

# Prevalence of quinolone-resistant uropathogenic *Escherichia coli* in a tertiary care hospital in south Iran [Response to letter]

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## Dear editor

We are grateful for the comments from our readers and their interest in our work. Also, we thank the editor for the opportunity to respond to the criticisms offered about our article. At first, Dr. Bhoj R. Singh highlighted one of our limitations that we already cited in our article and clearly stated that “further studies are required in larger series.”<sup>1</sup> But, 121 *Escherichia coli* isolated from urinary tract infections (UTIs) during a six months period from a major referral hospital is low in Dr. Bhoj R. Singh opinion, while their 46 isolates are not.<sup>1</sup> Anyway, if they had a concern regarding the epidemiological strength of our report on nalidixic acid and ciprofloxacin susceptibility, we would like bring to your attention to our previous retrospective study in the same hospital on 9991 UTI cases,<sup>2</sup> and also another multicenter report on pyelonephritis, cystitis, and urosepsis cases.<sup>3</sup>

Second, regarding Dr. Bhoj R. Singh concern about uropathogenic nature of our *E. coli* isolates and the absence of any confirmatory test, I invite our readers to read carefully our methods. Since we said that our samples derived from our previous work, where we detected *fimH* in 98.3% of isolates as a constitutive gene and potential vaccine candidate for uropathogenic *E. coli* (UPEC).<sup>4,5</sup> But, apart from our work, you can not find any standard method in the literature that certainly introducing a confirmatory test for identification of UPEC, and all of them such as pure isolation from a UTI episode, the presence of some adhesions or specific O-serogroups are just presumptive.

But regarding data presented by Dr. Bhoj R. Singh and comparing their critical situation with our country, we thought that some points must be clarified. We try to compare our fluoroquinolones resistance rates with the majority of previous works within the country and it seems that the overall resistance rates are about 40–50%.<sup>1</sup> But, you claimed that India situation is far worse than Iran based on your results from an institutional laboratory with only 46 isolates with no other citation showing the same finding. Also, we are wondering that as an academic member, there were several scientific mistakes for writing bacterial names in your report. Meanwhile, you raise a concern that our *E. coli* isolates may be just contamination rather than a true episode of UTI (which was clearly defined in our methods); but we have same concern since the majority of your bacterial isolates are usually contamination rather than a true cause of UTI. Another concern about your data is saying Metallo- $\beta$ -lactamase (MBL)

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producing for your carbapenem-resistant isolates, while we know that MBL is not the only mechanism of carbapenem resistance and this point must be testing by confirmatory tests. Finally, regarding the susceptibility of nitrofurantoin, we must say that in vitro susceptibility not always guarantee a successful therapy due to its numerous side effects.<sup>3</sup>

## Disclosure

The authors report no conflicts of interest in this communication.

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