

REFLECTIONS ON NEONATAL ORIENTATION

by John Salyer RRT-NPS, MBA, FAARC



It was a rainy night in 'Frisco in 1970-something. I was on my way to the University of California at Fisherman's Warf to pull my very first shift in an NICU. I had been in respiratory therapy for about 4 years at the time and had no training or experience in neonatal or pediatric care. Since I was the new guy I started on nights. Staffing was one therapist covering 8 NICU beds, 5 PICU beds, labor and delivery and a general pediatric floor. But the workload didn't really scare me. This kind of staffing was pretty typical in many places, (and probably still is in some), and I was quite used to it. And the environment of care was much less complex and thus it was possible to cover a lot more patients than it is now. But I had never seen a neonatal ventilator (in this case the illustrious Baby Bird). Nor did I have any experience with neonatal airway management, temperature control, neonatal blood gas acquisition/interpretation, or newborn resuscitation.

Nevertheless, I was thrilled to get the job, as the "NICU" was a pretty exotic place (it still is in my heart), and I was already suffering from some self-induced burn-out (ask me sometime about the 1970's). I was attracted to the challenge of learning neonatal respiratory therapy. Hal was one of the day shift supervisor/managers and had neonatal experience. So it was his duty to "orient" me. This consisted of 30 minute instruction periods on; the operation of the Baby Bird, how to do a ventilator patient system check, how to run the Corning 175 blood gas analyzer, the use of the

transport incubator, and how to get to labor and delivery and the equipment used for resuscitation. There were no training documents, no policy and procedure manual, no documentation of return demonstration, no equipment labs, no tests, and no equipment manuals (except for the blood gas analyzer). Orientation lasted one week, sort of. Hal had a day job which he was still doing. So he would show up when I did at 2300, spend about an hour with me each night, and then hit the sack, instructing me to call him if something came up I could not handle. This went on for 4 days. I knew absolutely nothing about the principles of time-cycled, pressure-limited, continuous flow neonatal ventilation. On night shift there was neither a respiratory supervisor nor another neonatal therapist in the house.

It is time here to stop and make the following pronouncement. This is not one of those warm, affectionate, nostalgic journeys back to a better, simpler, more rewarding time. Although I loved working in that unit, with those committed nurses, doctors and therapists, I have come to realize how very poor the process of orientation and training really was. I realized now that there were no good systems to support the clinical staff, no systematic method of verifying and documenting both intellectual and procedural competency, no printed resources for looking up information...zip, nothing, nada. I am not suggesting that the University of California at Fisherman's Warf was worse than most other hospitals. It was indeed probably representative of what it was like in a lot of hospitals at the time.

Let's agree that those were not really the "good old days". Instead, let's concur with Carly Simon who, ironically, in 1971 sang, "Stay right here, because these are the good old days".

We now take training and orientation a lot more seriously (I hope). When we hire a new graduate, it takes about a year to get ready to start intensive care orientation. We start by training them to work in our non-intensive care areas. First they get some class room instruction. Next there are equipment labs including structured return demonstration. They are given a large binder full of printed material they are expected to master. This includes written tests that they are expected to complete covering important clinical policies and protocols and equipment operation. They are paired with a trained preceptor under whose supervision they work for approximately 3-4 weeks. This period is individually adjusted to be longer if necessary if we deem them to not be ready. Then they work for approximately one year in the general medical surgical areas. In our hospital this includes caring for medically complex patients including tracheostomized and ventilated children.

Eventually, they will start intensive care orientation. This involves another series of equipment labs, printed materials and written test for every ventilator they will be expected to operate. Again they are paired with a preceptor for the first 2-4 weeks in NICU. They also get trained for the PICU and CVICU at the same time, spending 2-4 weeks in each of these units. Again, depending on their progress we may extend this orientation for some individuals. Finally, all ICU qualified therapists

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research it was soliciting but it is time to put aside all obstacles to creating rational shift work schedules; in other words, stop studying the problemand just do something about it.

The action required to deal with this problem occurs on two levels. On the personal level is requires personnel with symptoms of sleep disorders to admit them and seek diagnosis and treatment, especially for conditions such as sleep apnea and PLMS and RLS. On the organizational level is requires rationalization of schedules, not to be fair and equitable, but to be as stress free and healthy as possible given the circumstances. What this may entail is to first to poll all personnel and ask them if they could have a steady shift which would it be? ...and then to give it to them if it one of the least popular shifts. In other words if someone wants to work the unpopular night shift for personal reasons they should be allowed to do so. Some workers, such as sleep techs, have no choice but at least it is a steady shift without the problems caused by frequent rotations.

It is impossible to guess which shift would be least popular, but if one had to guess, it would probably be nights, followed by evenings with daytime being the most popular for a lot of reasons. Obviously a police department is not going to be able to give every officer exactly what he or she requests so after the least popular shifts are populated by volunteers, the balance of the assignments could be based on whatever criteria the department feels meets its needs such as the need for more experienced officers to complement and train newcomers who might draw the unpopular shifts due to lack of seniority. Senior officers have to understand that by drawing a steady but unpopular shift their work pattern would be healthier for them in the long run and they could participate in rotations every six months or annually instead of monthly which is the cause of many of the problems mentioned above. And finally police unions have to recognize that being fair and equitable is not in the best interests of their members who will suffer a variety of physical and mental problems by rotating shifts every month or more frequently.

must complete a written ventilator "competency". This document consists of disease based approaches to mechanical ventilation of infants and children. It includes a 140 question written test, and an interactive computer based instruction in pulmonary graphics interpretation. For all three of our intensive care units, this may take as much as 12 to 14 weeks, during which the trainee pairs with a preceptor and they take an assignment suitable for one therapist.

This may sound like a lot of training and orientation. It is. And it is costly. But probably not nearly as costly as the risk to our patients and our organization if we turn new therapists loose without proper training and competency verification. I believe that such a system decreases the likelihood of clinical inconsistency and the resulting poor quality care. I also believe that it reduces the risk of adverse events (errors) caused by inadequate training. Can poor quality care and errors and mishaps still occur in spite of rigorous training? Of course they can because systemically induced procedural errors have multi-factorial causes. But I believe that systematic and rigorous training and orientation are part of the due diligence of all respiratory therapists. Finally, there are some excellent computer based neonatal respiratory therapy training aids. I encourage you to examine the programs developed by Joseph D. Limauro, M.Ed., R.R.T. His software can be found at www.jlenterprise.com.

John Salyer, RRT-NPS is the Director of Respiratory Care at Seattle Children's Hospital. He appears regularly in Focus Journal writing on Neonatal Respiratory Care issues. He can be reached at John.Salyer@seattlechildrens.org

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