Introduction: Acne vulgaris (AV) is one of the most common chronic skin diseases that antibiotics mostly prescribed. Antibiotic resistance is a common and huge problem which threatening the public health.

Objective: In this study we intend to take attention to antibiotic resistance by comparing antibiotics prescribing habits of two different branch of physicians which follow AV patients.

Materials and Methods: 201 dermatologists and 147 family physicians (FPs), total amount of 348 doctors attended to the study. 29 questions were asked them by internet.

Results: The dermatologists mostly prescribe topical clindamycin, tetracycline, erythromycin and nadifloxacin in adult patients while the FPs prefer mupirocin, and fucidic acid. The dermatologists offer doxycycline and azithromycin in systemic treatment but the FPs prescribe tetracycline mostly. The dermatologists prefer topical clindamycin, tetracycline, and nadifloxacin in children and the FPs usually offer mupirocin and fucidic acid. For pregnant/breast feeding patients the dermatologists mostly prescribe topical clindamycin and erythromycin while the FPs prefer fucidic acid. Dermatologists recommended systemic antibiotics in moderate acne and back involvement, whereas FPs recommended severe acne. The majority of dermatologists continue to treat antibiotics for 8-12 weeks; the majority of FPs continued for 1-4 weeks. Dermatologists change antibiotics most frequently after 4-8 weeks of use, however FPs change after 4 weeks. While the majority of dermatologists did not give antibiotics for comedones, FPs sometimes give antibiotic for comedones, or had no idea. Dermatologists use combination therapy, FPs didn’t any information about this. As a combination dermatologists prefer more clindamycin + benzoyl peroxide combination.
Discussion: This study showed differences in antibiotic prescription habits between the dermatologists and FPs. Dermatologists were more conscious about antibiotic resistance. Nonetheless, for prevention of antibiotic resistance, dermatologist need to have detailed knowledge about precaution of antibiotic resistance. The protection of public health is one of the important duties of dermatologists.