

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

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INTRODUCTION

- Inappropriate use of antibiotics contributes to the global problem of antibiotic resistance^{1,2}
- Pharmacy staff play a pivotal role in antibiotic stewardship,³ 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 throat is due to group A beta-haemolytic streptococcus,⁴ antibiotic prescription for URTIs is widespread.^{5,6} Antibiotics do not provide relief from pain and inflammation⁷
- The Global Respiratory Infection Partnership (GRIP) is a multinational group of healthcare professionals working to facilitate 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 contained GRIP messaging and one that did not

METHODS

- An online survey of pharmacists and pharmaceutical technical assistants (PTAs) was conducted in Germany in 2016 by DocCheck Research (Cologne, Germany)
- To be eligible to participate, the healthcare professionals had to have >6 months' and <30 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 (12 pages)
 - The two e-detail aids had some common content
 - Causes, symptoms and the progress of sore throat
 - How pharmacy staff can provide needs-based consulting for patients with sore throat (in 3 steps)
 - Symptomatic relief provided by flurbiprofen 8.75 mg spray
 - Additionally, the GRIP e-detail 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)
- 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 likes/dislikes

Figure 1: The GRIP 1, 2, 3 approach to advising patients with upper respiratory tract infection



RESULTS

Participating healthcare professionals

- A total of 200 healthcare professionals participated
 - There were 100 in each group, comprising 50 pharmacists and 50 PTAs
- Almost all (≥90%) worked in an independent pharmacy, >50% had at least 10 years' professional experience (Table 1), >75% were female and >60% were between 31–50 years of age

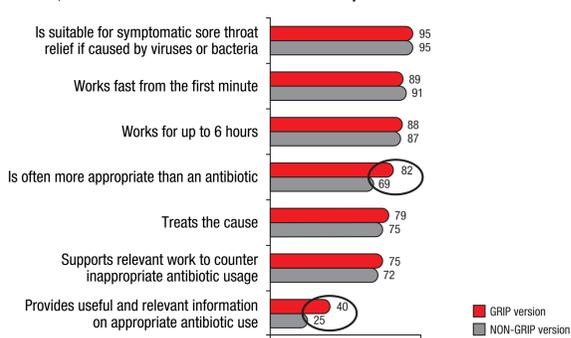
Table 1: Demographics of healthcare professionals

	GRIP e-detail aid (n=100)	Non-GRIP e-detail aid (n=100)
Place of work (%)		
Independent pharmacy	96	90
Chain pharmacy	2	8
Hospital pharmacy	2	2
Professional experience		
6 months–<1 year	3	3
1 year–<5 years	18	13
5 years–<10 years	28	25
10 years–<30 years	51	59
Consulting time (%)		
50–59%	12	5
60–69%	13	16
70–79%	25	33
80–89%	37	31
≥90%	13	15
Number of patients with sore throat per week (%)		
5–10	33	31
11–15	30	32
≥16	37	37

Relevance, 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 for:
 - 'Is relevant for my customers', with 69% (72% of pharmacists and 66% of PTAs) (GRIP) and 67% (64% of pharmacists and 70% of PTAs) (non-GRIP) of participants scoring 4 or 5 on a 5-point scale (from 1 = not good at all, to 5 = excellent)
 - 'Rouses interest for the product', with 75% (74% of pharmacists and 76% of PTAs) (GRIP) and 71% (68% of pharmacists and 74% of PTAs) (non-GRIP) of participants scoring 4 or 5 on a 5-point scale (from 1 = not good at all, to 5 = excellent)
- The GRIP e-detail aid provided relevant information on appropriate antibiotic use. Asked about the importance of various sore throat treatment characteristics (Q25), the participants in the GRIP group were more likely to believe:
 - In the importance of providing useful and relevant information on appropriate antibiotic use (40% of the GRIP group [36% pharmacists, 44% PTAs] and 25% of the non-GRIP group [16% pharmacists, 34% PTAs] scoring 4 or 5 on a 5-point scale, from 1 = not important at all, to 5 = very important) (Figure 2)
 - An antibiotic was less appropriate for sore throat (82% of the GRIP group [78% pharmacists, 86% PTAs] and 69% of the non-GRIP group [64% pharmacists, 74% PTAs] scoring 4 or 5 on a 5-point scale, from 1 = not important at all, to 5 = very important) (Figure 2)
- Both e-detail aids were considered appealing, with 71% of participants (68% of pharmacists and 74% of PTAs) in both groups scoring 4 or 5 on a 5-point scale (from 1 = not good at all, to 5 = excellent) when asked how they liked the e-detail aid they had been shown (Q8 of the survey)

Figure 2: The characteristics of a sore throat treatment considered important based on two e-detail aids

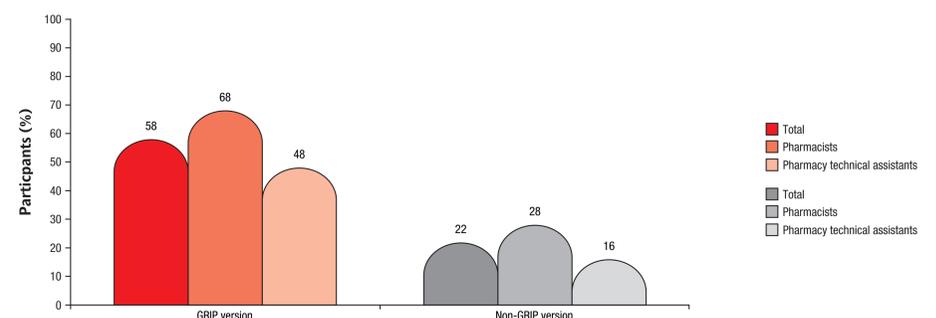


Participants were asked: When you recommend a remedy against sore throat, how important are the following characteristics? (Q25). The percentage represents participants scoring 4 or 5 on a 5-point scale (from 1 = not important at all, to 5 = very important)

Message recall

- The key message that was recalled 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 that flurbiprofen 8.75 mg spray provided symptom relief for both viral and bacterial sore throat which antibiotics do not provide (Figure 3)

Figure 3: Unprompted message recall for two e-detail aids: flurbiprofen 8.75 mg spray provides the symptom relief of both viral and bacterial sore throat which antibiotics do not

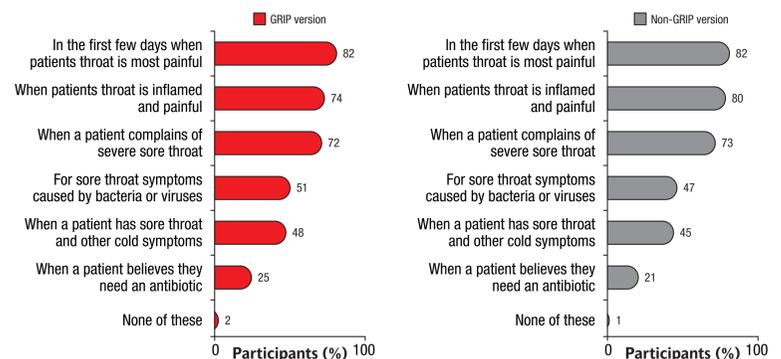


Participants were asked: In your opinion, what are the main messages of the e-detail? Which topics do you remember? (Q13)

Recommendation intent

- When asked about which brands they recommended for treating sore throat at least from time to time (Q3), three over-the-counter sore throat treatments containing one of two local antibiotics were recommended by participants (fusafungine 9%, tyrothricin 46–59%)
- The intent to recommend symptomatic relief (flurbiprofen 8.75 mg) 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 (84% and 76% respectively were encouraged, or strongly encouraged, to continue recommending it) (Q17)
 - 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 (Q21) (Figure 4)
 - 25% of participants in the GRIP group (and 21% in the non-GRIP group) reported that they would recommend flurbiprofen 8.75 mg spray when a patient believed they needed an antibiotic (Q21) (Figure 4)

Figure 4: Situations in which participants would recommend flurbiprofen 8.75 mg spray based on two e-detail aids



Participants were asked: In which of the following situations would you be likely to recommend [flurbiprofen 8.75 mg] spray to your customers? (Q21). Multiple answers were allowed

Likes and dislikes

- When asked what they liked about the e-detail aids (Q18a), both groups liked the explanations (64% for GRIP and 58% for non-GRIP), including the compact/concise information (24% for GRIP and 32% for non-GRIP)
 - The GRIP group also liked the information about the use of antibiotics
- The 1,2,3 approach (Figure 1) and symptom duration chart (Figure 5) were also seen as positive
- When asked about dislikes (Q18b), the most common in the GRIP group was an unclear, confusing structure (21%) followed by too much information per slide (10%), whilst in the non-GRIP group a lack of information (11%) was the most common dislike

Figure 5: Symptom duration chart

Sore throat is normally one of the first URTI symptoms experienced and is worst during the first 3 days



DISCUSSION

- The role of pharmacy staff in antibiotic stewardship for the management of URTIs is pivotal, since they are on the frontline and can advise patients on symptomatic treatment options and provide information on the realistic duration of illness⁸
- This study showed that the inclusion of GRIP messages in materials for pharmacy staff was considered relevant and interesting, with enhanced recommendation intent for relief with the symptomatic alternative of the anti-inflammatory flurbiprofen 8.75 mg spray
- Additionally, the GRIP communication enhanced message recall around recommending an anti-inflammatory spray for both viral and bacterial sore throat, thereby avoiding the use of antibiotics
- The provision of GRIP messaging to pharmacy staff has 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

- This evaluation supports the relevance of GRIP materials and pharmacy staff in antibiotic stewardship for sore throat

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