ABSTRAK

Latar belakang: Selama bekerja, karbon dioksida akan meningkat, asam laktat menumpuk, saturasi oksigen menjadi lebih rendah dengan demikian kebutuhan oksigen akan meningkat. Banyak dan lamanya tahapan kerja menjadikan nelayan kelelahan akibat pengerahan tenaga yang berlebihan. Oksigen merupakan molekul yang penting bagi kehidupan. Hemoglobin mampu mengikat 1,34 ml oksigen per gram hemoglobin. Tingkat oksigen dalam darah yang terikat pada hemoglobin disebut saturasi oksigen (SpO2) yang dapat diukur menggunakan oksimeter pulsa.
Tujuan: Mengetahui pengaruh minum air beroksigen tinggi dan air kelapa terhadap saturasi oksigen pada nelayan sepulang bekerja di desa Percut.
Metode: Penelitian bersifat *True Eksperimen* dengan rancangan penelitian *pretest-posttest control group design*. Jumlah sampel penelitian adalah 27 orang yang dibagi menjadi 3 kelompok dengan menggunakan metode *consecutive sampling*. Analisis data secara univariat dan bivariat menggunakan uji *wilcoxon* karena tidak berdistribusi normal.
Hasil: Rerata saturasi oksigen sebelum dan sesudah pemberian air beroksigen tinggi adalah 97,89% dan 98,89%. Rerata saturasi oksigen sebelum dan sesudah pemberian air kelapa adalah 97,67% dan 98,56%. Hasil uji *wilcoxon* menunjukkan terdapat perbedaan yang signifikan nilai saturasi oksigen sebelum dan sesudah minum air beroksigen tinggi p *value* = 0,014 (<0,05) dengan nilai saturasi oksigen sebelum dan sesudah minum air kelapa *p value* = 0,005 (<0,05).
Kesimpulan: Berdasarkan hasil penelitian ini, dapat dilihat bahwa terdapat perbedaan yang signifikan antara nilai saturasi oksigen sebelum dan sesudah minum air beroksigen tinggi dan air kelapa.

Kata Kunci: Nelayan, Air Beroksigen, Air Kelapa, Saturasi Oksigen

ABSTRACT

Background: *During work, carbon dioxide will increase, lactic acid accumulates, oxygen saturation becomes lower, thus oxygen demand will increase. The many and long stages of work make fishermen exhausted due to excessive exertion. Oxygen is a molecule essential for life. Hemoglobin is able to bind 1.34 ml of oxygen per gram of hemoglobin. The level of oxygen in the blood bound to hemoglobin is called oxygen saturation (SpO2) which can be measured using a pulse oximeter.*

Objective: *To determine the effect of drinking highly oxygenated water and coconut water on oxygen saturation of fishermen after work in Percut village.*

Methods: *This research is a true experiment with a pretest-posttest control group design. The number of research samples was 27 people who were divided into 3 groups using the consecutive sampling method. Univariate and bivariate data analysis used the Wilcoxon test because it was not normally distributed.*

Results: *The mean oxygen saturation before and after administration of highly oxygenated water were 97.89% and 98.89%. The average oxygen saturation before and after administration of coconut water was 97.67% and 98.56%. The results of the Wilcoxon test showed that there was a significant difference in the value of oxygen saturation before and after drinking highly oxygenated water p value = 0.014 (<0.05) with the value of oxygen saturation before and after drinking coconut water p value = 0.005 (<0.05).*

Conclusion: *Based on the results of this study, it can be seen that there is a significant difference between the oxygen saturation values before and after drinking highly oxygenated water and coconut water.*

Keywords: Fishermen, Oxygenated Water, Coconut Water, Oxygen Saturation