

**“HUBUNGAN TINGKAT PENGETAHUAN DENGAN KEJADIAN
KARIER *ENTEROBACTERIACEAE* PENGHASIL *EXTENDED
SPECTRUM BETA LACTAMASE* PADA TENAGA KESEHATAN
DI RUMAH SAKIT ISLAM BANJARNEGARA”**

ABSTRAK

Latar belakang: *Extended spectrum beta lactamase* (ESBL) merupakan enzim hasil mutasi gen pada bakteri, khususnya *Enterobacteriaceae*, yang dapat menghambat kerja antibiotik *beta lactam* seperti *penicillin*, *cephalosporin* generasi I, II, dan III, serta *monobactam*; kecuali *cephamycin* dan *carbapenem*. ESBL dapat menyebabkan *healthcare-associated infection* (HAIs). Kewaspadaan standar merupakan kewaspadaan utama yang terdiri dari 11 komponen yang perlu diterapkan dalam memberikan perawatan medis kepada pasien di fasilitas pelayanan kesehatan. **Tujuan:** Penelitian ini bertujuan untuk mengetahui hubungan antara tingkat pengetahuan dengan kejadian karier *Enterobacteriaceae* penghasil ESBL (ESBL-E) pada tenaga kesehatan di rumah sakit. **Metodologi:** Penelitian ini bersifat observasional analitik dengan metode kuantitatif dan pendekatan studi *cross sectional*. Responden penelitian adalah 61 tenaga kesehatan Rumah Sakit Islam (RSI) Banjarnegara yang diambil dengan teknik pengambilan sampel *purposive sampling*. Instrumen penelitian yang digunakan adalah kuesioner pengetahuan mengenai kewaspadaan standar 24 item dan sampel swab rektal yang kemudian dideteksi ESBL dengan media CHROMagar™ ESBL. **Hasil:** Mayoritas responden memiliki pengetahuan relatif baik mengenai kewaspadaan standar dengan skor median 16 (25%). Dari 61 responden, ditemukan delapan kejadian karier ESBL-E (13%). Isolat karier terdiri dari lima *Escherichia coli* (63%), dua *Klebsiella pneumoniae* (25%), dan satu *Acinetobacter baumannii* (12%). Data dianalisis dengan uji hipotesis *Mann Whitney* menggunakan aplikasi SPSS. Analisis statistik menunjukkan nilai signifikansi 0,493. **Kesimpulan:** Tidak terdapat hubungan antara tingkat pengetahuan dengan kejadian karier *Enterobacteriaceae* penghasil ESBL pada tenaga kesehatan di rumah sakit.

Kata kunci: ESBL, *Enterobacteriaceae*, *extended spectrum beta lactamase*, kewaspadaan standar, pengetahuan, tenaga kesehatan

**“RELATIONSHIP OF KNOWLEDGE LEVEL WITH THE INCIDENT OF
EXTENDED SPECTRUM BETA LACTAMASE PRODUCING
ENTEROBACTERIACEAE CARRIER IN HEALTHCARE WORKERS
AT BANJARNEGARA ISLAMIC HOSPITAL”**

ABSTRACT

Background: Extended spectrum beta lactamase (ESBL) is an enzyme produced by bacterial gene mutation, especially Enterobacteriaceae, which is able to restrict beta lactam antibiotic activity such as penicillin, 1st, 2nd, and 3rd generation of cephalosporin, and monobactam; except cephamycin and carbapenem. ESBL can cause healthcare-associated infection (HAIs). Standard precaution is the principal precaution consists of 11 components which should be applied while giving medical treatments to patients in healthcare facilities. **Objective:** This research was aimed to investigate the relationship of knowledge level with the incident of extended spectrum beta lactamase producing Enterobacteriaceae (ESBL-E) carrier in hospital healthcare workers. **Method:** This research was an observational analytical research with quantitative method and cross sectional approach. The respondents included 61 healthcare workers working at Banjarnegara Islamic Hospital, with the sampling method of purposive sampling. The instruments used in this research were a 24 item-questionnaire about the knowledge of standard precaution and rectal swabs intended to detect the incident of ESBL-E carrier using the CHROMagar™ ESBL medium. **Result:** Most of the respondents have a relatively good level of knowledge related to standard precautions with the median score of 16 (25%). Over all the 61 rectal swab samples, eight incidents of ESBL-E carrier are identified (13%). The isolates of the identified carriers consist of five *Escherichia coli* (63%), two *Klebsiella pneumoniae* (25%), and one *Acinetobacter baumannii* (12%). The data is analyzed with the Mann Whitney hypothesis test using the SPSS software. The statistical analysis shows the significant value of 0,493. **Conclusion:** There is no relationship of knowledge level with the incident of extended spectrum beta lactamase producing Enterobacteriaceae carrier in hospital healthcare workers.

Keywords: ESBL, Enterobacteriaceae, extended spectrum beta lactamase, healthcare workers, knowledge, standard precaution