

## **ABSTRAK**

### **JUMLAH BAKTERI STAPHYLOCOCCUS SP. PADA TOMBOL HAND SANITIZER DISPENSER DAN HAND SOAP DISPENSER DI RUMAH SAKIT “X”**

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Mikroflora komensal dalam kondisi tertentu dapat merugikan manusia, sehingga kebersihan penting dalam mencegah timbulnya penyakit akibat bakteri. Salah satu media penyebaran penyakit, fomit, contohnya tombol *hand sanitizer dispenser* dan *hand soap dispenser*. Tujuan penelitian adalah mengetahui jumlah *Staphylococcus sp.* yang menempel pada tombol *hand sanitizer dispenser* dan *hand soap dispenser* di Rumah Sakit “X”.

Desain penelitian *cross sectional* dan bersifat deskriptif. Jumlah sampel berupa *whole sampling* (26 sampel), diambil dengan metode *swab* pada tombol *hand sanitizer dispenser* dan *hand soap dispenser* pada pagi dan sore hari. Hasil *swab* ditanam di medium *nutrient agar*, diidentifikasi dengan pewarnaan Gram, dan dilanjutkan penanaman pada medium agar darah dan *mannitol salt agar*.

Hasil pengamatan, menunjukkan lantai 1,3,4,5 dan 6 adalah lantai dengan aktivitas yang tinggi. Hasil rerata jumlah koloni *Staphylococcus sp.* pada tombol *hand soap dispenser* di lantai 1 35,875 CFU/cm<sup>2</sup>, lantai 2 0,5 CFU/c m<sup>2</sup>, lantai 3 2,625 CFU/cm<sup>2</sup>, lantai 4 64,5 CFU/cm<sup>2</sup>, lantai 5 12,625 CFU/cm<sup>2</sup>, lantai 6 44,5 CFU/cm<sup>2</sup>, lantai 7 0,25 CFU/cm<sup>2</sup>, lantai 8 0,625 CFU/cm<sup>2</sup>. Rerata jumlah koloni bakteri *Staphylococcus sp.* pada tombol *hand sanitizer dispenser* di lantai 1 1,25 CFU/cm<sup>2</sup>, lantai 3 3 CFU/cm<sup>2</sup>, lantai 4 0,25 CFU/cm<sup>2</sup>, lantai 5 2,25 CFU/cm<sup>2</sup>, lantai 6 0,5 CFU/cm<sup>2</sup>.

Simpulan penelitian yang didapat yaitu jumlah *Staphylococcus sp.* terbanyak pada tombol *hand soap dispenser* pada lantai 4 (64,5 CFU/cm<sup>2</sup>) dan menunjukkan perbedaan yang signifikan dengan jumlah bakteri pada lantai 7 yang memiliki jumlah bakteri paling sedikit (0,25 CFU/cm<sup>2</sup>). Jumlah bakteri *Staphylococcus sp.* pada tombol *hand sanitizer dispenser* terbanyak pada lantai 5 (2,25 CFU/cm<sup>2</sup>) namun tidak menunjukkan perbedaan yang signifikan dengan jumlah bakteri pada lantai lainnya.

Kata kunci: *hand sanitizer dispenser*, *hand soap dispenser*, *Staphylococcus sp.*

## **ABSTRACT**

### **THE NUMBER OF STAPHYLOCOCCUS SP. ON THE BUTTONS OF HAND SANITIZER DISPENSERS DAN HAND SOAP DISPENSERS IN “X” HOSPITAL**

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*Normal microflora in certain condition can harm human, thus hygiene is very important in disease prevention caused by bacteria. Disease transmission can involve fomite, for example the buttons of hand sanitizer dispenser and hand soap dispenser. The aim of this study was to determine the quantity of Staphylococcus sp. on the buttons of hand sanitizer dispenser and hand soap dispenser in “X” Hospital.*

*The design of this study was descriptive, cross sectional study. The samples were the whole population (26 samples), which were taken using swab method on the buttons of hand sanitizer dispensers and hand soap dispensers, performed in the morning and late afternoon. The bacteria were inoculated on nutrient agar plates, stained using Gram staining, followed by inoculation on blood agar plates and mannitol salt agar plates.*

*The results of this study were as follow. The human activities on the first, third, fourth and sixth floor were higher than other floors. From the hand soap dispenser buttons , the number of Staphylococcus sp. found on each floor were as follow: 1<sup>st</sup> floor 35.875 CFU/cm<sup>2</sup>, 2<sup>nd</sup> floor 0.5 CFU/cm<sup>2</sup> , 3<sup>rd</sup> floor 2.625 CFU/cm<sup>2</sup> , 4<sup>th</sup> floor 64.5 CFU/cm<sup>2</sup> , 5<sup>th</sup> floor 12.625 CFU/cm<sup>2</sup>, 6<sup>th</sup> floor 44.5 CFU/cm<sup>2</sup> , 7<sup>th</sup> floor 0.25 CFU/cm<sup>2</sup> , 8<sup>th</sup> floor 0.625 CFU/cm<sup>2</sup>. From hand sanitizer dispenser buttons, the number of Staphylococcus sp. found on each floor were as follow: 1<sup>st</sup> floor 1.25 CFU/cm<sup>2</sup>, 3<sup>rd</sup> floor 3 CFU/cm<sup>2</sup>, 4<sup>th</sup> floor 0.25 CFU/cm<sup>2</sup>, 5<sup>th</sup> floor 2.25 CFU/cm<sup>2</sup>, 6<sup>th</sup> floor 0.5 CFU/cm<sup>2</sup>.*

*The conclusions of this study were as follow. The highest number of Staphylococcus sp. on the buttons of hand soap dispenser in 4<sup>th</sup> floor (64,5CFU/cm<sup>2</sup>)and shows significant differences with the result from 7<sup>th</sup> floor which has the lowest number of Staphylococcus sp. (0,25 CFU/cm<sup>2</sup>). The highest number of Staphylococcus sp. on the buttons of hand sanitizer dispenser in 5<sup>th</sup> floor (2,25 CFU/cm<sup>2</sup>)but it doesn't show significant difference with the other number of Staphylococcus sp. in another floor.*

*Keyword:* hand sanitizer dispenser, hand soap dispenser, Staphylococcus sp.

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