Pediatric Intensive Care Nursing

Journal of the International Pediatric Intensive Care Nursing Association

Volume 5, Number 1, May 2004
Editor: Franco A. Carnevale, R.N., Ph.D., Montreal, Canada
Email: frank.carnevale@muhc.mcgill.ca

Fax: 1-514-412-4477

Address: PICU, Montreal Children's Hospital, 2300 Tupper, Montreal, Quebec, Canada, H3H 1P3

International Editorial Advisory Board

Franco A. Carnevale Editor

Canada

Beverley Copnell
Australia

Dirk Danschutter Belgium

Libbie Janeke South Africa

Mario Labadet Argentina

Jos Latour
The Netherlands

Elaine McCall New Zealand

Patricia Moloney-Harmon
United States

Pang Nguk Lan Singapore

Marie-Catherine Pons France

> Karin Storm Denmark

Colin Way
United Kingdom

Ilona Weidner Germany

CONTENTS

Pediatric Intensive Care Nursing and International Outreach
Franco A. Carnevale, Canada

Personal Digital Assistants in nursing Care Irene Harth, Germany

Emily's Story: A Narrative of Uncertainty Jennifer Bevacqua, United States

Spotlight on PICU: Wuerzburg University Children's Hospital Ilona Weidner, *Germany*

Searching the Web!Edited by Dirk Danschutter, Belgium

Questions & Answers from PICU-Nurse-International Edited by Karin Storm, Denmark

PICU-Nurse-International Online Symposium Franco A. Carnevale, Canada

European Society of Paediatric and Neonatal Intensive Care Website Irene Harth, Germany

CONNECT: Official Journal of the World Federation of Critical Care
Nurses

Upcoming Conferences

Pediatric Intensive Care Nursing is indexed in CINAHL:
Cumulative Index to Nursing and Allied Health Literature.
This Journal is produced as a publication of the International Pediatric Intensive Care Nursing Association (for more information, visit our website and join our egroup: http://groups.yahoo.com/group/PICU-Nurse-International). Readers are encouraged to use any part of this Journal for newsletters in their own regions, as long as this publication, as well as the article's author, is recognized as the original source.

Page layout design by Marisa Picciano

Editorial

Pediatric Intensive Care Nursing and International Outreach

Franco A. Carnevale RN, PhD, Editor Coordinator, Critical Care Services Montreal Children's Hospital, Montreal, Canada

Pediatric critical care has a lot to be proud of. This specialty has made numerous significant contributions to the lives of countless critically ill children. However, it is remarkable that critical care has come to adopt **one** conventional model – the mobilization of high-technology and specialty-skilled clinicians. Critical care has come to signify high-cost care. Consequently, critical care has become a form of care that can only be afforded by members of societies that are relatively wealthy.

The provision of pediatric services on a selective basis, only for those "who have" and not for the "have nots" seems contrary to the humanitarian values of nursing. Our previous issue of this Journal highlighted a paper that described the efforts of some Australian pediatric critical care health professionals to provide complex cardiac surgical services to children in Papua New Guinea. Occasional discussions on our egroup, PICU-Nurse-International, have referred to some additional initiatives to provide critical care services to children in highly challenged regions of the world.

I believe that as pediatric critical care nurses, we are uniquely positioned to make important international outreach contributions to the care of children. We possess advanced expertise, a well-developed international network of fellow nurses, with an underlying commitment to beneficent values.

There exist a wide number of ways in which pediatric critical care nurses can support services for children on an international level. Through the use of the Internet or even regular mail (for nursing colleagues that do not have access to the Internet), information updates on effective practices can be disseminated. In particular, wealthy countries often have nurses that are multilingual and thus able to help translate such information from its original language to the languages of our nursing colleagues in various regions.

Many nurses are already commonly helping their less advantaged nursing colleagues by sending a variety of helpful materials, such as clinical textbooks and various medical supplies. Finally, and most challenging, some nurses help their colleagues and the children that they care for by offering their own human resources, either through the provision of direct clinical care or nursing education on relevant practices.

A few years ago, Wil de Groot-Bolluijt (Netherlands) and I had the privilege of having coffee in Amsterdam with Mr. Stephen Lewis (Deputy Executive Director of the United Nations Children's Fund: UNICEF). We met with him to discuss his thoughts on how the pediatric critical care community can offer useful support to the international community. Mr. Lewis emphasized the importance of de-emphasizing high-cost technologies, such as ventilators, which are not available to children in vast regions of the world. Some of the critical pediatric problems that he regarded as most urgently needing attention included dehydration and malnutrition, newborn care, management of infections, and first-line trauma care.

These problems can be managed to a large degree with low-cost, low-tech resuscitative techniques that pediatric critical care nurses are highly familiar with. I think a crucial challenge that this implies is discovering which are the most effective methods for disseminating these bodies of knowledge and skills. Should we arrange "foreign missions" whereby experts travel to certain areas to help teach nurses, or should we arrange for some key nursing leaders from less privileged regions to travel to pediatric critical care nursing conferences so that they can attend skills workshops on current resuscitative skills. The latter has the additional advantage of

enabling a reciprocal exchange whereby these invited nursing colleagues can also help those of us in more privileged settings learn about their needs and current approaches to care. For example, at the 3rd World Congress on Pediatric Intensive Care in Montreal, in 2000, conference participants were most impressed to hear from a Croatian colleague that spoke of her nursing experience during recent regional wars.

International networking facilitated by nursing conferences, journals, or egroups has helped create increased opportunities for fostering greater awareness and support for our nursing colleagues and the children that they care for in much less fortunate circumstances. I would like to call on our international nursing community to step forth and speak about any activities that you have been involved with to promote such outreach.

Note: In my references to less privileged regions, I do not intend to presume that they are all necessarily in need of support, materially or educationally. This editorial is directed only to those regions that indicate that they would like support.

* * * * *

Information For Authors

Pediatric Intensive Care Nursing welcomes paper submissions for upcoming issues of this publication. Papers may focus on any clinical or professional topic relevant to nursing the critically ill child and pertinent to an international nursing readership. Submissions should be 2-4 double-spaced pages in length.

Send your proposed papers directly to Franco Carnevale (Editor): frank.carnevale@muhc.mcgill.ca

Personal Digital Assistants in Nursing care

Irene Harth, RN, FIP Univ.-Kinderklinik Mainz, Germany

Abstract

Personal Digital Assistants (PDAs) have been successfully used for personal organisation for some time already. In recent time they have also gained more and more importance in the professional area of hospitals. As they are less expensive than Personal Computers and Note Books, higher numbers can be purchased and placed at the healthcare workers' disposal.

The handy size guarantees great mobility and independence from the electronic work stations of a unit. As a mobile component of a hospital information system, PDAs can be used for the documentation of patient data directly at the bed side. PDAs also allow a recall of patient related data there, where the data is needed – at the point of care. This can include the latest lab results as well as medical or nursing care information from the intranet, electronic textbooks or the numerous free ware and share ware offered especially for the use in PDAs.

Equipped with barcode scanners, digital cameras or speech recognition, PDAs impress with their multi functionality.

Therefore PDAs are not only toys for technical freaks but rather useful informatics instruments that have the potential to influence the future professional nursing world decisively.



We know PDAs as personal organisers for some time already. In recent time they have also gained more and more importance in the professional setting of hospitals. In this article I would like to present some basic information about a PDA as well as some opportunities for its clinical use.

Let's start by explaining 'What is a PDA'? Palm, handheld, palm top - there are so many terms for this one tool - a pocket sized computer that provides information storage and retrieval capabilities for personal or professional use.

The success of PDAs started in 1992 when Apple introduced a handheld computer that operates via a stylus on a LCD display (Fig. 1).



Fig. 1

Ten years later, in August 2002 a computer journal estimated 14.8 million users of PDA technology (I suppose only in the United States). The development of medical and nursing applications for PDAs has created a high demand for these devices in hospitals.

As a mobile component of a hospital information system, PDAs gain an additional importance and that is the topic I want to set my focus on.

No matter the brand, PDAs provide some personal information management tools like:

- A date book/calendar, probably the most used application of a PDA. It can track all appointments, show your schedule by day, week or month, alarm functions can be set to remind of an upcoming date;
- A memo pad is a place to jot notes. It can also be used to store some medical or nursing information;
- A 'to do' list is a little program that is very helpful to manage projects. One can set priorities and deadlines as reminders;
- The address book keeps track of all important contacts;
- A calculator is also integrated; and
- A search function enables the user to find all the stored data.

Advanced functionality depends on the PDA model. The trend is to equip PDAs with digital cameras, MP 3 players and mobile phones. Internet access and email function is possible. As well, more storage capacity is possible with expansion cards.

The PDA models supplied by Compaq, Hewlett Packard and Casio are equipped with the Pocket PC 2002 operating system and they come with a pocket version of Excel and Word. This allow an excellent integration of Microsoft documents and a file transfer from a PDA to a workstation and back. This is interesting, when you think about using PDAs to provide mobile data processing on your unit in combination with your Hospital Information System.

When we talk about the Advantages of a PDA first of all I have to mention the great mobility which you can reach with this device.

Wireless LAN technology (WLAN) allows the integration of PDAs into the network of a unit so that mobile data entry is possible at any time and anywhere on your unit.

So - no more transferring notes from multiple slips of paper!



Fig. 2 PDA and docking station

Without wireless LAN the data synchronisation is performed via a docking station or a cradle with a device link between PDA and desk top computer (Fig. 2). Infrared synchronisation is possible too.

Quick access to information is possible whenever it is needed. This could be, as mentioned before, information concerning the patient, e.g., latest lab results but also information from the intranet, care standards, drug references or information from electronic text books, or the multiple medical or nursing free ware or share ware applications for PDAs.

For healthcare practitioners, PDA software is available in the following categories: Clinical references, Document readers to give access to electronic text books and journals, medical Calculators and Drug references.

It is also possible to equip PDAs with a barcode scanner, a voice recorder in combination with intelligent speech recognition software or a digital camera for clinical use, also. For example, an integrated digital camera could be used for wound documentation.

At 100g, PDAs are very lightweight. They are thinner than a cigarette box, so they are easy to carry in a pocket.

PDAs are much less costly than note books or desktop computers. Prices range between 80 – 1000 Euros, depending on the model

One disadvantage is the small size of the screen – larger text is not easy to read, pictures could only be seen in parts. Also typing or writing a text with the stylos is a bit difficult and time consuming.

Another fact is that PDAs are desirable objects for many people, they often get stolen. Or they get lost due to their small size. Further, data security in PDAs is not that advanced. This should be considered while using PDAs in hospitals. You may secure the access with pass words or PIN codes, fingerprint recognition is possible also. (Fig. 3) It is possible to use PDAs in Hospital as 'thin clients', which means that only the screen of the PDAs is in function and all data is stored directly on a central server.



Fig. 3

Another disadvantage is their dependence on batteries. Battery life in actual use can vary from a few hours to several days.

The system enables nurses to have access to specific information there, where the information is needed – at the so called 'point of care', the patients bedside. And at the same time it allows direct data processing according to the patients' care.

This could be the documentation of vital signs as well as nursing care procedures, i.e. the LEP variables (a Swiss record system for nursing care procedures).

If the PDA is equipped with speech recognition software it could be used for the documentation of the patient's anamnesis directly during the evaluation, setting up the care plan, or during the nursing rounds to manage the results.

An additional Barcode scanner can ease pharmacy or food ordering and can be used for quality management also, while controlling thermo sensitive badges on products, which should be stored permanently cool.

These are some examples for PDAs in nursing care, but I'm sure that in their daily practice the clinical users will find more and more areas for the use of this device.

In our PICU in the University Children's Hospital in Mainz, we plan to do our daily rounds with the help of a PDA. We plan to use it to order investigations or pharmacy prescriptions directly from the bedside, see the latest lab results, and have direct access to personal patient data.

Kinderklinik der Johannes-Gutenberg-Universität Mainz

Mobile Visite auf der Kinderintensivstation



Conclusion

I hope I could make it clear that PDAs are not only toys for technical freaks but rather useful informatics instruments which have the potential to influence the future professional nursing world decisively. Especially on units with a limited number of stationary computer systems, PDAs may contribute to the efficiency of a hospital information system. As they are less expensive than personal computers and note books, higher numbers can be purchased and placed at the healthcare workers disposal.

This may lead to more job satisfaction as the frustration due to always occupied electronic workstations could be avoided. Direct documentation contributes to more quality as it reduces time-consuming and redundant paperwork. More time is left for direct patient care.

Better informed nurses may deliver better care and this may lead to more patient satisfaction as well.

Good nursing practice today, especially on intensive care units, requires tools to extend the limited capacity of human beings to recall and process large numbers of relevant data. Handheld computers may provide the solution to data access needs and can help to support the nurse's clinical practice.

Pediatric Intensive Care Links

Come visit many interesting website links to various international nursing societies as well other important resources:

Go to our website: http://groups.yahoo.com/group/PICU-Nurse-International and click on 'Links

Emily's Story: A narrative of uncertainty

Jennifer Bevacqua RN, BSN, CCRN
PICU, Emanuel Children's Hospital, Portland, Oregon
Enrolled in the Pediatric Nurse Practitioner Program at Oregon Health Sciences University
United States

Abstract

This discussion of a young girl with refractory status epilepticus examines the particular difficulties encountered by nurses when an underlying etiology or cause or a patient's condition cannot be identified.

Mother Theresa once said "We don't do great things. Only small things with great love". I relive these words coming out of my mouth in response to Kate's* 'thank-you's' for caring for her daughter Emily*, this day marking the beginning of the 2nd month of her ICU stay.

Emily was a bright eyed, rambunctious, beautiful light-of-her-parents life whose spirit transcended the pictures of her. On this day, Emily laid flaccid in bed with no such spark, save the monitors that recorded her continuing seizures.

To make a long story short, Emily presented with idiopathic refractory status epilepticus with evidence of hydrocephalus on CT scan. The week prior she contracted what appeared to be an ordinary cold consisting of fever, sniffles and malaise. Treating her with Acetaminophen and rest. her parents had no reason for suspicion. As Kate and Mark* readied for work one morning, they discovered Emily in her bed cyanotic and seizing. Emily was brought via ambulance to our emergency room and subsequently our PICU, where her seizures battled our myriad of drugs. A ventricularperitoneal shunt was inserted with a normal opening pressure and no signs of infection. We tried everything including unusually high doses of benzodiazepines, with no positive results.

While the neurologists and many intensivists tried different antiepileptics, samples were sent from every orifice to try and find a cause for Emily's paroxysmal illness. No bacterial or viral culprit could be found despite testing for everything from West Nile to Rabies. MRI and related scans could not focalize the areas, but instead showed generalized foci, thus ruling out extraction of the offending area. While over time we did gain control over her clinical seizures, they persisted subclinically.

Throughout our efforts, Emily laid in bed intubated, requiring vigorous treatment for diabetes insipidus, severe hypotension requiring multiple vasopressors, and one episode of resuscitation from a poor junctional rhythm... all the while seizing subclinically. After a few weeks, she regained her hemodynamic and hormonal stability, leaving our team to fully ponder the remaining neurological status of this little girl. Of course, she continued to be buried in multiple neurologically depressive drugs, leaving us only to spectulate with each other and her parents.

The literature does not show a plethora of cases like this. Having tried everything our team could think or read of and even a few "what the heck" approaches, we were resigned to wait for the burn-out of the subclinical seizures while keeping her heavily medicated in hopes of limiting them and thus limiting further damage.

Emily is now home with her loving parents, confined to complete dependency, severely neurologically damaged. She cannot walk nor talk. It is questionable whether she can communicate even in the most infantile ways. For me, this child has brought so many questions to the surface. I am realizing how hard it is for the nurse in me not to have the answers. Watching

parents and families struggle to cope can touch your heart and bring reality with all of its unanswered questions to the forefront. For me and perhaps some of my peers, it is sometimes easier to deal with unanswered questions when the patient succumbs to death. With acute illness and death, it has come and gone before you even know what is happening. Heavy handed finality is something we are forced to accept. Conversely, not knowing what a "living" outcome will be catalyzes a roller coaster of thoughts and emotions. Ironic, isn't it, that watching someone live can sometimes have more impact than watching someone die?

I found myself comforting Emily's parents with words I could not even comfort myself with. I told them, at an advanced point, that a precise answer would most likely not make any difference in Emily's outcome. The final 'answer' left on the table was an unknown virus and/or predisposition for intractable status epilepticus - neither of

which medicine can currently cure. With all the disappointment and lost hope of a search and rescue mission, we had essentially stopped searching and could not rescue Emily. It had been too long and daunting for her parents' hope to now be placed in labeling the enemy.

Of course, in my heart, I continually hoped for an answer - an answer for children in the future. As society often realizes better than we do, being a nurse indeed can be emotionally difficult. In times without answers, I am reminded of exactly how difficult it is and how far medicine has to go. For Emily, her fate has been decided and as I continue on in this career, I will remember her and only hope my great love made someone's journey a little better.

(*) denotes fictional name to protect privacy

Come & Join PICU-Nurse-International

An Internet discussion group of the International Pediatric Intensive Care Nursing Network.

For more information, visit our website: http://groups.yahoo.com/group/PICU-Nurse-International or contact Franco Carnevale (moderator) at frank.carnevale@muhc.mcgill.ca

Spotlight on PICU

This regular column will provide readers with an opportunity to learn about fellow PICUs in various parts of the world.

Column Editor: Beverley Copnell, RN, RSCN, BappSc, PhD
Postdoctoral Research Fellow, Department of Neonatology, Royal Children's Hospital &
Murdoch Childrens Research Institute, Parkville, Victoria, Australia

Neonatal and Paediatric Intensive Care Unit, University Children's Hospital, Wuerzburg, Germany

Ilona Weidner
Head Nurse, PICU/NICU
Neonatal and Paediatric Intensive Care Unit
University Children's Hospital, Wuerzburg, Germany



University Children's Hospital, Wuerzburg, Germany

The Children's Hospital in Wuerzburg has 117 beds distributed in several pediatric units. One of them is the Intensive Care Unit, which has 18 intensive care beds for neonates, infants and children. A 6 bed NICU aligned with the delivery room is located in a separate building of the obstetrics department (Perinatal Center). This arrangement avoids the well known negative effects of transporting infants immediately after birth. The remaining 12 beds are located in the Children's Hospital.

Neonatal patients transferred from other hospitals as well as children up to the age of 17 years are admitted to this NICU and PICU. One of the specialities is pediatric neurosurgery, which covers a wide variety of neurological diseases. Other subspecialities of the Children's

Hospital include oncology, stem cell transplantation, pneumology, nephrology, infectious diseases and others.

The PICU/NICU staff consists of a team of nurses and physicians all working in regular shifts. There is always one medical resident present in the NICU and PICU, supervised by a senior lecturer. Nurses' rosters are arranged in 3 shifts over a 24-hour period. Under normal circumstances one nurse cares for 2 children, but this depends on the patients' condition.

All of the nurses are registered nurses.

Until now nurse training in Germany differs from that in other countries. All pediatric nurses undergo 3-year specialist training. In addition, most nurses working in ICU undertake an extra 2 years training. However, starting in 2004, our training will be adjusted to the international system.

The PICU/NICU nursing staff includes a managing team of 4 (one head nurse, 3) substitutions), 3 mentors and a secretary. The duty of the 3 mentors is to accompany younger, less experienced nurses in their daily work. Orientation time for new staff depends on their experience, but is generally 6 to 8 weeks, during which they have one mentor assisting them. The team rotates between the Perinatal Centre and the Children's Hospital.

For psychological support we have a theologian/psychologist responsible for patients and their families as well as the unit staff.

To avoid psychological stress for the children as much as possible we have no restricted visiting hours. Parents and relatives (restricted to 2 persons at one time) are welcome.

Due to lack of space parents are unable to sleep in the unit. However, we have the possibility of accommodating them in two flats next to the hospital at no charge. Those apartments are kindly provided by the parents' community. We try to involve the parents in the care of their children as early as possible. In our daily care we use Basale Stimulation and Kinaestethic Handling. For our neonatal patients we use NIDCAP.

Further information about the unit can be found on the hospital website: www.klinik.uni-wuerzburg.de. You can also send an email to: weidner i@klinik.uni-wuerzburg.de



A view of the PICU and NICU

Searching the Web!

Column Editor

Dirk Danschutter, RN, CCRN, CCP Chief nurse, PICU Academic Hospital, Free University of Brussels Brussels, Belgium

This column is designed to highlight websites that may be of particular interest to PICU nurses. Some of these will appear directly pertinent to PICU nursing, while others will offer access to information that extends into broader yet related areas. We would appreciate hearing from our readers about any websites that our readers have found particularly interesting.

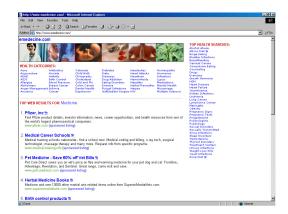
1. www.cardioweb.co.uk

Although some links do not appear to work (yet) this is a promising site for the nurse who wishes to learn more about overall 'cardiology'. Not directed towards pediatrics or neonatology the site is still useful since heart rhythm disturbances of both youngsters or elderly have in great part a common trajectory. Rhythm anomalies are shown as ECG strips highlighting the special points of interest. Also electrophysiology, rare heart conditions and heart axis determination are explained in a simple and comprehensive way. Still a site under construction (as mentioned by the author) we only can hope that the designers keep up the good work and give us the opportunity to explore echo, useful links... together with them.



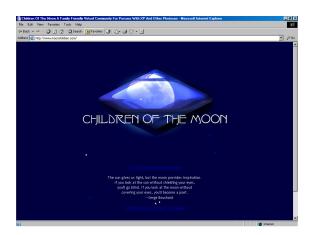
2. www.emedecine.com

If you want to surf on a really big site (including pediatric and neonatal items), well, this is one of them. There seems to be no item that remains unlinked to (an)other subsequent site(s). Unlike the autonomous sites, like the one mentioned above, this is a 'hollow' or jump site, whose main purpose is to connect searching people from one site to another. It has to be admitted that this site is not at all a pediatric one. However, the integrated search engine or the many links, such as 'bulimia', 'anorexia', 'ADHD', 'allergies', 'child birth' turn out to gather a sea of information and new useful links.



3. www.moonchildren.com

About 100 individuals in the UK are suffering from xeroderma pigmentosum, a rare condition where people may develop skin and eye cancers if exposed to the sun. This friendly site might look a little bit 'naïve' with some spelling errors now and then, but it provides maximal information on an extremely rare and debilitating condition. It is also one of the sites that have been reconfigured to meet with different ages amongst its possible visitors. In this way, the site has been divided in 'age categories' using adapted language. The information displayed is for the "moonpeople" themselves, interested visitors, or healthcare workers.



What are your comments?

The Editorial Board would appreciate your comments on this publication. This can include any thoughts that you have regarding the structure as well as the content of the Newsletter. We would particularly appreciate your suggestions on topics or issues that you would like to read about in future editions.

Forward your ideas to Franco Carnevale (Editor) : frank.carnevale@muhc.mcgill.ca

Questions & Answers from PICU-Nurse-International

Editor of column: Karin Storm, RN, MSc, Educational Consultant, The School of Nursing and Radiology, Herlev, Denmark

This column features particular dialogues that unfolded on the PICU-Nurse-International egroup that were particularly pertinent, stimulating, generated significant interest, and provided particularly informative replies.

Heparin vs Saline vs Citrate Question

I apologize for flogging the same topic but I thought I could take us off on a new spin.......

We recently had an error occur with regards to heparin infused for locking purposes of a CVC (central venous catheter). As a result, the value of heparin in locking peripheral and central venous catheters is being questioned. This is not a new question for nursing but we are glad to finally have buy in from other members of the PICU team. However, one of the physicians is suggesting we use citrate for locking our CVCs and saline for PIVs. I am unable to find any literature about citrate for locking CVCs...... I can find some for use with hemodialysis lines but not much re: locking with citrate.

Does anybody have a experience with this and/or evidence? If so I would appreciate if you would share it. Also, how many people saline lock their CVCs? (I have received the previous posts but they seemed to center on hep locking). Thanks.

Vancouver, United States

Answers

This is a very interesting twist. Abbott makes a product called the CLC 2000 that is a positive pressure adapter cap. It provides the positive pressure and theoretically one should be able to use saline in central liens as well if the CLC 2000 is on it.

We use saline all the time with our PIV and our PICC. Our hospital buys the PASV picc. The manufacturer recommends only saline flushes once weekly when not in use.

We have no big problems. The PASV company also makes PASV tunnelled lines and ports (more expensive than others).

I will watch the responses with interest. As far as the citrate I have no experience.

Canada

In our PICU, the policy is to use 1cc of 100u/cc heparin to lock all CVC's and PIV's. Personally, I don't use heparion for PIV's, I think its unnecessary and only increases a risk for medication error (using the wrong concentration of heparin, flushing the IV several times and locking with heparin more than once a shift etc.) I use saline for PIV's and heparin for CVC's. Never heard of citrate for locking IV's (CVC or PIV).

New Hyde Park, United States

We switched to the CLC 2000 for about a year, and used saline to lock CVLs (central venous lines). Our outcome data showed no increased occlusion rates in CVLs (slight increase in chronically ill kids with Broviacs or Mediports). Unfortunately, the hospital went back to heparin lock because of adherence to the guidelines of the INS. So, now we use the CLC 2000 with heparin flush on CVLs. There are some data to suggest that using heparin lock decreases the incidence of catheter-related bloodstream infection, and we are analysing before and after data now. I have not heard of locking with citrate.

St.Petersburg, United States

We use heparin flush for all central lines, and saline for peripherals. We have not used citrate except for an occasional CVVH port in which citrate was the anticoagulant for the procedure.

Our adult colleagues have tried using saline flushes to central lines and abandoned the practice when they had an increased clotting rate and an increased infection rate. They flush their CVLs only every 24 hours if not in use.

In the pediatric area we have not been that brave ... we tend to flush at least every 12 hours in the larger-lumen-lines and at least every 8 hours in the small-lumen lines (same for PICCs). *Tulsa, United States*

Nasojejunal Tubes

Question

What is your practice regarding the insertion of nasojejunal tubes? Nurses or Physicians or Both? *United States*

Answers

In our unit the nurses usually insert the NJ tubes. If successive attempts to pass the tube fail then the interventional radiologist does it.

Sydney, Australia

Nurses on both the Pediatrics Units and the PICU insert NJTs (usually requested as "transpyloric") with X-ray confirmation post-placement.

If the nurse has difficulty with replacement, the physician may do it.

Tulsa, United States

In our unit the nurses usually insert the NJ tubes. In Brazil, this is a nursing procedure. *Grande do Sul-Brazil, Brazil*

We have instituted a practice change in the past two years which has involved orientating all the nurses in PICU to NJT insertion. If unsuccessful the PICU Fellow or intensivist attempts insertion. Our policy has an extremely high success rate.

Vancouver, Canada

Interpretation Services *Question*

I would appreciate information on how your institution/unit/department makes arrangements for translation.

We have a growing population of Spanish-speakers, as well as small mixture of Vietnamese, Chinese, Russian etc. We currently do not employ anyone in a translator or interpreter position. Specifically, how does your staff access translator services? Are the translators "certified" or somehow credentialed? Do interpreters work regular hours? On call? In what department are translators employed? How do you justify the expenses with translator services? Any and all info would be helpful.

Tulsa, United States

Answers

We have a list of staff who have proven proficiency in various languages. If no one is available we have contracted with Pacific Translators to provide that service. I have no idea what the costs is, but I would imagine it is less than hiring someone for each language with around the clock availability.

Hope, Unites States

In our hospital there is a list of certified translators. When we need a translator we notify the page operator who has the list of who is on call for the specific language we need a translator for. The operator notifies the translator and they call to make arrangements to come and translate. In some instances they will translate over the phone. In emergencies there are a few staff members

in the institution who translate a few of the more common languages such as Spanish. Not sure who pays for the translator or how they are hired.

Hope this helps.

Oklahoma, United States

Fentanyl/Morphine Administration Question

What is your practice for the administration of Fentanyl and Morphine? If they are given intermittent IV push, can they be on the General Peds Floor? Or must they be in the PICU? *Hope, United States*

Answers

We do use Morphine (more then Fentanyl) for pediatric floor patients and it can be given IVP. Our policy states that the patient must be on a CR monitor and pulse oximetry if they are receiving IV narcotics.

United States

Morphine is given intermittent IVP frequently on the Pediatric unit for pain. Two nurses are to verify the dose prior to administration. No specific monitoring is needed. IVP Fentanyl is rarely used on the Peeds units except during procedures. If used, the patient is normally placed on continuous pulse oximetry monitoring.

Either of these meds, or Dilaudid, can be given by PCA method as continuous infusions with patient-regulated bolus doses. Patients are placed on continuous pulse oximetry monitoring for the first 24 hours; longer if many upward adjustments are being made to the dosages or if there is any concern of respiratory impairment. VS are Q4hours while the patient is on these infusions, and Q1h VS if upward titrations are made.

Tulsa, United States

Typically we reserve IV fentanyl use for the ICU because of the potiential for "rigid chest syndrome" if administrated too rapidly. All other IV narcotics may be given on the general floors as ordered by the physician. As with other centers, administration of IV narcotics requires the patient be on some sort of monitoring, either cardiac monitor or preferably pulse oximetry. *Columbus, United States.*

Annual Education Day Question

We are looking at trying to develop an annual collaborative interprofessional education day for our PICU. Our thought/hope is that it would involve development/presentation/participation from all disciplines in PICU. (Historically we have had separate education days for each discipline with the exception of ECLS or if physicians have been involved with it is as lecturers). Have any of you done this type of education day before? Would love to hear how you accomplished this. *Vancouver, Canada*

Answers

Here in Minneapolis the PICU plans and hosts a conference in conjunction with the University of Minnesota Nursing School. The topics have been various. Usually the morning is dedicated to physiology or therapies, and the afternoon leans toward social considerations. *Minneapolis, United States*

We do something similar, once a year. We choose a theme like our first was on cardiology, then on hepatic disease, then on hemato-onchology and this year on ethics and families. Then we look for in-house experts that will accept to give a talk on an aspect of the theme, such as surgery, family needs, etc. We do not have a lot of money, so usually our presenters do it for free. We make sure that we have at least three different kinds of professionals that will present such as doctor, nurse, RT, physioterapist, social worker, psychologist, etc. Then we post the program and sent it to tall the members of the PICU team. For nurse we can offer the day to 15 persons with

salary and to any other staff that would like to come on their day off. We let other professionals come for the entire day or for only to part of the day. We also tape the conference and make it available for every one interested.

Montreal, Canada

Nurse Practitioners *Question*

Are there Nurse Practitioners among you, and if so, how does your job look like? I mean: what do you do, what is your special task as a NP on a PICU or a NICU?

Amsterdam. Holland

Answers

I am functioning as a nurse practitioner at the Montreal Children's Hospital. There is 3 of us and we divide our time between clinical, educational and research duties. On the unit, we manage the medical aspects of care in collaboration with the intensivist, we order medication, therapies according to the patient's needs. The main advantage of having one of us taking care of the patient is the continuity of care we provide. We work in a 12 beds PICU. We see trauma patients, cardiovascular surgery post-op patients, patients with respiratory problems, and burn patients also.

Montreal, Canada

I am a nurse practioner working across PICU (23 beds) and a high dependency unit (15 beds). There are 3 of us and also a nurse consultant. We manage caseloads of patients in each area (rotate where we work each day). We cover Monday to Friday 8-17.30 on HDU and 4 days Monday to Friday 8.30-22.00 on PICU. 80% of our work is clinical. The remainder is practice development and research.

England

Thrombocytopenia Question

In patients that are thrombocytopenic, do your physiotherapists limit the treatment (chest physio) they give these children to positioning and oral suction?

At what level of thrombocytopenia would physiotherapy be limited or curtailed? Is there any evidence to support this practice? I yielded nothing from a preliminary literature search. *Liverpool, England*

Answer

We don't have any hard and fast rules as to what level of thrombocytopenia, but for instance, our ECMO patients who are, of course, heparinized, receive only vibration instead of percussion for physiotherapy. I've never looked for any evidence, but it's a practice we've had in place for a long time.

Hope, United States

PICU-Nurse-International Online Symposium Wednesday, June 16, 2004

Following several months of discussions, PICU-Nurse-International hosted its first live Online Symposium on Wednesday, June 16, 2004.

Through the use of a PICU nursing chat room, egroup members were able to log on and participate in two sessions led by experts in those areas. Unfortunately, due to significant technical difficulties most egroup members were unable to log on because the chat room was 'firewalled' in their respective institutions.

Consequently, the number of members that could participate in this symposium was very small, although there were members from the UK, US, and Canada. The discussions were informative and stimulating.

In light of these difficulties, a brief synthesis of the symposium is presented below.

It was very apparent that this is an activity that should be further developed. Planners will examine other modalities that will be more user friendly.

Franco Carnevale, RN, PhD Symposium Moderator

I. Pain & Analgsia

Should the control of sedation be placed in the nurse's hands?

Discussion led by Martha Curley, R.N., Ph.D., Boston Children's Hospital, USA

Dr. Curley highlighted that sedation decisions should be made by the treating PICU team, through a collaborative process. Such decisions require agreement on what the desired level of sedation ought to be. Further, these should be continuously evaluated through the use of reliable and valid tools for measuring sedation.

Some lively discussion was sparked when Dr.Curley stated that PICU patients should be managed in more awake states than is commonly practiced. This raised some concerns about the potential increased risks of accidental extubations. Dr.Curley pointed to some research evidence which suggests that the management of critically ill children with less sedation is not associated with an increased incidence of accidental extubations.

II. Life-support Decisions

Who should be responsible for life-support decisions in children: parents, physicians or nurse?

Discussion led by Franco Carnevale, R.N., Ph.D., Montreal, Canada

Dr.Carnevale outlined some of his current research in France and in Quebec examining the question of who ought to be responsible for life-support decisions in children. He described that there exists diverse viewpoints on how decisional authority ought to be arranged – some arguing that it is categorically a parent's right to decide, while others assert that these are medical decisions that should be made by physicians. This latter view is defended by the argument that (1) parents do not possess the required knowledge to make such decisions and (2) parents should be protected from feeling responsible for decisions that can result in the death of their child.

The ensuing discussion quite clearly favored the view that such decisions should be made by parents. Some argued that on occasions where the parents' abilities to make such decisions are in question, then parental authority could be overridden through legal measures. Dr.Carnevale also highlighted his concerns about the under-participation of children in such decisions (when their condition permits), although participants in the discussion felt that this is not pertinent for the PICU setting.

New ESPNIC Website

Dear international colleagues of paediatric and neonatal intensive care, let me take this opportunity to introduce the new web site of the **European Society of Paediatric and Neonatal Intensive Care – ESPNIC** to you.

Since November 1st, 2003 the site <u>www.espnic.org</u> is re-launched with a new design and with new functionality (Fig. 1).

Fig. 1



The structure of the site mirrors the vision of ESPNIC: two professional groups – paediatricians and nurses – closely working together in one organisation with a mutual objective: to promote the best quality of care for critically ill infants and children.

The idea is to give the society a dynamic web performance and provide room for the respective interests of both professional groups.

Fig. 2



The navigation structure shows up a common section 'medical info' (Fig. 2) but a pure nursing section as well as a medical section (Fig. 3).

Fig. 3



The section 'Medical Info' will provide an overview of the latest research results. Studies on a national or international level, in which you might participate, can be announced there. As a challenge for the future, ESPNIC is planning to define standards and guidelines for paediatric and neonatal intensive care activities on a European level which shall be shown in this part.

Within the section 'news' one can find latest information about conferences, meetings and developments within the society and all that is worth knowing about ESPNIC and paediatric and neonatal intenisve care in general.

A photo gallery shows, for example, historical pictures from the beginning of PIC in Europe in the early sixties.

The ESPNIC newsletter, which was delivered to the members twice a year in the form of a printed and well designed hard copy, will be published online in the future.

As ESPNIC members come not only from European countries but also from all four other continents, networking plays an essential role. All members and also our international colleagues have the opportunity to present the unit where they work and to offer job vacancies (Fig. 4a and b). This should allow easy networking among our colleagues.

Fig. 4a





Fig. 4b

Also, one can find links and information on ESPNIC related societies and other professional organisations working in the field of health care.

A regularly updated Congress Calendar will give useful information on relevant events in the field of paediatric and/or neonatal intensive care or related disciplines (Fig. 5).

(Fig. 5).



The ESPNIC Forum provides an interesting and new means to communicate between the members of ESPNIC and other interested colleagues.

We set up several forum platforms for online discussion and idea exchange of ideas on general and specific topics. Some platforms are open to public; others are hidden and reserved for the internal communication of the respective working groups of ESPNIC.

FORUM

ESPNIC Discussion Board

Public and restricted discussions and collaboration

 Profile

 ☐ You have no new messages

 ☐ Log out [Irene Harth]

You last visited on Thu Jan 29, 2004 7:43 pm The time now is Sun Feb 01, 2004 9:50 pm ESPNIC Discussion Board Forum Index

ESPNIC Public Discussion ESPNIC Public Discussion This board is open for discussion to everyone interested in healthcare topics, preferably paediatric and/or neonatal intensive care. Registered Users Registered Discussion To take part in the discussion you are requested to fill in the required data and register as a member of the ESPNIC forum. Within 48 hrs your registration will be confirmed by the webmaster and you will receive information about your permisssion to join your respective discussion group. Moderator Irene Harth Working Groups

topic. In order to take part in the discussion in our restricted area or just to be identified by the other participants we however recommend registration in the forum.

At the moment the usage is still a bit restricted but I hope this will change in the future time when the advantages of this forum are recognised by the users.

So, let me invite you to surf in on the new ESPNIC website.

Some areas are still under construction but it is growing, slowly but constantly.

To create a web site that meets the interests of its users, it is essential for the webmaster to know the users' needs.

Feel free to give me feedback. I would appreciate very much to know your opinions and suggestions for further improvement.

Irene Harth, RN
ESPNIC Nursing
Univ.-Kinderklinik Mainz
Langenbeckstr. 1
D 55101 Mainz/Germany

Tel.: +49 6131 17 2786 iharth@onlinehome.de

Contents of Previous Issue

Pediatric Intensive Care Nursing

Journal of the International Pediatric Intensive Care Nursing Network

Volume 4, Number 2, November 2003

If you have missed this past issue, as well as any other issue, you can access them at our website: http://groups.yahoo.com/group/PICU-Nurse-International (just click on 'Files' after you have signed in on Yahoo – top right corner)

Pediatric Intensive Care Nursing is now a Journal!Franco A. Carnevale, Canada

Open Heart Surgery in Papua New Guinea – 2003 Margaret Bresnahan, Australia

Improving Nursing Care of Infants and Children Ventilated with
Uncuffed Endotracheal Tubes
Sandi Evans, New Zealand

Spotlight on PICU: Starship Children's Hospital Elaine McCall, New Zealand

Questions & Answers from PICU-Nurse-International Edited by Karin Storm, Denmark

Report on 4th World Congress on Pediatric Intensive Care
Patricia A. Moloney-Harmon, United States

Minutes from the WFPICCS Nursing General Assembly

CONNECT

Official Journal of the World Federation of Critical Care Nurses

The main purpose of CONNECT is to provide a forum for critical care nurses around the world to share good practice. It aims to be the voice of critical care nurses world-wide. One of its founding principles is that of support of the Critical Care Nursing speciality. CONNECT aims to create a nurturing environment that enables all critical care nurses to have a voice. As such, the editors believe that all nurses have something valuable to contribute to CONNECT, that others may learn from. For this reason, no articles are rejected on the basis of language, and the editors undertake to provide help to authors, especially those writing in a second language.

The main focus of CONNECT is clinical practice, and we (the editors) are particularly keen to receive articles that describe or evaluate developments in nursing. The journal contains a mixture of articles, including descriptions of practice innovation, literature reviews, letters, conference reports, clinical skills guidelines, news items, research and, of course, all the latest information about developments in WFCCN. Its aim is to be a friendly journal - one that nurses read because they are interested - and we make no apologies for its informal style!

CONNECT is produced in association with the European federation of Critical Care Nursing associations: http://www.wfccn.org/ http://www.wfccn.org/

Current Issue

<http://www.connectpublishing.com/current.asp>

World Federation of Critical Care Nurses sub-committee for the position statement: guidelines on nursing workforce requirements for the care of critically ill patients.

The WFCCN is looking for critical care nurses with expertise and knowledge in the development of workforce guidelines for critical care nursing.

The internet. Part two: a resource for critical care nurses.

Karl Øyri, RN, CCN, MNSc, Nurse Manager and Researcher, The Interventional Centre, Rikshospitalet University Hospital, Oslo, Norway. Rod Ward, RN, BSc, RNT, MA Ed Senior Lecturer, Faculty of Health & Social Care, University of the West of England, Bristol, UK

Animal-assisted therapy: the bond that heals.

Julie Miller, RN, BSN, CCRN Staff Development Educator, Critical Care Residency, Trinity Mother Frances Health System, Tyler, Texas, USA; President/Founder, Paws To Learn: Empowering Nurses with Education. Whitehouse, Texas, USA

Implementation of a patient data management system in an ICU.

Marcel van Vliet RN, BN Senior Nurse, Adult Intensive Care, Academic Medical Centre, Amsterdam, The Netherlands

A new communication aid for mechanically ventilated patients.

Mark van den Boogaard RN, intensive care nurse, AOV-Intensive Care, St. Radboud University Medical Centre, Nijmegen, The Netherlands. Arno van Grunsven RN, intensive care nurse, AOV-Intensive Care, St. Radboud University Medical Centre, Nijmegen, The Netherlands

An investigation into patients' quality of life following intensive care and general surgical admissions

Robert Goddard, BSc (Hons) Physiotherapy, Senior I Physiotherapist, Darlington Memorial Hospital, UK

Upcoming Conferences

2nd Annual Symposium on Pediatric Critical Care: Critical Caring - Speaking Out For Sick Children

June 17th & 18, 2004

The Hospital for Sick Children in Toronto, Canada

The conference is intended to meet the learning needs of all health care professionals. It promises to be an exciting event. We hope to see you there.

Lucy Costanzo
The Hospital for Sick Children, Critical Care Unit, Toronto, Ontario
Lucy.costanzo@sickkids.ca

Cecilia Hyslop, Clinical Nurse Educator Cecilia.hyslop@sickkids.ca

15th ESPNIC Medical and Nursing Annual Conference

Imperial College, London, United Kingdom 16 - 18 September 2004

15th ESPNIC Medical and Nursing Annual Congress will be held at Imperial College, University of London, London, UK, from 16th to 18th September 2004. The congress is being held jointly with the annual meeting of the UK Paediatric Intensive Care Society (PICS) and is supported by the National Paediatric Pharmacists Group (NPPG) and the Paediatric Intensive Care Pharmacists (PICUP), UK.

The congress, the theme of which is "Paediatric and Neonatal Critical Care - Art or Science", will explore both clinical and scientific topics relevant to doctors and nurses caring for critically ill children and neonates. The Scientific Committee are pleased to present an exciting and varied provisional programme, incorporating review and scientific sessions and research papers as well as breakout workshops and special interest sessions.

Besides the exciting scientific programme, you will find yourself in the cultural and historical heart of Kensington in central London, close to the Royal Albert Hall, Harrods and London's famous Hyde Park. Delegates are invited to attend a welcome reception following the opening ceremony, and can subscribe to the congress dinner which will be held at the prestigious Royal Automobile Club in London's Pall Mall. A variety of accommodation is available ranging from inexpensive university rooms to more expensive hotels, all of which offer attractive rates and are conveniently located in the immediate surroundings of Imperial College.

We look forward to welcoming you in London in September.

Secretariat: 15th ESPNIC Medical and Nursing Annual Conference c/o Rose International, P.O. Box 93260, NL-2509 AG The Haque, The Netherlands

Telephone: +31 70 383 8901 Fax: +31 70 381 8936

Contact: Ms Mirella Kester, Project Manager mkester@rose-international.com

Website: www.espnic2004.org

THE SPRING FLING! Australian scientific meeting

Would you like to come to Melbourne Australia in October (7-10th) 2004? The Australian Collage of Critical Care Nurses (& the Australian and New Zealand Society of Intensive Care) are hosting a national medical and nursing program lasting 4 days, with specific neonatal and paediatric content on the Thursday and Friday, and other relevant ICU material within the adult program on the Saturday & Sunday.

Our guest nursing speaker is our own (ie. PICU Nurse International) head honcho Franco Carnevale from Montreal, and the medical guest speaker is Joseph Carcillo from Pittsburgh. The paediatric program contains current issues for the neonatal and paediatric audience. All PICU Nurse International members are most welcome (submit a free paper & ask your hospital to sponsor you!). Other Key nursing speakers include Maureen Coombs from England and Mary Lou Sole from Florida.

October in Melbourne ("The World's Most Livable City") is glorious, warming up as we enjoy spring and a hectic horse racing carnival season. We have the world's best restaurants (If you don't believe us you will have to come and taste for yourself) and fantastic wineries nearby.

This meeting is the 10th Anniversary of the Paediatric & Neonatal Intensive Care Conference and we are celebrating - have you heard about how hard Australians party? Check out the web site, there are amazing social functions and parties every night included with full registration.

The web site to link is http://www.anzics.com.au - click ANZICS ASM Melbourne. This contains the full program, registration, and abstract forms which are due Wed 16th June. Please contact me if you want some more informal information.

SEE YOU IN MELBOURNE FOR THE SPRING FLING... AN AFFAIR TO REMEMBER! Dianne McKinley
Paediatric Nursing Scientific Convener
Australian Collage of Critical Care Nurses
Melbourne, Australia
ph 03 93455777
di.mckinley@rch.org.au

IPOKRaTES Nursing Course

DATE October 21 - 22, 2004; starts at 9:00 a.m. PLACE Medizinzentrum Anichstrafle, Medical University Innsbruck, Innsbruck, Austria

OBJECTIVES: Building upon the IPOKRaTES tradition, our first nursing program will provide an opportunity for participants to experience evidence-based state-of-the-art presentations from an international faculty on the most relevant topics facing paediatric and neonatal critical care nurses today. The small group format allows interactive learning and collective discourse so that fundamental practices and the care milieu can be challenged.

The program will consist of three MODULES. The respiratory module focuses on lung injury, endotracheal suctioning, patient positioning, and airway malformations. The cardiovascular module deals with the failing myocardium, pulmonary hypertension, postoperative cardiac care and pressure ulcers. The Comfort and Care Module is devoted to NIDCAP, pain assessment and sedation. Additional topics discuss parents' presence during procedures, patient and nurse satisfaction and virtual patient visits.

Limited Number of participants: 55

This seminar thus will offer extensive chances for personal discussion.

LECTURERS

Martha Curley Harvard Med School, Boston, USA

Lori Fineman University of California, San Francisco, USA

Heidi Koll University of Innsbruck, Innsbruck, Austria

Jos Latour Erasmus MC - Sophia Childrenís Hospital, Rotterdam, NL

Patricia van Deventer Erasmus MC - Sophia Childrenís Hospital, Rotterdam, NL

Martin Metschitzer University of Innsbruck, Innsbruck, Austria

George Simbruner University of Innsbruck, Innsbruck, Austria

Westrup B Astrid Lindgren Childrenís Hospital, Stockholm, Sweden

Weidner I University of Wuerzburg, Wuerzburg, Germany

PROGRAM DESIGN

Martha Curley in cooperation with Jos Latour, Heidi Koll, Martin Metschitzer and George Simbruner

TARGET GROUPS

Nurses in Pediatrics and Neonatology

PARTICIPATION FEE

Single Person 250 Euros

ESPNIC Members 200 Euros

ORGANIZATION

ORGANIZER IPOKRATES

m:con GmbH · Rosengartenplatz 2 · D-68161 Mannheim / Germany

LOCAL Heidi K^II, Martin Metschitzer ORGANIZATION University Children's Hospital

Anichstrafle 35 · A-6020 Innsbruck / Austria

Phone: +43 (0) 512 504- 0 · Fax: +43 (0) 512 504-2 73 08

e-mail: neugeborenen.intensiv@tilak.at

or pediatrie.intensiv@uklibk.ac.at

INFORMATION / m:con · Rosengartenplatz 2 · D-68161 Mannheim / Germany REGISTRATION

Phone: +49 (0) 621 / 4106-134 · Fax: +49 (0) 621 / 4106-202 e-mail: ipokrates@mcon-mannheim.de · www.ipokrates.info

The 10th International Paediatric Nursing Research Symposium (IPNRS)

NOW ON-LINE at www.ipnrs-sirsip.com.

November 10-12, 2004 - Montreal, Canada

Excitement about the Symposium is rapidly gaining momentum. Don't miss this opportunity to share in the 10th IPNRS and the 100th birthday of the Montreal Childrenûs Hospital!

REGISTER ONLINE: You can also register with our on-line secure system using VISA or MasterCard.

Deadline for early bird registration: September 15, 2004.

Delta Montreal hotel forms are also available on the web site.

Dr. Janet E. Rennick

Chairperson, 10th International Paediatric Nursing Research Symposium

Need more information?

Please contact the IPNRS 2004 Secretariat:

Tel: 514-954-4454 / Fax: 514-874-1580

info@ipnrs-sirsip.com