

POLITEKNIK KESEHATAN KEMENKES TANJUNG KARANG
JURUSAN FARMASI
Laporan Tugas Akhir, Juni 2022

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Uji Daya Hambat pada Beberapa *Hand Sanitizer* dari *Marketplace* yang Tidak Memiliki Izin Edar terhadap Bakteri *Staphylococcus aureus*

xvii + 63 halaman, 4 tabel, 10 gambar, dan 13 lampiran

ABSTRAK

Pelonjakan penjualan terbesar semenjak pandemi COVID-19 terjadi pada penjualan produk sanitasi tangan alias *hand sanitizer*, yang peningkatannya mencapai 531% pada bulan Februari 2020 lalu. Melonjaknya permintaan terhadap *hand sanitizer* di pasar menyebabkan banyak penjual yang terindikasi dengan berbuat curang memanfaatkan kelengahan masyarakat yang masih awam akan bahaya penjualan barang tanpa izin edar. Produk PKRT yang diproduksi, dirakit, atau dikemas ulang dan diedarkan, termasuk *hand sanitizer*, harus terlebih dahulu mendapat persetujuan untuk dijual oleh Kementerian Kesehatan (Permenkes RI No. 62/2017:II:3(1)).

Tujuan dari penelitian ini adalah untuk mengetahui daya hambat dan efektivitas beberapa *hand sanitizer* dari *marketplace* yang tidak memiliki izin edar terhadap pertumbuhan bakteri *Staphylococcus aureus*. Metode penelitian yang digunakan yaitu dengan cara *disc diffusion* Kirby-Bauer yaitu dengan menggunakan kertas cakram yang dicelupkan ke sampel *hand sanitizer* kemudian diletakkan di media *Mueller Hinton Agar* (MHA) yang telah diulaskan dengan bakteri *Staphylococcus aureus* dan setelah diinkubasi selama 24 jam dilakukan pengukuran diameter daya hambat. Sampel *hand sanitizer* diambil dari salah satu *marketplace* di Indonesia yang terdiri enam sampel yaitu HS A, HS B, HS C, HS D, HS E, dan HS F. Sampel tersebut dibandingkan keefektifannya dengan *hand sanitizer* yang memiliki izin edar sebagai kontrol positif dan pengulangan yang dilakukan sebanyak empat kali. Hasil penelitian menunjukkan terdapat satu merk *hand sanitizer* yang sama sekali tidak menunjukkan efek daya hambat yaitu HS A, sedangkan HS D hanya menunjukkan daya hambat pada pengulangan pertama. Pada HS C dan F menghasilkan rata-rata diameter daya hambat sebesar 6,875 mm dan 6,65 mm dengan kategori respon hambatan sedang. Sedangkan terdapat dua *hand sanitizer* yang memiliki kategori daya hambat kuat terhadap pertumbuhan bakteri *Staphylococcus aureus* yaitu HS B dan E dengan rata-rata diameter daya hambat yaitu 11,3 mm dan 11,525 mm. Kesimpulan dari penelitian ini adalah lima sampel *hand sanitizer* menunjukkan daya hambat terhadap pertumbuhan bakteri *Staphylococcus aureus*, namun masih lebih rendah jika dibandingkan dengan kontrol positif

Kata Kunci : Uji Daya Hambat, *Hand Sanitizer*, *Staphylococcus aureus*,
Marketplace

Daftar Bacaan : 28 (1992-2021)

POLITEKNIK KESEHATAN TANJUNG KARANG JURUSAN FARMASI
Final Project, Juni 2022

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Inhibitory Test on Several Hand Sanitizer from the Marketplace That Do Not Have a Distribution Permit Against Staphylococcus aureus Bacteria

xvii + 63 pages, 6 tables, 11 pictures, and 13 attachments

ABSTRACT

The biggest sales spike since the COVID-19 pandemic occurred in sales of hand sanitizer products, which increased by 531% in February 2020. The soaring demand for hand sanitizers in the market has caused many sellers who are indicated to have participated in doing so while taking advantage of the negligence of the public who are still unfamiliar with the dangers of selling goods without a distribution permit. PKRT products that are produced, assembled, or repackaged and turned off, including hand sanitizers, must first obtain approval for sale by the Ministry of Health (Permenkes RI No. 62/2017: II:3(1)).

The purpose of this study was to determine the inhibition and effectiveness of several hand sanitizers from the marketplace that did not have a marketing authorization for the growth of Staphylococcus aureus bacteria. The research method used was the Kirby-Bauer disc diffusion method, namely by using disc paper dipped in a hand sanitizer sample then placed on Mueller Hinton Agar (MHA) media which had been reviewed with Staphylococcus aureus bacteria and after being incubated for 24 hours, the diameter of the power was measured. The hand sanitizer sample was taken from one of the marketplaces in Indonesia, which consisted of six samples, namely HS A, HS B, HS C, HS D, HS E, and HS F. The samples were compared to their effectiveness with hand sanitizers that had distribution permits as positive controls. and culture conducted four times. The results showed that there was one brand of hand sanitizer that showed absolutely no inhibitory effect, namely HS A, while HS D only showed inhibitory power in the first row. In HS C and F, the average diameter of the inhibition was 6.875 mm and 6.65 mm in the category of medium resistance response. Meanwhile, there are two hand sanitizers that have a category of strong inhibition against the growth of Staphylococcus aureus bacteria, namely HS B and E with an average diameter of inhibition of 11.3 mm and 11,525 mm. The conclusion of this study is that five samples of hand sanitizers showed inhibition against the growth of Staphylococcus aureus bacteria, but were still lower when compared to positive controls.

Keywords : *Inhibitory Test, Hand Sanitizer, Staphylococcus aureus, Marketplace*

Reading lists : *28 (1992-2021)*