Factors of Antibiotic Resistance in Vietnam: Prescribing in Primary Healthcare

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Funded by CHW under the Health Grand Challenges program

Introduction
• Antimicrobial resistance (AMR) is a pressing global issue
• Low- and middle-income countries (LMIC) at particularly high risk
• Vietnam has one of the highest AMR rates in the world

Objective of the Study
This purpose of this study is to investigate the patterns and determinants of antibiotic prescribing in primary healthcare in Vietnam to inform the development of appropriate interventions.

Results

<table>
<thead>
<tr>
<th>Qualification</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary healthcare doctor</td>
<td>121</td>
<td>57.6%</td>
</tr>
<tr>
<td>Assistant primary healthcare doctor</td>
<td>89</td>
<td>42.3%</td>
</tr>
<tr>
<td>Other (non-prescribers)</td>
<td>95</td>
<td>N/A</td>
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Attitudes:
• Doctors don’t think they see many patients with resistant infections
• Doctors have varying perceptions of how their prescribing affects local AMR patterns
• On average, doctors have high self-efficacy with antibiotic prescribing

Knowledge:
• Insufficient knowledge of antibiotic drugs and AMR among prescribers
• Most common AMR training is from medical school
• 41% have had specific, recent training from the Ministry of Health
• 96.7% seek better clinical practice guidelines

Practice:
• Doctors prescribe antibiotics frequently each week and for most ARI patients
• Clinical uncertainty and lack of diagnostics are the most common reasons for prescribing without bacterial infection
• Few doctors talk about AMR with patients
• 93.3% had experienced shortages of antibiotics

Discussion
• Doctors in Vietnam show a lack of understanding about AMR and a shortage of training
• Clinical uncertainty and lack of diagnostics encourage empiric antibiotic treatment
• Lack of communication on AMR between doctors and patients

Conclusion
The factors known to drive AMR are seen among primary healthcare prescribers in Vietnam commune health centers and should be addressed with the proper interventions, such as AMS training and better clinical guidelines.

Acknowledgements
I would like to thank OUCRU and Sonia Lewycka, Ph.D. for their guidance and support in this summer project. I also acknowledge Center for Health and Wellbeing and the Health Grand Challenges program for their support.