Evaluasi Penggunaan Antibiotik dengan Intervensi E-Learning pada Pasien Anak di Departemen Ilmu Kesehatan Anak RSCM = Evaluation of the Use of Antibiotics with E-Learning Interventions in Pediatric Patients at the Department of Child Health Cipto Mangunkusumo

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Abstrak

Resistensi antibiotik merupakan ancaman kesehatan global. Tingginya tingkat reproduksi mikroorganisme dan kemampuan tekanan selektif yang kuat dari mikroorganisme menghadapi antibiotik pilihan merupakan permasalahan penggunaan antibiotik saat ini. Salah satu cara menguatkan pemahaman dan ketaatan staf medis adalah melalui edukasi. E-learning merupakan salah satu cara untuk meningkatkan tingkat pengetahuan dan ketepatan penggunaan antibiotik. Penelitian intervensi ini melibatkan seluruh DPJP dan PPDS Sp1 Ilmu Kesehatan Anak yang berstatus aktif di FKUI RSCM. Intervensi e-learning dilakukan terhadap DPJP dan PPDS dengan topik Antimicrobial Stewardship (AMS) melalui website EMAS UI kemudian dinilai tingkat pengetahuan pra- dan pasca-intervensi. Penggunaan antibiotik satu bulan pra- dan pasca-intervensi dinilai dengan alur Gyssens untuk menilai ketepatan penggunaan antibiotik. Sebanyak 135 (54,4%) penggunaan antibiotik pra-intervensi dan 170 (72,24%) penggunaan antibiotik pasca-intervensi dinilai tepat. Analisis bivariat terhadap ketepatan penggunaan antibiotik menunjukkan terdapat hubungan bermakna pra- dan pasca-intervensi (OR= 0,537, IK 95% 0,363-0,795; p< 0,002). Sebanyak 42 dari total 56 DPJP anak dan 119 dari total 123 PPDS Sp1 Ilmu Kesehatan Anak mengikuti intervensi e-learning. Analisis bivariat menunjukan terdapat hubungan bermakna terhadap tingkat pengetahuan DPJP pra- dan pasca-intervensi (1 vs 32; p<0,001) dan PPDS pra- dan pasca-intervensi (10 vs 66; p<0,001). Terdapat peningkatan signifikan tingkat ketepatan penggunaan antibiotik pada pasien anak di ruang perawatan RSCM setelah dilakukan intervensi edukasi melalui metode e-learning.

.....Antibiotic resistance is a global health threat. The high rate of reproduction of microorganisms and the strong selective pressure ability of microorganisms against antibiotics are the problems of the current use of antibiotics. Education is a way to strengthen the understanding and obedience of medical staff. E-learning can be used to increase the level of knowledge and the effectiveness of using antibiotics. This intervention study involved all active pediatric staff and pediatric residents from the Department of Child Health in FMUI-CMH. Staff and residents underwent intervention through e-learning on the topic of Antimicrobial Stewardship (AMS) via the EMAS UI website, and then the level of their pre- and post-intervention knowledge was assessed. The use of antibiotics one month pre- and post-intervention was assessed by Gyssen's flowchart to assess the appropriateness of the antibiotics usage. A total of 135 (54.4%) uses of pre-intervention antibiotics and 170 (72.24%) uses of post-intervention antibiotics were considered appropriate. Bivariate analysis of the appropriate use of antibiotics showed that there was a significant relationship pre- and post-intervention (135 vs. 170, 95% CI 0.363-0.795; p 0.002). Forty two out of 56 staff and 119 out of 123 residents participate in e-learning. Bivariate analysis showed that there was a significant relationship between the level of knowledge of pre- and post-intervention in pediatric staff (1 vs. 32; p 0.001) and pre- and post-intervention pediatric residents (10 vs. 66; p 0.001). The total use of pre- and post-intervention antibiotics being, respectively, 248 and 229 antibiotics. There was a significant increase in the

appropriateness level of using antibiotics in pediatric patients at CMH after educational interventions were carried out through the e-learning.