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Skripsi, Juli 2023
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**PERBEDAAN TINDAKAN *CLOSE SUCTION SYSTEM* (CSS)
DAN *OPEN SUCTION SYSTEM* (OSS) TERHADAP
PERUBAHAN *TIDAL VOLUME* PADA PASIEN DENGAN
VENTILATOR DI ICU**

ABSTRAK

Latar belakang : Masalah utama yang sering muncul pada pasien yang menggunakan alat bantu nafas (ventilasi mekanik) adalah bersihan jalan nafas yang tidak efektif yang dapat berakibat pada turunnya *tidal volume* pasien. Salah satu tindakan yang dapat dilakukan adalah tindakan *suction*. *Suction* memiliki 2 jenis tehnik yaitu *Close Suction System* (CSS) dan *Open Suction System* (OSS).

Tujuan : Mengetahui perbedaan tindakan *close suction system* (css) dan *open suction system* (oss) terhadap perubahan *tidal volume* pada pasien dengan ventilator.

Metode : *Eksperiment (Quasy)* dengan rancangan penelitian *Pretest Posttest One Group Design*, dengan total sampel 32 responden terbagi 16 responden kelompok *close suction system* dan 16 responden kelompok *open suction system*. Besarnya sample menggunakan *total sampling* kemudian dianalisis dengan *uji Independent t-test*.

Hasil : Nilai rata-rata *tidal volume pre test close suction system* 435.50 ml dan *post test* 389.06 ml dengan perubahan *tidal volume* 46 ml. Sedangkan *open suction system* nilai *tidal volume pre test* 425,69 ml dan *post test* 332,75 ml dengan perubahan *tidal volume* 93 ml. Terdapat perbedaan yang signifikan pada tindakan *Close Suction System* (CSS) dan *Open Suction System* (OSS) Terhadap Perubahan *Tidal Volume* Pada Pasien Dengan Ventilator di ICU didapatkan hasil $P\text{ value}=0,001$ ($p<0,05$).

Saran: Diharapkan perawat mampu memilih tindakan *suction* yang beresiko rendah digunakan pada pasien.

Kata kunci : *Close Suction System, Open Suction System, Tidal Volume*
Kepustakaan : 34 (2015-2023)

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Thesis, July 2023
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THE DIFFERENCES IN CLOSE SUCTION SYSTEM (CSS) AND OPEN SUCTION SYSTEM (OSS) MEASURES ON TIDAL VOLUME CHANGES IN PATIENTS WITH VENTILATOR IN ICU

ABSTRACT

Background: The main problem that often arises in patients who use breathing apparatus (mechanical ventilation) is ineffective airway clearance which can result in a decrease in the patient's tidal volume. one of the actions taken is suction action. Suction has 2 types of techniques in its use, namely Close Suction System (CSS) and Open Suction System (OSS).

Objective : To know the difference between closed suction system (css) and open suction system (oss) actions on changes in tidal volume in patients with ventilators

Methods: Experiment (quasi) with the *Pretest Posttest One Group Design*, with a total sample of 32 respondents, divided into 16 respondents in the closed suction system group and 16 respondents in the open suction system group. The sample size used total sampling and then analyzed using Independent t-test.

Results: The average value of pre-test close suction system tidal volume was 435.50 ml and post-test 389.06 ml with a change in tidal volume of 46 ml. While the open suction system tidal volume value pre test 425.69 ml and post test 332.75 ml with a tidal volume change of 93 ml. There is a significant difference in the Close Suction System (CSS) and Open Suction System (OSS) actions on Tidal Volume Changes in Patients With Ventilators in the ICU, the results obtained are P value = 0.001 ($p < 0.05$).

Suggestion: It is hoped that nurses are able to choose suction that has a low risk of being used on patients.

Keywords: *Close Suction System, Open Suction System, Tidal Volume*
Literature : 34 (2015-2023)