



## **CPS-056**

# ADDRESSING CONSUMER MISCONCEPTIONS ON ANTIBIOTIC USE AND RESISTANCE IN THE CONTEXT OF SORE THROAT ON SOCIAL MEDIA: TEACHABLE MOMENTS FOR PHARMACISTS

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### INTRODUCTION

- Overuse and misuse of antibiotics are the main drivers of antimicrobial resistance (AMR)<sup>1</sup>
- Inappropriate use of antibiotics is likely to be influenced by users' misunderstanding the mechanisms of action<sup>2-6</sup>
- Despite widespread online media coverage of the coronavirus disease 2019 (COVID-19) pandemic, there are misconceptions on how bacterial and viral infections are treated and AMR<sup>2,7</sup>
  - A European study found that only half of respondents knew that antibiotics are ineffective against viruses, while ~20% of respondents were unaware that unnecessary antibiotic use renders them ineffective<sup>7</sup>
- The extensive use of social media provides an opportunity to explore online conversations on antibiotics and AMR to identify beliefs and misconceptions<sup>2</sup>
- Insights can then be used to inform strategies and resources for healthcare professionals (HCPs) that can be used to educate antibiotic users and help mitigate AMR

### AIM

To analyse social media conversations on antibiotic use and AMR in the context of sore throat, across a range of social media platforms with pharmacists using the Global Respiratory Infection Partnership (GRIP) Ask; Customise; Empower (ACE) model

### **METHODS**

### Study design

- A multinational, observational, social media content analysis was undertaken between 1 January 2018 and 25 November 2021 across eight countries (Germany, Italy, Spain, Mexico, Brazil, Thailand, Romania and the Russian Federation) that captured conversations on AMR and sore throat<sup>2</sup>
- Five distinct groups of antibiotic users were identified and categorised based on their diverse opinions and beliefs on antibiotic use in sore throat. These profiles were shared with pharmacists attending a workshop convened by the GRIP, held at the 80th International Pharmaceutical Federation (FIP) World Congress of Pharmacy and Pharmaceutical Sciences 2022
- Pharmacists were then divided into groups to explore one of the five profiles in more detail. In addition, groups assessed whether the profiles and perceptions were recognised by pharmacists and explored their role as educators on social media
- The ACE framework developed by GRIP was used to identify questions that antibiotic users in each profile could be asked together with potential responses that could be provided to address misconceptions

### RESULTS

### Overview of workshop participants

● In total, 150 pharmacists from different regions took part in the workshop, allowing knowledge and experiences to be shared across geographies

#### **Exploration of the five profiles and associated** misconceptions around antibiotic use in sore throat

During the first part of the workshop, each group of pharmacists explored one of the five profiles identified from the multinational, observational, social media content analysis study<sup>2</sup> (Figure 1)

Figure 1. Five antibiotic user profiles identified

### **Antibiotic user profiles**

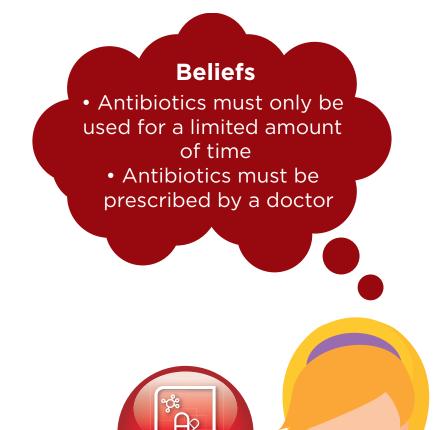
Opposed to antibiotics

*In favour of antibiotics* 



Pharmacists recognised the five distinct profiles presented to them and provided examples of statements that antibiotic users were likely to make (Figure 2)

Figure 2. Examples of beliefs, statements and behaviours identified by pharmacists for each profile



**Statements**  "I need to educate my family on how to measure doses correctly to prevent under- or overdosing' "Antibiotics must not be shared among friends"

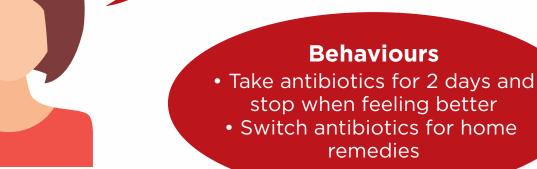
> **Behaviours**  Educate people to trust HCPs • Have a higher level of education on the use of antibiotics

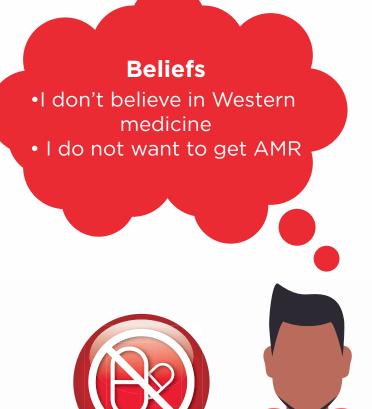


**Antibiotic-preserving** 

peer educators

**Statements**  "I do not take antibiotics as they interact with other medications" • "I am not taking this as it will kill my microbiota and I will get thrush"





**Antibiotic-cautious users** 

**Medication-resistant** antibiotic opponents

**Statements** • "I do not trust the pharmacist" • "I do not want to take chemical products"

> **Behaviours** • Take symptomatic treatment only • Take family, friends' or neighbours' advice



**Beliefs** 

Believers in the strength of antibiotics

**Statements** • "Get an antibiotic and everything will get better" "Antibiotics will prevent my symptoms from getting worse and I must continue my vacation

> **Behaviours** • Try to buy antibiotics without a prescription Buy antibiotics online



**Determined** 

pro-antibiotic users

azithromycin works well for me' "Other medication does not work so I will take antibiotics instead" Behaviours

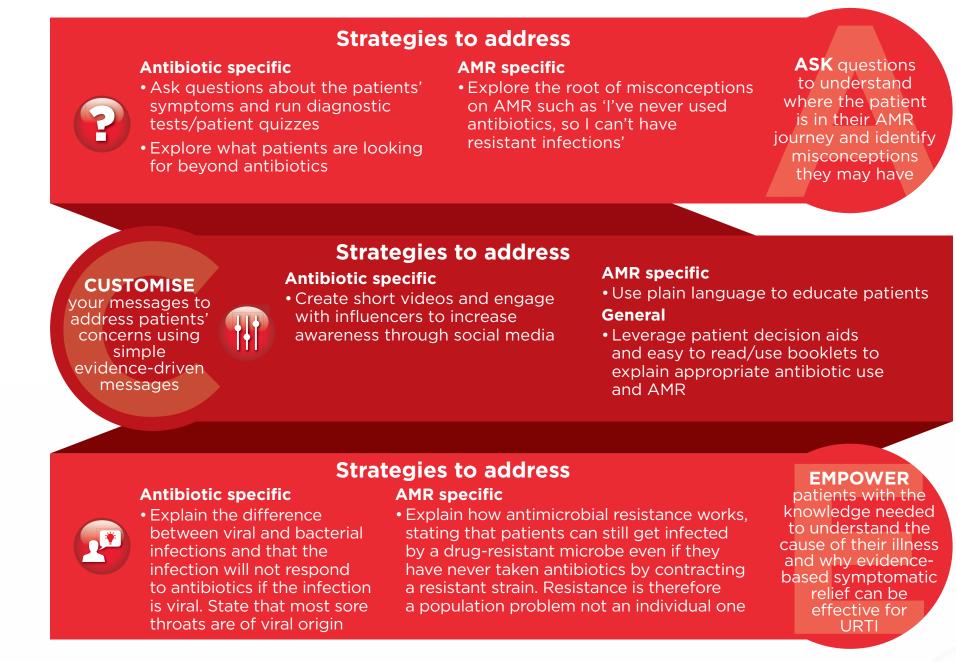
**Statements** 

/isit the doctor and refuse to Use older antibiotics or find

#### Strategies to overcome challenges and misconceptions on AMR

- Strategies were identified by pharmacists to address challenges and misconceptions on antibiotics and AMR
- Pharmacists identified various stakeholders that could play a role in conveying the correct messaging on AMR at the community level
  - Online influencers (medical and non-medical)
  - HCPs
- Pharmacists applied the GRIP ACE model to the profiles and identified actions that pharmacists could take to identify and address misconceptions on antibiotics and AMR (Figure 3)
  - The GRIP ACE model highlights the importance of asking the right questions to identify patient needs/misconceptions. It encourages pharmacists to customise messaging to patients and **empowers** patients with the knowledge required to understand and manage their illnesses

Figure 3. ACE model for engagement and strategies to address misconceptions



AMR, antimicrobial resistance; URTI, upper respiratory tract infection

### CONCLUSIONS

- The multinational, observational, social media content analysis study identified five profiles, which covered a spectrum of profiles ranging from being 'opposed to antibiotics' to 'in favour of antibiotics'
- Pharmacists recognised the five profiles and identified unique beliefs, statements and behaviours for patients belonging to each profile
- Social media content analysis allows pharmacists to address patient needs and misconceptions using the ACE model
- Pharmacists should engage with relevant social media platforms to address misconceptions and promote the mitigation of AMR

### REFERENCES

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### **WEBSITE**

www.grip-initiative.org.

### **DISCLOSURES**

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