

Neonatal Nursing Efficacy: Practical Standards of Nursing Care Provision in a Newborn Network

Pillay T, Nightingale, P, Owen, Sarah; Kirby, Denise; Spencer, SA

Aims: To measure the nursing workload and timely completion of essential tasks in relation to BAPM recommended staffing levels in a Newborn Network

Methods: A prospective observational study was conducted by measuring the time taken by selected nurses to undertake necessary tasks for babies receiving different levels of care. A single independent assessor observed and assessed the time spent on various tasks at each of the 6 constituent neonatal units of our Newborn Network. The individual workload for each nurse was evaluated against BAPM standards of nursing workload[1]. Note was made of how long essential pre-determined tasks were delayed. The impact on the quantity of care given and on the number of delayed tasks was compared between those with the recommended workload or less and those that were overstretched.

Results: Between Oct 2008-Feb 2009, 89 nurses from six units were observed caring for 244 neonates over 534 hours. 54% of nursing shifts failed to meet BAPM standards. These shifts demonstrated a 26% decrease in clinical care provided. Time taken on nursing breaks (average 20 minutes, 95% CI 3) was 51.4% less than allocated. 92 (17%) essential tasks were delayed >1 hour or not done. Delays/omissions were more likely to occur when BAPM standards were not met (53% vs 40%, $p=0.05$). In 43 nursing observations without delays/omissions, 302 minutes were spent on clinical care per baby in intensive care (IC), 254 in high dependency (HD) and 158 in Special Care (SC) categories. This indicates that a nurse cannot care for ≥ 1.2 , 1.4 and 2.3 babies in IC, HD and SC respectively without delaying treatment.

Conclusion: Understaffing leads to measureable problems including delays to essential treatment, reduced clinical care and absent staff breaks. The BAPM standards are not aspirational and should be regarded as a minimum.

1. BAPM: Standards for hospitals providing neonatal care December 2001, August 2010. <http://bapm.org>