

ABSTRAK

Latar Belakang: Frekuensi penggunaan *smartphone* oleh tenaga kesehatan di rumah sakit yang tinggi dapat menyebabkan penyebaran bakteri dan kontaminasi silang ke pasien dengan *smartphone* sebagai perantaranya. *Smartphone* yang dirancang dengan layar sentuh memungkinkan terjadinya kontaminasi bakteri dari tangan tenaga kesehatan.

Tujuan: Mengetahui jumlah rata-rata angka kuman yang diisolasi dari telapak tangan dan *smartphone* tenaga kesehatan, dan mengetahui adanya perbedaan rata-rata angka kuman yang diisolasi dari telapak tangan dan *smartphone* tenaga kesehatan di RS PKU Muhammadiyah Gamping.

Metode Penelitian: Jenis penelitian ini adalah penelitian observasional analitik dengan desain *cross sectional* pada 56 tenaga kesehatan di RS PKU Muhammadiyah Gamping Yogyakarta. Penelitian ini dilaksanakan pada Juni 2019-Agustus 2019. Perhitungan angka kuman menggunakan metode *streak plate* di laboratorium Mikrobiologi Fakultas Kedokteran dan Ilmu Kesehatan Universitas Muhammadiyah Yogyakarta.

Hasil Penelitian: Hasil analisis data dari 56 responden 75% perempuan dan 25% laki-laki didapatkan rata-rata angka kuman yang diisolasi dari telapak tangan tenaga kesehatan sebesar 23 CFU/cm². Angka kuman yang diisolasi dari layar *smartphone* tenaga kesehatan didapatkan rata-rata 15 CFU/cm². Uji analisis perbedaan angka kuman tangan dan angka kuman pada *smartphone* tenaga kesehatan menggunakan uji *Mann-Whitney* diperoleh nilai $p=0,014$ ($p<0,05$), maka dapat disimpulkan bahwa ada perbedaan antara angka kuman tangan dan angka kuman pada *smartphone* tenaga kesehatan di RS PKU Muhammadiyah Gamping.

Kesimpulan: Ada perbedaan antara angka kuman telapak tangan dan angka kuman pada layar *smartphone* tenaga kesehatan di RS PKU Muhammadiyah Gamping dengan rata-rata angka kuman telapak tangan sebesar 23 CFU/cm² dan angka kuman pada layar *smartphone* sebesar 15 CFU/cm².

Kata Kunci: *angka kuman, tangan, smartphone, tenaga kesehatan*

ABSTRACT

Background: Smartphone users by health care workers in the hospital are very high that can cause bacterial spreading and cross-contamination in patients with smartphones as intermediaries. A smartphone designed with touch-screen allows bacterial contamination from the hands of health care workers.

Objective: This study is conducted to examine the difference between the number of bacterial contamination on health care workers' hands and the number of bacterial contamination on health care workers' smartphones

Methods: This research is an analytic observational study with a cross-sectional design on 56 health workers at PKU Muhammadiyah Gamping Yogyakarta Hospital. This research was carried out on June 2019-August 2019. Measurement of bacterial contamination using the streak plate method in the microbiology laboratory of FKIK UMY.

Result: The results of data analysis of 56 respondents 75% female and 25% male obtained an average number of bacterial on health care workers' hands of 23 CFU/cm². The number of bacterial on health care workers' smartphones is an average of 15 CFU/cm². Test analysis of differences in the number of bacterial on health care workers' hands and the number of bacterial on health care workers' smartphones using the Mann-Whitney test obtained p value = 0.014 ($p < 0.05$), it can be concluded that there is a difference between the number of bacterial on health care workers' hands and the number of bacterial on health care workers' smartphones in RS PKU Muhammadiyah Gamping.

Conclusion: There is a difference between the number of number of bacterial on health care workers' hands and the number of bacterial on health care workers' smartphones at RS PKU Muhammadiyah Gamping with an average number of hand's bacterial of 23 CFU/cm² and the number of bacterial on the smartphone of 15 CFU/cm².

Keywords: number of bacteria, hand, smartphone, health-care worker.