

## ABSTRAK

### **Latar Belakang:**

kritis yang dirawat di ICU. Umumnya faktor yang banyak menyebabkan infeksi nosokomial yang terjadi di ICU adalah akibat dari pemasangan CVC. Penggunaan antiseptik merupakan salah satu upaya dalam pencegahan infeksi akibat pemasangan CVC.

### **Tujuan:**

Tujuan dari penelitian ini adalah untuk melihat perbedaan antara penggunaan chlorhexidine 2% - alkohol 70% dan povidone iodine 10% - Alkohol 70% terhadap nilai leukosit, NLR dan kultur kuman pada pasien paska pemasangan CVC di ICU RSUP dr. Kariadi.

### **Metode:**

Penelitian ini menggunakan rancangan penelitian *experimental study design* di ICU RSUP dr. Kariadi Semarang. Subjek penelitian terbagi dalam kelompok antiseptik chlohexidine dan kelompok antiseptik dengan povidone iodine. Ada sejumlah tahapan yang dilakukan dalam pengumpulan datanya yaitu tahap penapisan pasien, tahap enrollment dan penelitian, serta tahap analisis variabel.

### **Hasil:**

Rerata penurunan kadar leukosit pada pasien chlohexidine senilai 45,1% dibandingkan kelompok povidone iodine 1,58% dan rerata penurunan NLR pada pasien kelompok chlohexidine senilai 12,62% dibandingkan kelompok povidone iodine 0,45%. Perbandingan hasil kultur kuman kelompok chlohexidine lebih baik daripada kelompok povidone iodine.

### **Kesimpulan:**

Penggunaan chlorhexidine 2% - Alkohol 70% lebih baik dari pada povidone iodine 10% - Alkohol 70% terhadap nilai leukosit, NLR dan kultur kuman pada pasien paska pemasangan CVC di ICU RSUP dr. Kariadi.

**Kata kunci:** *central venous catheter, chlorhexidine- alkohol, povidone iodine- alkohol*

## ABSTRACT

**Background:**

*Installation of central venous catheter is a procedure that is commonly done in critical patients treated in the Intensive Care Unit (ICU). The most common cause of nosocomial infection in the ICU is the result of CVC installation. Antiseptics is believed as one of the efforts to prevent infection due to CVC installation.*

**Aim:**

*To determine the difference between the use of chlorhexidine 2% - 70% alcohol and povidone iodine 10% - 70% alcohol on the leukocyte values, NLR and bacterial culture in patients after CVC installation in the ICU of RSUP dr. Kariadi Semarang.*

**Method:**

*This study used an experimental study design in the ICU of RSUP dr. Kariadi Semarang. The research subjects were divided into the chlohexidine antiseptic group and the antiseptic group with povidone iodine. Data collection in this study consisted of several stages, namely the patient screening stage, the enrollment and research stage, and the variable analysis stage.*

**Result:**

*The blood culture in the chlohexidine group was better than the povidone iodine group. The decreased of leukocyte count mean in chlohexidine patients was 45.1% compared to the 1.58% in povidone iodine group and declined of NLR mean in patients in the chlohexidine group was 12.62% compared to the 0.45% in povidone iodine group.*

**Conclusion:**

*Chlorhexidine 2% - 70% alcohol performed better than 10% povidone iodine - 70% alcohol for the leukocyte values, NLR and bacterial culture in patients after CVC installation in the ICU of RSUP dr. Kariadi Semarang.*

**Key words:** *central venous catheter, chlorhexidine- alkohol, povidone iodine- alkohol*