



**PEDIATRIC NURSES ASSOCIATION OF EUROPE
34TH MEETING
OCTOBER 2019 ZADAR**

PAEDIATRIC EARLY WARNING SYSTEM (PEWS)

PNAE – ZADAR, CROATIA.

OCTOBER 2019

CATHERINE SHERIDAN RGN, RCN – IRISH NURSES AND MIDWIVES ORGANISATION

PEWS – WHAT WE KNOW...

- PEWS WIDELY USED INTERNATIONALLY – VARIED DESIGNS, NO UNIFORMITY
- LACK OF CONSENSUS ON WHICH PEWS MOST EFFECTIVE
- RRT VS METS – VARIATIONS OPERATIONALLY
- NO CONCLUSIVE EVIDENCE ON EFFECTIVENESS AND IMPACT ON CLINICAL PRACTICE
- POSITIVE TRENDS IN IMPROVED CLINICAL OUTCOMES: LESS CARDIAC ARRESTS, EARLIER RECOGNITION, EARLIER INTERVENTION, EARLY TRANSFER TO (P)ICU, SAFETY NETWORK IMPROVED
- PEWS VIEWED AS A SYSTEM, NOT JUST A SCORE – SAFETY CULTURE, IMPROVED COMMUNICATION, USER CONFIDENCE
- PEWS EDUCATION - UNCERTAINTY INTERNATIONALLY

(LAMBERT, V., MATTHEWS, A., MACDONELL, R. AND FITZSIMONS, J. (2017))

NEWER STUDIES 2018...

EPOCH CLUSTER RANDOMISED CLINICAL TRIAL (PARSHURAM ET AL., 2018)

- EXAMINED EFFECT OF PEWS ON ALL-CAUSE HOSPITAL MORTALITY IN 21 HOSPITALS/7 COUNTRIES
- 10 HOSPITALS USED PEWS, 11 “USUAL CARE”
- CONCLUDED THAT IMPLEMENTATION OF PEWS DID NOT SIGNIFICANTLY REDUCE ALL-CAUSE MORTALITY COMPARED WITH USUAL CARE SITES AND DOES NOT SUPPORT USE OF PEWS TO REDUCE MORTALITY.

IMPLEMENTING PEW SCORE SYSTEMS IN THE NETHERLANDS: FUTURE IMPLICATIONS (DE GROOT ET AL 2018)

- MIXED METHODS STUDY EXAMINED RESULTS OF IMPLEMENTATION OF PEWS AND GAIN INSIGHT INTO HCP ATTITUDES USING PEWS
- 5 HOSPITALS
- FOUND VARIABILITY IN DESIGN AND PROFESSIONAL ATTITUDES – BARRIERS AND FACILITATORS TO IMPLEMENTATION
- CONCLUDED THAT NATIONAL PEWS HIGHLY RECOMMENDED

PNAE PEWS SURVEY 2019

12 RESPONSES

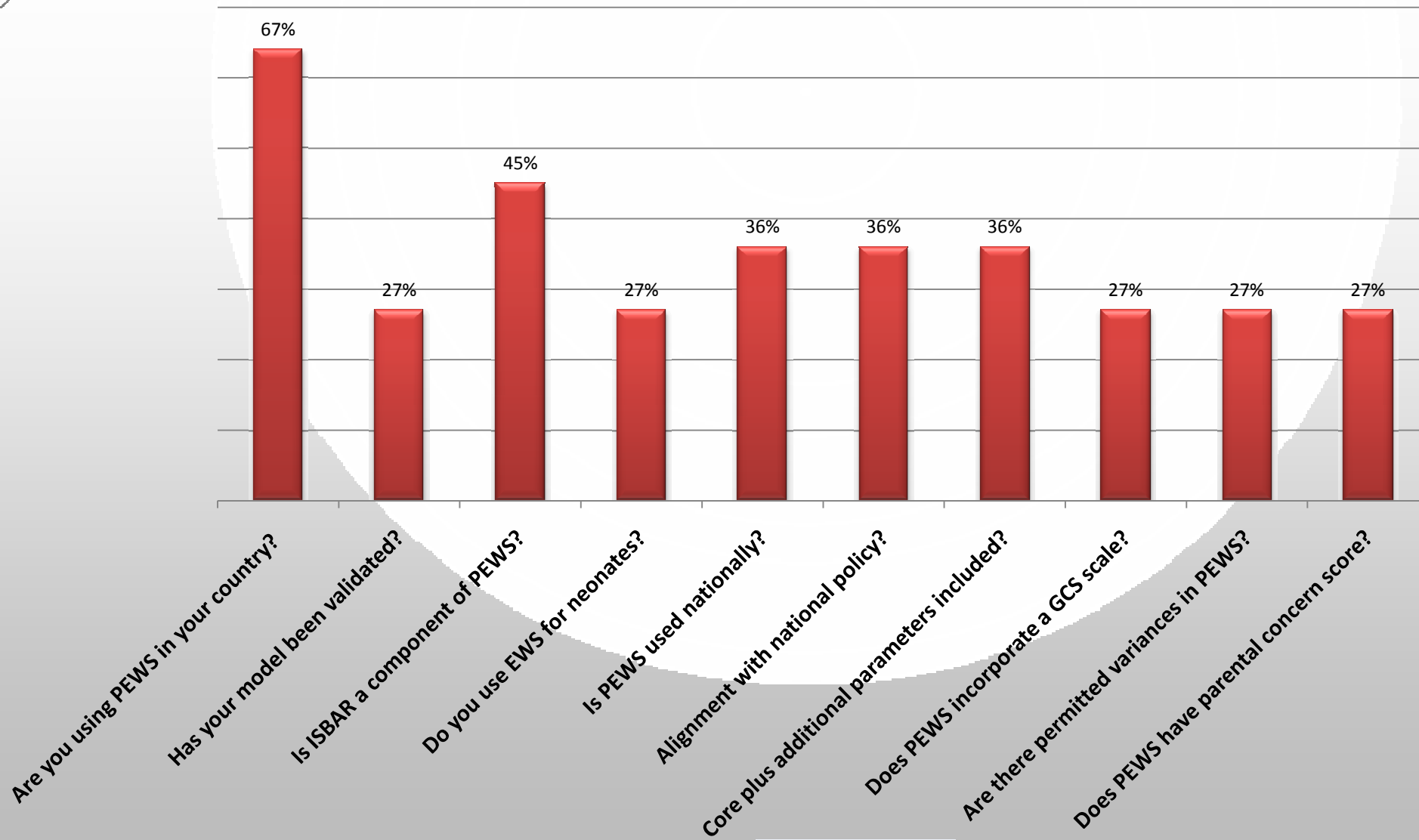
YES - USING PEWS (67%)

- BELGIUM — ADAPTED BEDSIDE WITHOUT B/P
- IRELAND — BEDSIDE PEWS, 2016
- ITALY — BEDSIDE PEWS, 2013
- LATVIA - PASQ (EUROPEAN UNION NETWORK FOR PATIENT SAFETY AND QUALITY OF CARE).
- NETHERLANDS — NEW NATIONAL MODEL, 2019
- NORWAY — BEDSIDE PEWS (PEDSAFE), 2013/14
- PORTUGAL — ADAPTED BEDSIDE MODEL
- SCOTLAND (2018) AND UNITED KINGDOM — STANDARDISED CHART IMMINENT UK/SCOTLAND/WALES

NO - NOT USING PEWS (33%)

- CROATIA — NATIONAL CHART AWAITING VALIDATION
- GREECE
- ICELAND - PRISM SCORE TO CALCULATE THE RISK OF DEATH IN CHILDREN IN INTENSIVE CARE AND SPECIAL RISK ASSESSMENT BARNAGÁT USED AT THE EMERGENCY DEPARTMENT TO ASSESS THE ACUITY OF THE CHILD
- SLOVENIA

PEWS - 11 European countries 2019



MASTERS (CLINICAL EDUCATION) THESIS 2019

**THE IRISH PAEDIATRIC EARLY WARNING SYSTEM EDUCATION PROGRAMME -
EXPLORING THE LEARNING EXPERIENCES OF REGISTERED CHILDREN'S NURSES AND REGISTERED GENERAL NURSES.**

Theme 1: Safer patients

- 1.1 Improved patient assessments
- 1.2 Rapid responses
- 1.3 Seeing children through a different lens

2. Theme 2: Empowerment and trust

- 2.1 New language
- 2.2 Confidence

Theme 3: The qualification question

- 3.1 Tacit and superficial knowledge
- 3.2 Fear – not so uncommon

Theme 4: How nurses learn

- 4.1 Practicality matters
- 4.2 Sources of PEWS knowledge

FINDINGS

SAFER ENVIRONMENT, EMPOWERMENT AND TRUST:

- IMPROVEMENTS IN THE FREQUENCY AND QUALITY OF PAEDIATRIC PATIENT ASSESSMENTS
- INCLUSIVE ASSESSMENTS WITH REGULAR PARENTAL INVOLVEMENT
- RCNS QUESTIONED THE MEANING OF VITAL SIGNS AND TRENDS
- CHANGE IN PERSPECTIVE FOR RGNS IN HOW THEY VIEWED SICK CHILDREN
- COMMON PEWS LANGUAGE WITHIN THE HOSPITAL WITH IMPROVED NURSING COLLABORATION
- POSITIVE INFLUENCE ON PROFESSIONAL CONFIDENCE
- IMPLEMENTATION OF WARD HUDDLES FOR MDT COMMUNICATION
- USE OF A SAFETY PAUSE ON ADULT WARDS TO IDENTIFY PAEDIATRIC PATIENTS
- TIMELIER SENIOR MEDICAL RESPONSE TIMES - HIERARCHICAL PATHWAY OF ESCALATION IN THE PAST

FINDINGS

INFLUENCE OF PROFESSIONAL BACKGROUND AND CONFIDENCE:

- SIGNIFICANT BREADTH OF EXPERIENTIAL KNOWLEDGE AMONG RCNS
- USE OF CLINICAL JUDGEMENT WHEN INTERPRETING VITAL SIGNS OR SUBTLE CUES
- DECIDE WHEN PEWS SCORES CONTEXTUALLY CORRECT OR WHEN THEY COULD CONSIDER USING PERMITTED NURSE VARIANCES TO SUSPEND MEDICAL ESCALATION
- SENSE OF CONFIDENCE INFORMED THEIR CLINICAL DECISION-MAKING PROCESSES AND INSTIGATED INITIATION OF QUICKER NURSING INTERVENTIONS
- RGNS FELT LESS PROFESSIONALLY EQUIPPED THAN RCNS WHEN MAKING CLINICAL DECISIONS
- RGNS - NOT WORKING WITHIN COMFORT ZONE WHEN CARING FOR SICK CHILDREN - FEAR OF MAKING ERRORS OF CLINICAL JUDGEMENT - LACK OF A PAEDIATRIC KNOWLEDGE BASE
- PEWS - ONLY PAEDIATRIC EDUCATIONAL EXPERIENCE SINCE COMPLETION OF UNDERGRADUATE TRAINING
- COMPOUNDED BY MINIMAL EXPOSURE TO CARING FOR SICK CHILDREN
- PEWS EDUCATION - PHYSIOLOGICAL DIFFERENCES WHICH EXIST BETWEEN ADULTS AND CHILDREN HENCE PROVIDING NEED-TO-KNOW FACTUAL, INFORMATION
- RELYING ON SCORES IN CONJUNCTION WITH PEWS ESCALATION GUIDELINES – SUPERFICIAL LEARNING

FINDINGS

OPTIMAL PEWS EDUCATION STRUCTURE:

- CLASSROOM SETTING FOR THE EDUCATIONAL INTRODUCTION TO PEWS
- UNINTERRUPTED OPPORTUNITY TO PRACTICE CHARTING OF VITAL SIGNS AND ENCOURAGE OPEN DISCUSSION
- UNPREDICTABLE NATURE OF WARD-BASED EDUCATION WOULD BE UNSUITABLE
- TWO HOURS SUFFICED IN DELIVERING A FACTUAL EDUCATIONAL SESSION - “*PITCHED*” WELL, MET INITIAL LEARNING NEEDS, WHILE MAINTAINING LEVEL OF INTEREST
- SCENARIO-BASED EDUCATION EXTREMELY POPULAR
- CASE-STUDIES RELEVANT TO PRACTICE
- COMBINING BOTH GROUPS IN INITIAL EDUCATIONAL PERIOD - VIEWED AS BOTH BENEFICIAL AND SIMILARLY CHALLENGING FOR LEARNING
- IMPORTANCE OF REGULAR BRIEF WARD-BASED REFRESHER SESSIONS - CONCERNS ABOUT INFREQUENT USE OF PEWS AND FORGETTING KEY INFORMATION
- ACCESS TO KNOWLEDGEABLE, NON-JUDGEMENTAL EDUCATORS
- NURSES FREQUENTLY MIRRORED EACH OTHER’S POOR CHARTING HABITS
- NEED FOR CONSISTENT OVERSIGHT - PEWS AUDITS ACCEPTED AS A USEFUL SOURCE OF ONGOING CORRECTIVE LEARNING

Conclusion

Early recognition of deterioration with early senior medical escalation and provision of appropriate and timely intervention is essential to achieving positive outcomes in sick children. While PEWS education is not intended to nor does it replace professional or experiential knowledge, it has been shown to be a very useful adjunct to guide clinicians, regardless of professional qualification or experience. However, correct use of PEWS must be continually supported and quality controlled. Suitably targeted PEWS education with ongoing support can significantly influence provision of safer paediatric nursing care in any clinical area.

Questions and Recommendations?



thank you!