



ABSTRAK

Latar Belakang: Banyak pasien kritis mengalami perburukan klinis atau kematian tidak lama setelah keluar dari unit perawatan intensif (ICU). Kriteria keluar dari unit perawatan kritis harus sama dengan kriteria masuk pada level perawatan berikutnya seperti perawatan intermediet. Namun demikian, tidak semua pasien membutuhkan perawatan intermediet setelah keluar dari ICU. *National Early Warning Scores(NEWS)* merupakan suatu sistem skoring sederhana menilai tujuh parameter yang terdiri dari enam parameter fisiologis sederhana (laju pernafasan, laju nadi, tekanan darah sistolik, saturasi oksigen, temperatur, dan tingkat kesadaran) ditambah dengan satu paremeter penggunaan suplemental oksigen yang dinilai saat pasien datang atau untuk pemantauan di rumah sakit. Penelitian ini dilakukan untuk melihat apakah NEWS dapat digunakan untuk menilai risiko perburukan kondisi klinis pasca perawatan di ICU RSUP dr. Sardjito.

Tujuan: Mengetahui hubungan antara *National Early Warning Score (NEWS) ≥ 5* saat pasien keluar dari ICU dengan perburukan klinis dalam 72 jam di *step down unit*.

Metode: Studi observasional kohort retrospektif. Protokol penelitian disetujui oleh komite etik Fakultas Kedokteran, Kesehatan Masyarakat dan Keperawatan Universitas Gadjah Mada. Data diambil dari rekam medis pasien yang keluar hidup dari *ICU* periode November 2017 hingga Oktober 2018. Nilai *NEWS* dinilai saat pasien akan pindah. Subyek dibagi menjadi dua kelompok, yaitu kelompok risiko tinggi ($NEWS \geq 5$) dan risiko rendah ($NEWS < 5$). Kemudian dilakukan penilaian luaran pasien dalam 72 jam pasca keluar dari *ICU*.

Hasil : Data diperoleh dari 370 pasien. Didapatkan pasien dengan nilai $NEWS \geq 5$ lebih banyak mengalami perburukan klinis (23,3%) dibandingkan pasien dengan nilai $NEWS < 5$ (2,7%) pada luaran 72 jam pasca keluar dari *ICU* dengan $p=0,0001$ dan $RR=8,65$.

Kata Kunci : Pasien kritis, perawatan intensif(*ICU*), *NEWS* saat keluar *ICU*, perburukan kondisi.



ABSTRACT

Background: Many critically ill patients had clinical deterioration or death shortly after discharge from the intensive care unit (ICU). Discharge criteria from critical care units should be similar to the admitting criteria for further care such as intermediate care. However, not all patients require intermediate care after ICU discharge. National Early Warning Scores (NEWS) is based on a simple scoring system in which a score is allocated to physiological measurements already undertaken when patients present to, or are being monitored in hospital. NEWS comprised of seven parameters consist of six simple physiological parameters form the basis of the scoring system (respiratory rate, heart rate, oxygen saturations, systolic blood pressure, temperature, and level of consciousness) and one parameter for people requiring oxygen supplementation. This study was conducted to see whether NEWS can be used in the ICU Dr. Sardjito General Hospital to assess the risk of clinical deterioration after ICU discharge.

Methods: A retrospective observational cohort study was conducted. The study protocol was approved by ethics committee at the Faculty of Medicine, Public Health and Nursing of Universitas Gadjah Mada (UGM). The data were recorded from medical record of the patient who were discharged from ICU between November 2017 and October 2018. The NEWS was calculated before patient discharged from medical record. The subjects were divided into high risk ($NEWS \geq 5$) and low risk group ($NEWS < 5$). The outcome was observed at step down unit within 72 hours after discharged.

Result: Data were collected from 370 patients. There was a significant relationship between NEWS and the outcome of 72 hours after ICU care. More deterioration was occurred in high risk group (23,3%) than low risk group (2,7%) within 72 hours after discharged ($p=0,0001$; $RR=8,65$)

Keyword: Critical patient, Intensive Care Unit(ICU), NEWS at ICU discharge, clinical deterioration.