

***THE DIFFERENCE BETWEEN HEMODYNAMIC MONITORING AND
FLUID OUTPUT VOLUME AS INDICATORS FOR INTRAOPERATIVE
FLUID THERAPY IN NEUROSURGERY***

Nadya Putri Chania¹, Jenita Doli Tine Donsu², Maryana³
Department of Nursing Poltekkes Kemenkes Yogyakarta
Jl. Tata Bumi No. 3 Banyuraden, Gamping, Sleman
Email: putrichanianadya@gmail.com

ABSTRACT

Background: Neurosurgery is a medical procedure performed to diagnose conditions related to the nervous system according to the patient's pathophysiology. Intraoperative fluid imbalance in neurosurgery can increase the risk of complications. The two main indicators that can be used to determine the need for intraoperative fluid therapy are hemodynamic monitoring and the amount of fluid output.

Objective: Knowing the difference in fluid status of neurosurgical patients after being given fluid therapy using hemodynamic monitoring indicators and the amount of intraoperative output fluid.

Methods: This study is a quantitative study with analytic observations and uses a cross-sectional design. The sampling technique used was non-probability sampling with consecutive sampling technique. Respondents consisted of 2 observation groups with a total of 64 respondents. Data analysis using parametric statistical tests, namely the independent t-test.

Results: The results of data analysis using the independent t-test are that there is a significant difference between indicators of fluid therapy administration based on the amount of fluid output and hemodynamic monitoring with a sig. 2-tailed = 0.004 or p value <0.05.

Conclusion: There was a significant difference between fluid therapy indicators based on hemodynamic monitoring and the amount of intraoperative neurosurgical fluid output.

Keywords: fluid balance, neurosurgery, fluid output, hemodynamics, fluid therapy

¹Studen of Nursing Department of Poltekkes Kemenkes Yogyakarta

^{2,3}Lecturer of Nursing Poltekkes Kemenkes Yogyakarta

**PERBEDAAN *MONITORING* HEMODINAMIK DENGAN JUMLAH
CAIRAN *OUTPUT* SEBAGAI INDIKATOR TERAPI CAIRAN
INTRAOPERASI BEDAH SARAF**

Nadya Putri Chania¹, Jenita Doli Tine Donsu², Maryana³
Jurusan Keperawatan Poltekkes Kemenkes Yogyakarta
Jl. Tata Bumi No. 3 Banyuraden, Gamping, Sleman
Email: putrichanianadya@gmail.com

ABSTRAK

Latar Belakang: Bedah saraf adalah tindakan medis yang dilakukan untuk mendiagnosis kondisi yang berkaitan dengan sistem saraf sesuai patofisiologi pasien. Ketidakseimbangan cairan intraoperasi bedah saraf dapat meningkatkan risiko komplikasi. Dua indikator utama yang dapat digunakan untuk menentukan kebutuhan terapi cairan intraoperasi yaitu monitoring hemodinamik dan jumlah cairan output.

Tujuan: Mengetahui perbedaan status cairan pasien bedah saraf setelah diberikan terapi cairan menggunakan indikator *monitoring* hemodinamik dan jumlah cairan *output* intraoperasi.

Metode: Penelitian ini merupakan penelitian kuantitatif dengan observasional analitik serta menggunakan desain *cross-sectional*. Teknik sampling yang digunakan ialah *non-probability sampling* dengan teknik *consecutive sampling*. Responden terdiri dari 2 kelompok observasi dengan total 64 responden. Analisis data menggunakan uji statistika *parametric*, yaitu uji *t-test independent*.

Hasil: Hasil analisis data menggunakan uji *t-test independent* yaitu terdapat perbedaan yang signifikan antara indikator pemberian terapi cairan berdasarkan jumlah cairan *output* dan *monitoring* hemodinamik dengan nilai *sig. 2-tailed* = 0,004 atau *p value* <0,05.

Kesimpulan: Terdapat perbedaan yang signifikan antara indikator terapi cairan berdasarkan *monitoring* hemodinamik dan jumlah cairan *output* intraoperasi bedah saraf.

Kata Kunci: *balance* cairan, bedah saraf, cairan *output*, hemodinamik, terapi cairan

¹Mahasiswa Jurusan Keperawatan Poltekkes Kemenkes Yogyakarta

^{2,3}Dosen Keperawatan Poltekkes Kemenkes Yogyakarta