Reviewer’s report

Title: Prospective study on human fecal carriage of Enterobacteriaceae possessing mcr-1 and mcr-2 genes in a regional hospital in Hong Kong

Version: 0 Date: 28 Oct 2017

Reviewer: Shetty Ravi Dyavar

Reviewer's report:

In this manuscript titled, "A prospective study on human fecal carriage of Enterobacteriaceae possessing mcr-1 or mcr-2 genes in Hong Kong, with molecular characterization of IncP-1 and IncX4 types of mcr-1 plasmids coexisting in an Escherichia coli Sequence Type 201 isolate", Chan et al conducted a screening of fecal samples from 616 donors for colistin resistant enterobacteriaceae by bacterial culture. The authors also amplified mcr-1 and mcr-2 gene sequences from the clinical samples and identified mcr-1 +ve genes in 14 individuals. They also isolated a plasmid with Inc-P1 and IncX4 types of mcr-1 plasmids in E. coli. Since IncX4 containing E.coli has higher transmissible rate, this study has identified a novel strain of E.coli with high transmissible rate. This manuscript also confirms the origin of mcr-1 plasmid containing E. coli from China based on the existing reports of IncP-1 type pf mcr-1 plasmids present as reference plasmids in genbank. The study has an important update on the prevalence of mcr resistant E.coli strains in Hong Kong.

Major Comments:

1) Introduction needs more description of mcr-1 plasmid containing E.coli and their significance and geographical distribution and show the importance of the current study.

2) The structural map of the plasmid containing IncP-1 and IncX4 types pf mcr-1 plasmid in E.coli will be highly important and should be presented as a figure in the manuscript. This provides important information about this plasmid and also serves as an important reference for future studies.

Minor Comments:

1) In the abstract and also when noted for the first time in the introduction, full length names of mcr-1 and mcr-2 genes, MIC, ESBL need to be written.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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