Profiling Physiotherapy in Australian and New Zealand Intensive Care

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Congress Guide
Abstracts: Friday

PROFILING PHYSIOTHERAPY IN AUSTRALIAN AND NEW ZEALAND INTENSIVE CARE
Kristin Leslie, Shane Patman
The University of Notre Dame Australia, Fremantle, Western Australia, Australia

Physiotherapy for ICU patients is considered essential by many health professionals and professional bodies, yet the evidence base for this service is insufficient. No published research outlining optimal management of this service exists. Effective evaluation and implementation of best practice ‘critical care physiotherapy’ requires knowledge of the current profile of ICU physiotherapists.

This study aimed to establish current service and staffing characteristics of physiotherapy in level two and three ICUs within Australia and New Zealand. An online questionnaire was sent to 150 facilities identified from the ANZICS database targeting the most senior physiotherapist with a clinical load in ICU. Survey topics included: respondent and facility demographics, respondent qualifications and job descriptions, after-hours ICU physiotherapy services, physiotherapist to ICU beds ratios, and practices and decision making processes of ICU physiotherapists.

Ninety-two responses (61%) were received; 64% from level three units and 74% being public facilities. Average respondents were: female (77%), aged 36(+/-10), working fulltime (73%), graduated 13(+/-10) years, with entry-level physiotherapy degree as highest formal qualification (71%), 10(+/-8) years experience within the cardiorespiratory specialty, and 56(+/-6) years in the ICU leadership role. Evening ICU physiotherapy services were unavailable in 41% of facilities, with 46% of ICUs reporting no overnight service. Variances were evident between level two and three units for evening (p=0.02) but not night (p=0.24) services; such differences were not apparent between public and private units.

This study provides a snapshot of the current ICU physiotherapy workforce within Australia and New Zealand. It is hoped this information can be used in the process of benchmarking critical care physiotherapy and development of minimum standard of service guidelines.

THE EFFECT OF CRITICAL ILLNESS ON LONG TERM NEUROPSYCHOLOGICAL FUNCTION.

In 2008, patients in a single centre tertiary ICU were enrolled for long-term follow-up if they had an ICU length of stay of over 48 hours. Patients with head injuries, or a history of brain injury were excluded. Ethics approval was obtained, with consent and enrollment occurring on discharge from ICU. Baseline ICU data was collected as well as estimates of pre-morbid IQ, and scores for function and independence. Follow-up consisted of a battery of tests and questionnaires which were performed face to face where possible, at 28 days and 3, 6, 12 and 24 months.

To date, there have been 9 deaths out of 71 patients. The median age at ICU discharge was 65.5. Other median values include: a hospital stay of 22 days; ICU stay (LOS) of 7.3 days; Hours of Mechanical Ventilation (HMV) of 118; APACHE III of 63; and Risk of Death of 0.124.

Four neuropsychological tests were conducted, and results adjusted for age and sex. Impairment was defined as being below 2 SD from the population average.

<table>
<thead>
<tr>
<th>Impaired patients / total tested</th>
<th>3 month</th>
<th>6 month</th>
<th>12 month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stroop3 Test</td>
<td>30/47</td>
<td>30/42</td>
<td>24/41</td>
</tr>
<tr>
<td>Letter Number Sequence</td>
<td>15/63</td>
<td>8/57</td>
<td>7/49</td>
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<td>Digit Span</td>
<td>2/55</td>
<td>1/59</td>
<td>1/52</td>
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<tr>
<td>Trails B</td>
<td>15/47</td>
<td>15/48</td>
<td>12/41</td>
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There was no correlation between impairment and AP III score, LOS, or HMV (Mann-Whitney).

The results suggest that long-term brain impairment is common in survivors of critical illness, across a wide spectrum of admission diagnoses, and is independent of severity of illness.

USE OF A FORMAL STUDY RUN-IN PHASE TO REDUCE RECRUITMENT ERRORS IN A MULTI-CENTRE RANDOMISED CONTROLLED TRIAL: IS QUALITY BETTER THAN QUANTITY?
Gordon S Dolg, Fiona Simpson and Liz Sweetman
Royal North Shore Hospital, Intensive Care Unit, Sydney, NSW 2005, Australia and Northern Clinical School University of Sydney, Sydney, NSW.

Introduction: Major protocol violations occur more frequently during the early stages of a clinical trial, when investigators are less familiar with study processes. Recruitment errors arise when study eligibility criteria are violated and can account for 50% of all major protocol violations.

Abstract – Friday 30 October
Session: Free Papers - General
Room: Bayside 106
Time: 14.45 – 15.00

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