

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’.

Key areas encompassed within the survey included gathering information about

- Reporting and recording systems
- Factors influencing the reporting of medication errors
- Measures taken to reduce medication errors

Reporting and recording systems

The survey found that some countries had introduced a national recording and reporting system. These included the Switzerland and the United Kingdom. Countries like Belgium reported that a system was currently under development. Other countries reported that individual hospitals had a reporting system in place.

Factors influencing reporting of medication errors

To do - summarise factors from Appendix 1.

See Appendix 1

PNAE members to discuss and rank what they consider to be the top 3 are in Appendix 1 (which we then cite here)

Reducing medication errors

See Appendix 2

PNAE members to discuss and rank what the top measures are from Appendix 2 (which we can then cite here)

Q: DO WE WANT TO RECOMMEND THAT CONSIDERATION IS GIVEN ACROSS EUROPE TO THE ABOVE FOR IMPLEMENTATION IN THEIR COUNTRY?

Q: DO WE WANT TO ASK FOR RESEARCH CONTACTS ACROSS EUROPE TO ENACT A MORE SPECIFIC SURVEY?

Useful websites for further information include:

Do we want to add here?

i.e.

<http://www.npsa.nhs.uk/nrls/medication-zone/>

www.nmc-uk.org

www.rcn.org.uk

Key stakeholders

Professional nursing association/organisation in each member state

EU and individual governments of member states

EFN

FePI

HOPE

Date agreed to be added

Appendix 1: **Factors influencing reporting of medication errors**

Respondents to the survey highlighted the following as key factors

- Ease of reporting mechanisms
- Awareness of reporting mechanisms
- Concerns re penalisation for reporting
- Recognition of drug error including what constitutes a medication error
- Anonymity
- Education level of nurses
- Blame culture
- Patient safety focus
- Workload and staffing levels
- Patient harm
- Responsibility level of nurses
- Hospital policies

Appendix 2: Measures taken to **reducing medication errors**

Remove duplications

- Standards for drug and infusion preparation
- Checklists for medication administration
- Alert system
- Critical system monitoring
- Safety conferences
- Nursing education, including specific education for nurses caring for neonates and children
- Different coloured syringes for IV and oral medications
- Locked anaesthetic drugs
- Identification of all drug prepared for the children (name, drug, administration etc)
- Bracelet identification and systematic control right patient
- Dangerous medications have a warning an a extra cover (KCI)
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- Every nurse prepares her own medications
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- Drug preparation by specialists (pharmacists)
- Evaluation of health professionals' ability to calculate doses
- Different levels of control before the drug administration
- Double check of the drug dialysis and documentation by two nurses
- Training on drug administration (TEI, University, Hospitals' Education programmes, Staff training programmes)
- National record of drug effects

POSITION STATEMENT

- Discuss final form during meeting
- Members of PNAE to comment and send written proposals on draft position statement
- Form final statement (KP and FS)
- Discuss next step (Six ICU's in volunteering base? or maybe one of each partner if there is a will)