

ABSTRAK

Pada umumnya pasien sakit kritis mengalami demam, dengan insiden berkisar antara 23%-70%. Penatalaksanaan demam dibutuhkan untuk meminimalkan stres metabolik dan meningkatkan oksigenasi jaringan. Penelitian ini bertujuan membandingkan pengaruh *water spray* dan *fan cooling* yang menggunakan air hangat dengan air suhu ruangan terhadap kecepatan dan besarnya penurunan suhu tubuh pasien demam yang mendapat terapi acetaminophen, di ruang rawat intensif RSUP dr. Hasan Sadikin Bandung. Desain penelitian ini adalah *pretest-posttest control group design*. Subjek dipilih secara acak, kemudian dibagi ke dalam kelompok perlakuan dan kontrol sebagai berikut: 1) 500 mg acetaminophen dan *water spray* dan *fan cooling* dengan air hangat (n= 14), 2) 500 mg acetaminophen dan *water spray* dan *fan cooling* dengan air suhu ruangan (n= 14). Terapi *water spray* dan *fan cooling* diterapkan selama 60 menit setelah pemberian acetaminophen. Hasil Uji Repeated ANOVA pada kedua kelompok menunjukkan penurunan suhu tubuh yang bermakna terjadi pada waktu 10-60 menit setelah pemberian terapi *water spray* dan *fan cooling*. Hasil uji Independent Samples T Test menunjukkan perbedaan rata-rata nilai suhu tubuh yang bermakna antara kelompok perlakuan dan kontrol ($0,8^{\circ}\text{C}$ ($0,3^{\circ}\text{C}$) vs $0,5^{\circ}\text{C}$ ($0,3^{\circ}\text{C}$), $p < 0,05$). Pada pasien yang mendapat terapi acetaminophen, *water spray* dan *fan cooling* dengan air hangat menurunkan suhu tubuh sebesar $0,5^{\circ}\text{C}$ lebih cepat (30 menit) daripada air suhu ruangan (60 menit). Hasil setelah 60 menit terapi *water spray* dan *fan cooling* juga menunjukkan penggunaan air hangat menurunkan suhu tubuh lebih besar daripada air suhu ruangan. Oleh karena itu, hendaknya *water spray* dan *fan cooling* diterapkan menggunakan air hangat.

Kata kunci: demam, *water spray* dan *fan cooling*, air hangat, air suhu ruangan.

ABSTRACT

Fever is common among critically ill patients, with incidence ranging from 23%-70%. Fever management may be required to decrease metabolic stress and increase tissue oxygenation. The purpose of the study was to compare the effects of water spray and fan cooling which used tepid water and water at room temperature to reduce fever of critically ill patients treated with acetaminophen, in the ICU RSUP dr. Hasan Sadikin Bandung. The study design was pretest-posttest control group design. Subjects were randomly assigned to treatment and control groups as follows: 1) 500 mg acetaminophen and water spray and fan cooling which used tepid water (n= 14), 2) 500 mg acetaminophen and water spray and fan cooling which used water at room temperature (n= 14). Water spray and fan cooling was applied for 60 minutes after the patient had received acetaminophen. Repeated ANOVA analysis resulted both of the groups have significant effect at 10-60 minutes after water spray and fan cooling treatment. Independent Samples T Test analysis showed significant differences between treatment and control groups (0,8 °C (0,3 °C) vs 0.5 °C (0,3 °C), $p < 0,05$). The finding of the study suggest that in critically ill adult treated with acetaminophen, water spray and fan cooling which used tepid water could reduce body temperature 0,5°C faster (30 minutes) than water at room temperature (60 minutes). The result after 60 minutes treatment showed that tepid water also reduce body temperature greater than water at room temperature. Therefore, water spray and fan cooling should be applied by using tepid water.

Keywords: fever, water spray and fan cooling, tepid water, water at room temperature.