

**HUBUNGAN CAIRAN INFUS HANGAT DENGAN KEJADIAN  
PENURUNAN DERAJAT SHIVERING INTRA OPERASI PADA PASIEN  
SPINAL ANESTESI DI RSUD Dr. HARJONO PONOROGO**

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**ABSTRAK**

**Latar Belakang :** *Shivering* intra operasi merupakan respons fisiologis yang sering terjadi pada pasien yang menjalani prosedur bedah, terutama pada mereka yang mendapatkan anestesi spinal. *Shivering* dapat menyebabkan ketidaknyamanan yang signifikan bagi pasien dan berpotensi mengganggu stabilitas hemodinamik selama operasi. Salah satu penyebab utama *shivering* pada pasien yang menjalani anestesi spinal adalah penurunan suhu tubuh akibat vasodilatasi yang disebabkan oleh anestesi. Anestesi spinal dapat mengganggu mekanisme pengaturan suhu tubuh, sehingga pasien lebih rentan terhadap hipotermia.

**Tujuan Penelitian :** Diketahuinya pengaruh pengaruh pemberian cairan infus hangat terhadap kejadian *shivering* intra operasi pada pasien spinal anestesi di RSUD dr. Harjono Ponorogo.

**Metode Penelitian :** Jenis penelitian ini adalah kuantitatif *observasional* analitik dengan desain penelitian *cross sectional*. pengambilan sampel pada penelitian ini menggunakan metode *non probability sampling* dengan menggunakan *consecutive sampling*. Analisis pada penelitian ini dilakukan untuk mengetahui hubungan cairan infus hangat dengan kejadian penurunan derajat shivering intra operasi pada pasien spinal anestesi menggunakan uji statistik Chi Square.

**Hasil Penelitian :** Hasil uji chi square didapatkan nilai p-value 0,000. Nilai signifikansi p-value 0,000 lebih kecil dari 0,05 ( $0,000 < 0,05$ ), dengan demikian dapat disimpulkan bahwa ada hubungan antara pemberian cairan infus hangat dengan kejadian penurunan derajat shivering intra operasi pada pasien spinal anestesi di IBS RSUD Dr. Harjono Ponorogo.

**Kesimpulan :** Infus Hangat berhubungan terhadap penurunan derajat *shivering* intra operasi pada pasien spinal anestesi.

**Kata Kunci :** Infus hangat, intra operasi, *shivering*, spinal anestesi.

**THE RELATIONSHIP BETWEEN WARM INTRAVENOUS FLUID AND  
THE REDUCTION IN INTRAOPERATIVE SHIVERING SEVERITY  
IN PATIENTS UNDERGOING SPINAL ANESTHESIA AT  
DR. HARJONO REGIONAL HOSPITAL PONOROGO**

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**ABSTRAK**

**Background :** Intraoperative shivering is a common physiological response in patients undergoing surgical procedures, particularly among those receiving spinal anesthesia. Shivering can cause significant discomfort and has the potential to disrupt hemodynamic stability during surgery. One of the main causes of shivering in patients under spinal anesthesia is a drop in body temperature due to vasodilation induced by the anesthetic. Spinal anesthesia can impair the body's thermoregulatory mechanisms, making patients more susceptible to hypothermia.

**Purpose :** This study aims to determine the effect of warm intravenous fluid administration on the incidence of intraoperative shivering in patients undergoing spinal anesthesia at Dr. Harjono Regional Hospital, Ponorogo.

**Methods :** This study is a quantitative observational analytic research with a cross-sectional design. The sampling technique used in this study was non-probability sampling with a consecutive sampling method. The analysis was conducted to determine the relationship between warm intravenous fluid administration and the reduction in intraoperative shivering severity in patients undergoing spinal anesthesia, using the Chi-Square statistical test.

**Result :** The Chi-Square test results showed a p-value of 0.000. Since the significance value of  $p = 0.000$  is less than 0.05 ( $0.000 < 0.05$ ), it can be concluded that there is a significant relationship between the administration of warm intravenous fluids and the reduction in intraoperative shivering severity in patients undergoing spinal anesthesia at the Operating Room of Dr. Harjono Regional Hospital, Ponorogo.

**Conclusion :** Warm intravenous fluids are associated with a reduction in the severity of intraoperative shivering in patients undergoing spinal anesthesia

**Keywords :** Warm intravenous fluids, intraoperative, shivering, spinal anesthesia.