EVALUATING THE IMPACT OF GLOBAL RESPIRATORY INFECTION PARTNERSHIP MANAGEMENT ON THE SYMPTOMS OF URTI IN COMMUNITY PHARMACIES IN GERMANY

John Bell,1 Sabiha Essack2 and Adrian Shephard3
1Graduate School of Health, University of Technology, Sydney, NSW, Australia; 2Antimicrobial Research Unit, College of Health Sciences, University of KwaZulu-Natal, Durban, South Africa; 3Reckitt Benckiser Healthcare Ltd, Slough, UK

INTRODUCTION

- Inappropriate use of antibiotics contributes to the global problem of antibiotic resistance.
- Pharmacy staff play a pivotal role in antibiotic stewardship, particularly in cases where antibiotics are used inappropriately.
- Despite the fact that the majority of upper respiratory tract infections (URTIs) are self-limiting viral infections and only 10% of sore throats are due to bacterial causes, antibiotics are prescribed inappropriately.
- The Global Respiratory Infection Partnership (GRIP) is a multinational group of healthcare professionals working to foster multi-stakeholder commitment to antibiotic stewardship and rational antibiotic use. The GRIP has developed materials for healthcare professionals and patients, advocating non-antibiotic symptomatic treatment for self-limiting URTIs of largely viral aetiology.
- Advocates a 1, 2, 3 approach addressing the patient’s concerns, being vigilant in assessing severity (checking for red flags), and counselling on effective self-management.

AIM

- The aim of this study was to evaluate the perspective of pharmacists/pharmacy technical assistants on two electronic detail aids (e-detail aids) for the management of sore throat, one that used GRIP messaging and that did not.

METHODS

- A survey of pharmacists and pharmaceutical technical assistants (PTAs) was conducted in Germany in 2016 by DrugCheck Research (Cologne, Germany).
- To enable the participants, the healthcare professionals had to have ≥1 month and ≤4 years working experience, spend ≥50% of their time in consultation with patients and see ≥5 patients with sore throat in 1 week.
- The participants were randomly split into two groups to independently test two e-detail aids online: a GRIP version (23 pages) and a non-GRIP version (10 pages).
- The 2 groups had some common points:
  - Causes, symptoms and the proper use of sore throat.
  - How pharmacy staff can guide patients resulting for patients with sore throat (1 step).
- Symptomatic relief provided by flurbiprofen 8.75 mg spray.
- Additionally, the GRIP detailed aid contained content on:
  - The GRIP team and their goal of reducing the inappropriate use of antibiotics for sore throat.
  - Information on antibiotic resistance, and the role of pharmacy staff in antibiotic stewardship.

- The 1, 2, 3 approach recommended by GRIP (Figure 1):

The 1, 2, 3 approach recommended by GRIP (Figure 1)

- Both groups were given the same questionnaire to determine their perceptions of their allocated e-detail aid, including overall relevance, interest, appeal, message recall, flurbiprofen spray recommendation intent and dislikes.

RESULTS

- Participating healthcare professionals
  - A total of 261 healthcare professionals participated.
  - There were 106 in each group, comprising 90 Pharmacists and 58 PTAs.
  - Almost all (96%) worked in independent pharmacy, 56% had at least 10 years’ professional experience (Table 1): 75% were female and 25% were between 30-35 years of age.

Table 1: Demographics of healthcare professionals

<table>
<thead>
<tr>
<th>Place of work (%)</th>
<th>Independent pharmacy</th>
<th>Chain pharmacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional experience</td>
<td>6 months–&lt;1 year</td>
<td>5–10 years</td>
</tr>
<tr>
<td>Number of participants with sore throat per week (%)</td>
<td>1–2</td>
<td>3–4</td>
</tr>
<tr>
<td>Participants (%)</td>
<td>23</td>
<td>33</td>
</tr>
</tbody>
</table>

- Relance, interest and appeal
  - Both e-detail aids were considered to be relevant and interesting. When participants were asked how well various characteristics fitted to the e-detail aid they had been shown (Q20), both e-detail aids scored highly:
    - ≥80% for key content;
    - ≥80% for the ease of reading for laypeople;
    - ≥80% for the ability to promote antibiotic awareness;
    - ≥80% for the structure.
  - The GRIP e-detail aid provided relevant information on appropriate antibiotic use, advocated the importance of various sore throat treatment characteristics (Q22): the participants in the GRIP group were more likely to believe:
    - 82% of the GRIP group (and 78% pharmacists, 86% PTAs) and 69% of the non-GRIP group (75% pharmacists, 70% PTAs) scored ≥5 on a 5-point scale (from 1 = not good at all to 5 = excellent) when asked whether the detailed aid they had been shown (Q8 of the survey) was helpful for diagnosis and management of sore throat.

- Communication and consultation
  - An antibiotic was less appropriate for sore throat (62% of the GRIP group (73% pharmacists, 86% PTAs) and 64% of the non-GRIP group (70% pharmacists, 74% PTAs) scoring ≥4 on a 5-point scale; from 1 = not useful at all to 5 = very important) (Figure 2).
  - Both e-detail aids were considered appealing, with 71% of participants (56% of pharmacists and 84% of PTAs) in both groups scoring ≥5 on a 5-point scale (from 1 = not useful at all to 5 = very important) (Q13).
  - When asked about dislikes (Q18b), the most common in the GRIP group was an unclear, confusing structure (21%) followed by too much detailed information (20%).
  - When asked what they liked about the e-detail aids (Q18a), both groups liked the explanations (64% for GRIP and 58% for non-GRIP), the compact/concise information (24% for GRIP and 32% for non-GRIP), the 1, 2, 3 approach (16% for GRIP and 28% for non-GRIP) and the information about the use of antibiotics.

- Communication and consultation
  - In the first two days when patients throat is most painful
  - When patients throat is infected and painful
  - When a patient complains of severe sore throat
  - When a patient shows symptoms caused by bacteria or viruses
  - When patients throat is painful and other cold symptoms
  - When patients believe they need an antibiotic

- Participants were asked about the following situations, would you be likely to recommend flurbiprofen 8.75 mg spray to your customers?

<table>
<thead>
<tr>
<th>Situation</th>
<th>GRIP group (%)</th>
<th>Non-GRIP group (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ≥1 week</td>
<td>90</td>
<td>80</td>
</tr>
<tr>
<td>2. 5–10 weeks</td>
<td>87</td>
<td>79</td>
</tr>
<tr>
<td>3. 1–2 weeks</td>
<td>87</td>
<td>79</td>
</tr>
<tr>
<td>4. ≤1 week</td>
<td>95</td>
<td>95</td>
</tr>
</tbody>
</table>

- The GRIP group also liked the information about the use of antibiotics.
  - 51% of participants in the GRIP group (and 47% in the non-GRIP group) reported that they would recommend flurbiprofen 8.75 mg spray for sore throat symptoms caused by bacteria or viruses when they were asked about the situations in which they would recommend it (Q12).
  - 25% of participants in the GRIP group (and 23% in the non-GRIP group) reported that they would recommend flurbiprofen 8.75 mg spray for sore throat symptoms caused by viruses when patients believed they needed an antibiotic (Q12).

- Message recall
  - The key message that was recollected after the GRIP e-detail aid was related to appropriate antibiotic use:
    - After being asked to recall the main messages and the topics they remembered (Q13), 58% of participants in the GRIP group (compared with 22% in the non-GRIP group) spontaneously recalled flurbiprofen 8.75 mg spray provides symptom relief for both viral and bacterial sore throat which antibiotics do not.

- Recommendation intent
  - When asked whether they believed that they recommended for treating sore throat at least from time to time (Q13), three over the counter sore throat treatments containing one of two local antibiotics were recommended by participants (flurbiprofen 1%, symptocin or BSN): the intent to recommend symptocin or BSN exceeded 75% was high after the GRIP e-detail aid.

- When asked how the e-detail aids would affect their recommendation of flurbiprofen 8.75 mg spray, participants were more likely to recommend it after the GRIP than the non-GRIP e-detail aid and 76% intended to recommend it strongly, or strongly recommended, to continue recommending it (Q17).

Dedicated support from the GRIP team resulted in a significant increase in pharmacist and pharmacy technical assistant recall and recommendation intent for relief with the symptomatic alternative of the anti-inflammatory flurbiprofen 8.75 mg spray.

DISCUSSION

- The provision of GRIP messaging to pharmacy staff had the potential to promote symptomatic treatment of sore throat, thus contributing to antibiotic stewardship.
  - It is important to ensure communication is clear and focused to avoid confusion.

CONCLUSION

- The panel agreed that the relevance of GRIP messaging and pharmacy staff in antibiotic stewardship for sore throat is critical.

REFERENCES