

per 12 hours are reported as mean (SD) and compared using the student t-test.

One hundred patients were randomised with 96 completing the study (150 mls/min – 49; 250 mls/min – 47). Groups were well matched for baseline characteristics with the exception that patients in the 150 mls/min group were slightly heavier (83.5 vs. 75.8kg,  $p=0.039$ ). Hours of treatment per 12hrs ( $n=854$ ) was 6.3hrs (3.7) in the 150 mls/min group and 6.7hrs (3.9) in the 250ml/min group,  $p=0.6$ . There was no difference between the two BFR groups for delta urea (-0.06 [0.015] vs. -0.074 [0.01],  $p=0.42$ ) or delta creatinine (-0.05 [0.01] vs. -0.08 [0.01],  $p=0.18$ ). Independent variables associated with less reduction in serum urea and creatinine were a low haemoglobin, -0.01 [0.005],  $p=0.002$ ; 0.01 [0.005],  $p=0.006$  and less hours treated; -0.023 [0.001],  $p=0.000$ ; -0.02 [0.002],  $p=0.001$ . No effect for body weight was found. BFR assessed for treatment time over 12 hour intervals did not influence solute control in patients with AKI, however haemoglobin and hours of treatment did affect control of both urea and creatinine.

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### Compassion-satisfaction and compassion-fatigue in Australian intensive care units



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Compassion-satisfaction and compassion-fatigue influence nurses' decision to remain in nursing and may impact patient experience of ICU. It is important to gauge ICU nurses' levels of compassion-satisfaction or fatigue, as workforce turnover is high and quality patient care is essential.

The aim was to determine the extent and predictive factors of critical care nurses' level of compassion-satisfaction and fatigue.

A self-reported cross-sectional survey collected data from nurses of two adult Australian ICUs ( $n=117$ ). The Professional Quality of Life Scale measured compassion-satisfaction, with compassion-fatigue as two subscales: burnout and secondary traumatic stress (STS). Scores of 22 or less were designated low, 23–41 average and 42 or above as high.

Participants were mostly female, held post-graduate qualifications with a mean age of 42 years, 16 years experience and 9 years tenure. The mean (SD) score for compassion-satisfaction was 35.39 (6.00), burnout 25.47 (5.31) and STS 21.43 (4.64). Compassion-satisfaction levels significantly increased experience and tenure. With increasing age, years of tenure and practice burnout scores reduced significantly. Mid-career nurses had higher burnout scores than their colleagues [ $F(2,110)=4.11$ ,  $p=.019$ ]; post hoc test [ $p=.023$ , 95% CI [0.33, 5.55]]. Nurses with a postgraduate qualification had significantly higher compassion-satisfaction scores ( $p=.027$ ). Nurses at Site A had significantly higher compassion-satisfaction scores ( $p=.008$ ) but lower STS scores ( $p=.025$ ).

High compassion-satisfaction and moderate to low fatigue are indicators of an effective workforce and may impact quality of patient care. Interventions targeting mid-career nurses and those without post-graduate qualifications are required to support these at risk groups. Further investigation is needed to understand different ways each unit supports their nurses by examining potential protective factors present at one site and possibly absent from the other.

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### Patient-centred nursing and compassion in Australian intensive care units: mixed methods research



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The aggressive, curative ICU setting may compromise patient-centred nursing (PCN). ICU nurses are *expected* to employ clinical expertise and compassionate nursing care; they are at high risk of anxiety and fatigue. Compassion-satisfaction and compassion-fatigue influence nurses' intention to leave; workforce turnover is high.

The aim was to develop an explanatory framework for PCN and compassion-satisfaction or fatigue in ICU.

We used a mixed methods explanatory sequential design and collected data from nurses of two adult ICUs using a self-reported cross-sectional survey ( $n=117$ ). The Professional Quality of Life Scale was chosen. Grounded theory methods were used to examine 23 nurses' experiences. Findings were integrated using a constructivist paradigm.

Participants had average levels of compassion-satisfaction and fatigue. Compassion-satisfaction scores rose significantly with increasing experience and tenure. Burnout scores significantly reduced with increasing age, experience and tenure. Nurses at Site A had significantly higher compassion-satisfaction scores ( $p=.008$ ) and lower STS scores ( $p=.025$ ). The results indicate mid-career nurses and those without post-graduate qualifications are at higher risk of compassion-fatigue. Facilitative themes to compassion-satisfaction include: colleagues; understanding; time; education; and collaboration. Communication around treatment plans, lack of management support and pressured patient flow impedes nurses' ability to fulfil their role and may cause ethical dilemma.

High compassion-satisfaction and low fatigue augments PCN and a healthy workforce. ICU nurses experience compassion-satisfaction when supported in achieving and maintaining patients' biomedical stability and providing compassionate care. Barriers to nurses' providing PCN may challenge compassion-satisfaction. The complex nature of ICU nursing and fatigue for some nurses substantiates establishment of early interventions to enhance compassion-satisfaction.

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### Oxygenation practices in the adult ventilated patient: a retrospective audit



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Prolonged exposure to a high  $FiO_2$  has been linked to significant ramifications, and therefore the lowest possible  $FiO_2$  to maintain normoxemia is likely warranted.

The aim was to examine the timeframes fraction of inspired oxygen ( $FiO_2$ ) was weaned in relation to oxygen saturations ( $SpO_2$ ) and partial pressure of oxygen ( $PaO_2$ ) and whether target parameters were provided by the medical team.

A retrospective clinical audit was conducted from 15 adult ventilated patients presenting with a variety of illnesses, examining

- Time taken to achieve an  $FiO_2$  of  $\leq 60$
- Parameters provided by the ICU medical team for weaning
- $SpO_2$  and  $PaO_2$  in relation to  $FiO_2$