



GLOBAL RESPIRATORY  
INFECTION PARTNERSHIP

RESPONSIBILITY  
TREATS BEST

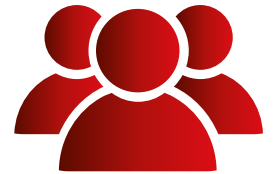
STOP ANTIBIOTIC OVERUSE

October 2023

# INTERVENTIONS FOR LASTING CHANGE

The Global Respiratory Infection Partnership (GRIP) met in Kuala Lumpur, Malaysia, to discuss the problem of antimicrobial resistance (AMR) in the region and to find solutions and interventions that will bring about tangible behaviour change globally.

# ATTENDEES



## GLOBAL RESPIRATORY INFECTION PARTNERSHIP (GRIP) MEMBERS

### **Prof. Sabiha Essack, Chair of GRIP**

South African Research Chair in Antibiotic Resistance and One Health and Professor in Pharmaceutical Sciences, University of KwaZulu-Natal (UKZN), South Africa

### **Prof. Attila Altiner**

Professor and Medical Director, Department of Primary Care and Health Services Research Heidelberg University, Germany

### **Mr John Bell**

Principal Advisor to the Pharmaceutical Society of Australia Pharmacy Self Care Programme; Practitioner/Teacher in Primary Health Care at the Graduate School of Health, University of Technology Sydney, Australia

### **Dr Doug Burgoyne**

Adjunct Associate Professor at University of Utah College of Pharmacy and former President and CEO of Veridicus Health

### **Dr Alike van der Velden**

Assistant Professor, University Medical Centre Utrecht, Netherlands

## GRIP GUESTS

### **Dr Geraldo Druck Sant'Anna**

Professor of Otorhinolaryngology at Federal University of Health Sciences of Porto Alegre, Former Chairman of the Brazilian Associate of Otorhinolaryngology

### **Dr Sergio Caretta**

Founder and Director of the Centre for Respiratory Disease in the State of Mexico, President of the Mexican Society of Otolaryngology Head and Neck Surgery

### **Dr Martin Duerden**

Fellow of the UK Royal College of General Practitioners, and Medical Adviser, Centre for Medical Education, Cardiff University

### **Dr Aurelio Sessa**

Family Physician and Senior Partner, Varese, Italy. Italian College of General Practitioners and Primary Care (SIMG)

### **Dr Wirat Tongrod**

Lecturer at the Faculty of Pharmaceutical Sciences and Former Dean Assistant at The Graduate School, Huachiew Chalermprakiat University

### **Prof Khalid Eljaaly**

Associate Professor and Infectious Disease Pharmacy Consultant, King Abdulaziz University and Hospital, Saudi Arabia

### **Dr Gabriela Musat**

Primary ENT Physician, Doctor of Medical Sciences and Associate Professor, ENT Discipline, Faculty of Dentistry, UMF "Carol Davila" Bucharest Romanian Society of Rhinology

## REGIONAL DELEGATES

### **Anitha Ramadas**

Infectious Disease Pharmacist, Hospital Universiti Kebangsaan Malaysia

### **Prof. Baharudin Abdullah**

Professor and Senior Consultant in Department of Otorhinolaryngology, Hospital Universiti Sains Malaysia

### **Dr Chayada Chanasriyotin**

ENT Doctor, Vajira Hospital, Bangkok, Thailand

### **Dr Gil Vicente**

Consultant at St Lukes Medical Center Global City, Phillipines

### **Kee Ya Ling**

Senior Clinical Pharmacist, National Centre of Infectious Disease, Singapore

### **Dr Koh Kar Chai**

General Practitioner, immediate past president of Malaysia Medical Association

### **Dr Petrick Periyasamy**

Infectious Disease Physician, Hospital Universiti Kebangsaan Malaysia

### **Dr Piyawan Danwilai**

ENT Doctor, Bhumiphol Hospital, Thailand

### **Dr Nurashikin Mohammad**

Consultant Internal Medicine and Pulmonology, Hospital Universiti Sains Malaysia

### **Woh Yon Mak**

Department of Pharmacy, Hospital Kuala Lumpur, Malaysia

### **Prof. Syafinaz Binti Amin Nordin**

Professor in Medical Microbiology, Universiti Putra Malaysia

### **Dr Vincent Tang Eng Soon**

Consultant ENT Surgeon, KPJ Klang Specialist Hospital, Malaysia

### **Dr Wilfredo De La Cruz**

ENT Doctor, Medical Specialists Clinic, Mandaluyong City Metro Manila

### **Prof. Zamberi Sekawi**

Clinical Microbiologist, Universiti Putra Malaysia

## RECKITT GLOBAL

### **Adrian Shephard**

Global Medical Marketing Director

### **Imran Lodhi**

Regional Medical Affairs Director

### **Terence Pilay**

Global Medical Marketing Manager

## RECKITT ASEAN AND MALAYSIA

### **Carrie Chew**

Senior Medical Marketing Manager, Malaysia

### **Chow Guan Kuan**

Regulatory Affairs Manager, Malaysia

### **Choo Poh Yee**

Brand Manager, Malaysia

### **Haniza Samian**

Regulatory Affairs Manager, Malaysia

### **Jerome Goh**

Marketing Manager, Malaysia

### **Khristine Cabanayan**

MSL Manager, Philippines

### **Poh Yee Choo**

Brand Manager, Malaysia

### **Phoenix Ho**

Senior Manager, Brand Purpose and Sustainability, Malaysia

### **Nhuntnaphut Pongchitampai**

Medical Marketing Manager, Thailand and IDC

### **Sin Yee Loh**

Medical Marketing Manager, Malaysia

### **Satyajyoti Kanjilal**

Medical Affairs Manager, South Asia

### **Tiffany Tang**

Marketing Director, ASEAN

### **So Fie Tan**

Senior Regional Medical Affairs Manager, ASEAN

# DRIVING FOCUS ON AMR IN SOUTH EAST ASIA



**This year's GRIP meeting in Malaysia welcomed experts across the South East Asia region to meet with global GRIP members and share local learnings and exchange ideas to support mitigation of AMR globally. With the key focus of the meeting on creating interventions for lasting change, delegates shared experiences and co-created strategies to implement interventions that would bring about tangible behaviour and perception changes to support GRIP's fight against AMR.**

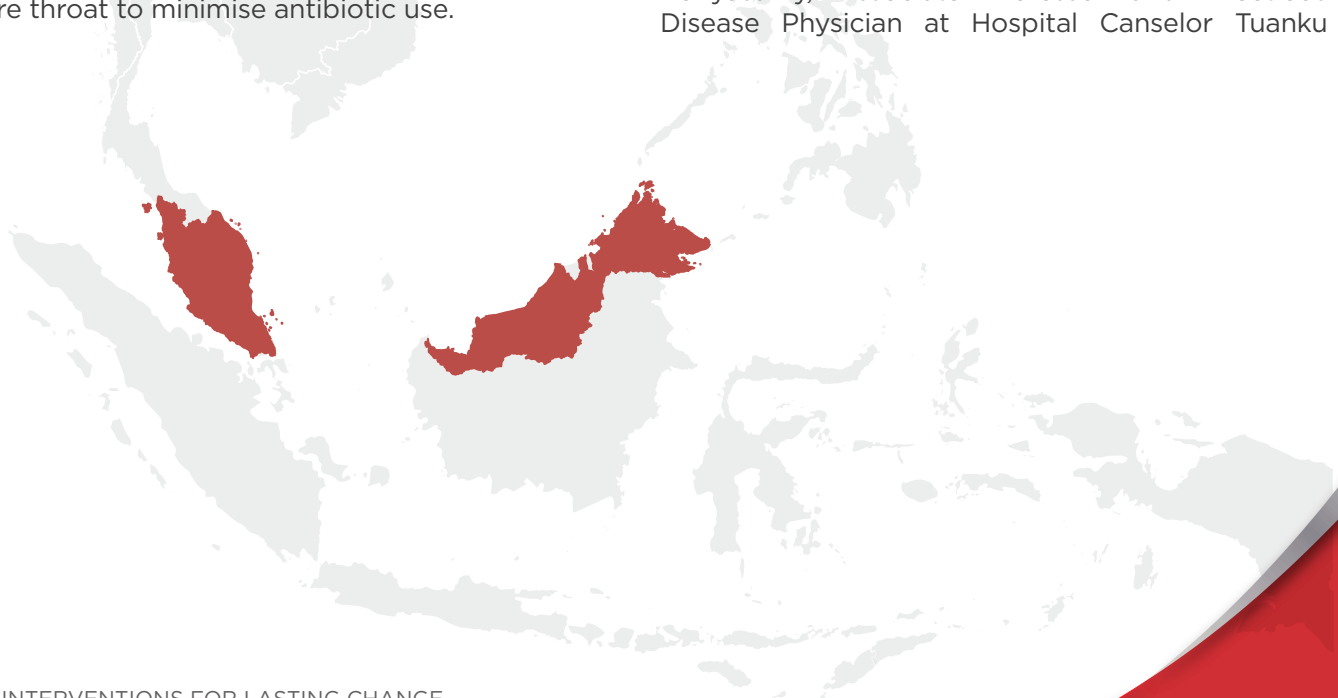
To further drive momentum in the region, MIMS, a leading supplier of global medical and pharmaceutical education, held an AMR Summit sponsored by Reckitt on Saturday 7th October. Over 300 local healthcare providers attended the event in person and via the live broadcast, with a focus on optimising patient care in the evolving antibiotic landscape. GRIP Chair Professor Sabiha Essack presented alongside Professor Attila Altiner and Dr Sergio Caretta-Barradas on the global perspectives of antibiotic resistance and insights into the key behaviour and attitudes towards AMR from the recent Reckitt Sore Throat and Antibiotic Resistance (STAR) study. Following the summit, over 80% of attendees agreed that non-antibiotic treatments have the potential to be used for symptomatic relief of sore throat to minimise antibiotic use.

## MINISTRY OF HEALTH COLLABORATION

Representatives from the Ministry of Health (MOH) attended the Summit and met with Professor Sabiha Essack and Malaysian experts Dr Koh Kar Chai and Professor Baharudin Abdullah. Key areas of discussion centred around stakeholder involvement, National Action Plans, and antimicrobial committees to raise awareness of AMR in Malaysia. Future collaboration between GRIP and the Malaysian MOH hopes to support the MOH in its endeavours to maximise the impact of its National Action Plans, particularly in supporting more appropriate antibiotic use in the private sector where there is perceived to be a greater overuse.

## EXPERT FORUM

In addition, local and global experts in policy and guideline change came together for an Expert Forum to promote international and local exchange of insights into the development of the local consensus recommendations for the symptomatic treatment of sore throat. The roundtable meeting, chaired by Professor Dr Baharudin Abdullah, provided a further opportunity to gain insights into the challenges and burden of antibiotic resistance in the Malaysian healthcare system. Dr Petrick Periyasamy, Associate Professor and Infectious Disease Physician at Hospital Canselor Tuanku



Muhriz UKM in Kuala Lumpur, began the meeting with an overview of trends in antibiotic resistance in Malaysia. He highlighted the urgency of the situation, with growing resistance rates for many of the bacterial infections present in hospitals. It was also evident that in primary care, there is a concept of 'doctor shopping', where the patient has the ability to cycle around doctors until they get the treatment they perceive they need, which in this context would be an antibiotic. Both of these themes were explored further as part of the GRIP workshop sessions.

During the forum, Professor Dr Zamberi Sekawi, Consultant Clinical Microbiologist, Universiti Putra Malaysia, presented consensus recommendations for the symptomatic treatment of sore throat on behalf of a number of experts present who had met previously on the topic. The statements were discussed at length and as an outcome of the Expert Forum, the intention will be to publish a framework and consensus on the appropriate symptomatic treatment of sore throat, with the aim to help to reduce the inappropriate prescribing of antibiotics.



*AMR Summit Speakers. From left to right: Adrian Shephard (Reckitt), Dr Attila Altiner, Dr Koh Kar Chai, Tiffany Tang (Reckitt), Professor Sabiha Essack, Professor Baharudin Abdullah, Professor Zamberi Sekawi, Dr Sergio Caretta, Imran Lodhi (Reckitt)*

# A SPOTLIGHT ON AMR IN MALAYSIA



**Whilst a National Action Plan for AMR mitigation is in place in Malaysia, activities on the ground reveal sub-optimal compliance to National prescribing guidelines particularly within the private sector.**

Professor Dr Zamberi Sekawi, a clinical microbiologist in Kuala Lumpur, gave an overview of Malaysia's multi-agency commitment to One Health Antibiotic Resistance (MyOHAR) and the AMR National committee (NARC) responsible for the development of the Malaysian Action plan on antimicrobial resistance (MyAP-AMR). Despite the National commitment, a study conducted across hospitals in Malaysia found that about one quarter of prescribers did not adhere to the National antibiotic guidelines. Whilst prescription of antibiotics for upper respiratory tract infections (URTI) in public hospitals is at 31%, in the private sector, prescription is twice as high at 61%. Professor Zamberi emphasised that what is happening on the ground is very different from the Malaysian National Action Plans and this is where the challenge lies.

One of the key problems that is driving high prescriptions in the private sector is that doctors feel obliged to provide antibiotics as the patient is willing to pay. The sentiment was echoed by GPs at the meeting who noted that public guidelines are challenging to apply in the private sector, where patients are interested in a "quick fix".

A nationwide cross-sectional study highlighted the need for public education on antibiotic prescription, particularly among individuals who have received less education or have lower monthly household income. The Malaysia Society of Infectious Disease and Chemotherapy, where Professor Zamberi is the immediate past president, has been working on initiatives to promote patient advocacy with support from healthcare professionals, with plans to expand beyond the hospital level and into public health at the primary care level to have greater impact.

Overall, whilst the Ministry of Health has developed strategic plans to support appropriate antibiotic prescribing, there is a consensus that change at the ground level is required in Malaysia. Meeting attendees discussed that there is a need for specific primary care level guidelines to better support guideline adherence. While professional societies' guidelines for the primary care level exist, they are not officially endorsed by the MOH which represents another challenge to guideline adherence.

## **GRIP IN THE COMMUNITY**

GRIP members attended local primary and secondary care practices to see first-hand why challenges may exist and understand the ways in which pharmacists, GPs and hospital physicians can help to mitigate AMR in Malaysia. GRIP members were impressed by the entrepreneurial nature of many of the healthcare professionals they met, and their willingness to engage on the topic of antimicrobial resistance and contribute to change.

*Professor Zamberi Sekawi  
shares his experience of  
AMR in Malaysia*

**“ We can do a lot more at the primary care level to communicate the AMR message to the public much better. There is a pressing need to refine antibiotic prescribing habits among physicians. ”**

**Professor Zamberi Sekawi**



# GRIP IMPACT



Following the conception of GRIP in 2012, the focus of GRIP has evolved to using patient-centric advocacy, partnerships, and self-care to instigate action in the post-pandemic era to drive AMR mitigation. The work and momentum of GRIP has been supported by numerous meetings held in recent years in Mexico City, Bucharest and now Malaysia that support the sharing and creation of ideas to support behaviour change. With the focus of this year's meeting on lasting change, it is important to look back at the impact that GRIP meetings have had across these countries.

## INITIATING CHANGE IN MEXICO

The 2020 GRIP meeting held in Mexico City had a focus on promoting behaviour change in healthcare professionals and communities to support self-care and evidence-based symptomatic relief. Following this meeting, the Mexican Government has shown continued interest in the work of Reckitt and GRIP. The local GRIP initiative, the Program for the Education on Antimicrobial Resistance (PERAM), has had a long-standing partnership with Universidad Nacional Autonoma de Mexico (UNAM) to support education to drive responsible antibiotic use in Mexico, with a particular focus on medical students who can deliver further educational training across universities in LATAM. Through social media, key opinion leaders are featuring on TikTok videos to promote appropriate antibiotic use. GRIP support with World AMR Awareness Week is also important in line with UN SDG goals for LATAM.

## BUILDING MOMENTUM IN ROMANIA

In 2022, GRIP members reconnected for the first time in person following the COVID-19 pandemic for the 10th anniversary GRIP meeting in Bucharest, Romania. Assoc. Prof. Gabriela Musat who was a guest speaker at the Romania meeting and re-joined the group once again in Malaysia, provided insights into progress made in Romania following the GRIP meeting. The Romanian Rhinology Society has been active against antimicrobial resistance for several years now through the initiation of sociological studies, roundtable events and publications to ignite the National conversation around AMR. Dr Musat presented an online and social media campaign which was fuelled by the pandemic, to continue the conversation about the risk of antibiotic resistance in Romania. The 2022 meeting helped direct these efforts, particularly



*Dr Gabriela Musat shares her experience in Romania following the 2022 GRIP meeting*

around health literacy principles that could be conveyed through social media and public educator involvement.

A roundtable was held that shared the results of the Reckitt Sore Throat and Antibiotic Resistance (STAR) study. The study examined behaviours and attitudes towards antibiotics from individuals who have suffered an upper respiratory tract infection globally across 12 countries\*. Examining the results in the context of Romania, the roundtable helped to tailor the group of messages for the media and social media campaigns, which has sparked great interest and questions from the public to support the conversation on antibiotic resistance.

Following the meeting in Romania, GRIP developed the ACE framework to further support healthcare professionals in addressing patient misconceptions around antimicrobial resistance and provide symptomatic relief for upper respiratory tract infections, leveraging health literacy principles learnt from previous studies and discussions in Romania.

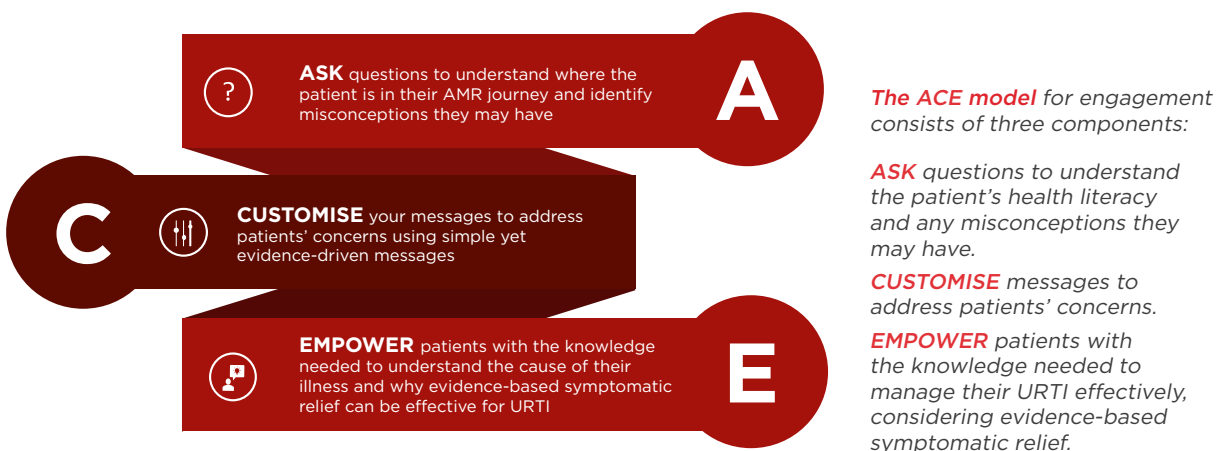
\*Brazil, Germany, Italy, Mexico, Philippines, Poland, Romania, Saudi Arabia, South Africa, Spain, Thailand, United Kingdom



## SUPPORTING LASTING CHANGE IN MALAYSIA

Previous GRIP meetings have emphasised the importance of considering variations between countries that can impact the success of AMR interventions. With a focus on ensuring successful implementation for lasting change, the 2023 GRIP meeting brought together global GRIP members and experts across South East Asia to ensure interventions were collectively feasible, scalable and impactful. Equipped with an understanding of the challenges faced in Malaysia, the delegates were in a good place to start to think about these country nuances when generating ideas for change.

## GRIP CONTINUES TO SUPPORT THE REVIEW OF LOCAL GUIDELINES AND ENCOURAGES MEMBERS TO ENGAGE THEIR NETWORKS.







# ENSURING LASTING CHANGE IN AMR MITIGATION

Whilst National Action Plans are critical in the mitigation of AMR, the implementation of plans represent the greatest challenge. The implementation challenge is even greater in lower and middle-income countries that require substantial development assistance to implement their National Action Plans. However, the challenges are not only to do with available funds but depend on the effective implementation strategies that take evidence-based interventions and ensure that they are adaptable and scalable across countries. GRIP Chair Professor Sabiha Essack shared her breadth of experience in implementation research and provided an overview of the intervention-implementation research continuum and framework that would be critical in the design of implementation strategies to support lasting change in GRIP interventions.

Implementation research (IR) facilitates the systematic and sustainable uptake of evidence-based AMR interventions into routine practise, with the ultimate goal to improve capacities of health systems to mitigate AMR<sup>2</sup>. The intervention-implementation research continuum details the process, starting by assessing the proof of concept - will the intervention work in a controlled research setting? The second step looks at proof of implementation which is dependent on the design of the implementation strategy to ensure the intervention will work in real-world settings. Finally, once proof of concept and proof of implementation has been demonstrated, the intervention needs to be scaled up across the whole health system.

**“ Proof of implementation investigates whether the intervention works in real-world settings. How do we have to adapt it and ensure that it is going to be accepted by the people that are implementing it and on whom it is being implemented? ”**

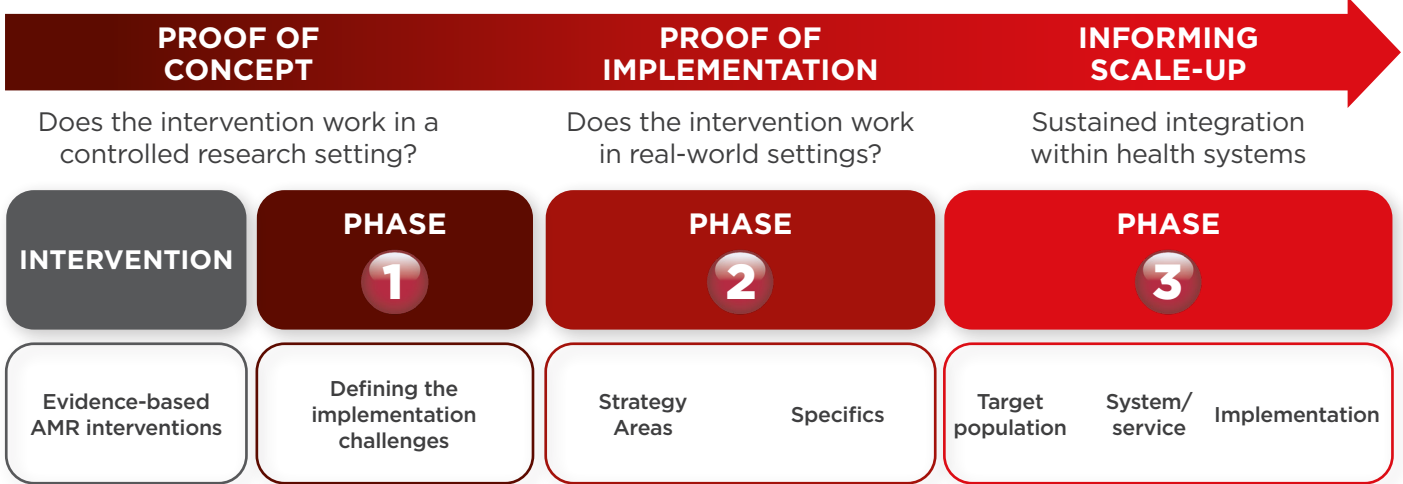
Professor Sabiha Essack

Ensuring that an intervention is successful requires thinking about the intervention within the political, economic and social context. Whilst these external factors are harder to influence, identifying the changes needed by relevant stakeholders, within internal systems (i.e. culture, networks, healthcare systems) along with the correct implementation strategy can help mitigate such external challenges.

The implementation strategy requires identification of the relevant stakeholders, their actions, the target audience, temporality of actions and the outcomes of interest. Professor Essack highlighted that the number of stakeholders involved and their different levels of health literacy may create a challenge when communicating concepts of evidence-based practice.

Equipped with a strong theoretical understanding of implementation research and a global perspective of potential implementation challenges, meeting delegates were well-positioned to start co-creating implementation strategies.

**Implementation research conceptual framework**



**“ The greatest challenge in Implementation research is getting the right people around the table right from the beginning, because one misstep there may compromise your entire project ”**

Professor Sabiha Essack

*Dr. Sergio Caretta (GRIP) presented intervention ideas on behalf of the ENTs in attendance*





# IMPLEMENTING THE RESULTS OF THE STAR STUDY

**The recent Reckitt STAR study provided a global perspective on behaviours and attitudes towards antibiotics highlighting real world antibiotic use and perspectives towards AMR within countries. Particular behaviours and attitudes may stem from issues within countries that can help form the starting-point for interventions to support change.**

Dr Alike van der Velden gave an overview of some of key themes that the STAR study highlighted including the variations in behaviour and attitudes between high and low income countries and across different age groups. The STAR study also provides an insight into the real world antibiotic prescribing practices in the primary care setting. Meeting attendees reflected on the key issues from the STAR study that particularly resonated with them and discussed some of the potential causes behind them.

Delegates shared similar views on the key issues that the STAR study highlighted, with the continued inappropriate use and prescription of antibiotics representing the most pertinent problem. In addition, a clear disconnect between understanding and comprehension is apparent within the public and physicians, contributing to behaviours that do not

support appropriate antibiotic use. Potential causes included the complex cultural challenges to change perceptions of antibiotics that have historically saved lives and the pressure to prescribe from patients, societies, pharmaceutical manufacturers, in addition to liability pressure (prescription out of fear of malpractice). Finally, habits, misconceptions and an absence of care towards AMR amongst physicians and the public remain contributing factors for concerning behaviours and attitudes.

Meeting attendees brainstormed potential intervention elements that could target the root causes of the key issues discussed. These fell into three groups of education, HCP/patient interactions and HCP motivation. Intervention elements were incorporated to create multi-faceted AMR interventions that could be implemented across Ear, Nose and Throat Consultants (ENTs), GPs or Pharmacy audiences. Delegates co-created and presented their proposed implementation strategies, identifying key actors, their actions, the target audience and the key enablers and barriers that could support their strategy.

## Potential intervention elements identified from the results of the STAR study



### EDUCATION

- Further teaching around AMR resistance and appropriate antibiotic use
- Establishing health beliefs
- Communication of good examples / case studies of good prescribing behaviour within HCPs



### HCP/PATIENT INTERACTIONS

- Supporting greater shared decision-making
- Greater support for self-diagnosis through education and follow-up opportunities



### HCP MOTIVATION FOR MORE APPROPRIATE PRESCRIBING

- Certification for pharmacies/ pharmacists in responsible prescribing
- Understanding financial incentives to support non-antibiotic prescribing
- Encouraging regulatory enforcement of appropriate antibiotic use
- Campaigns endorsed by ENT societies to change perceptions

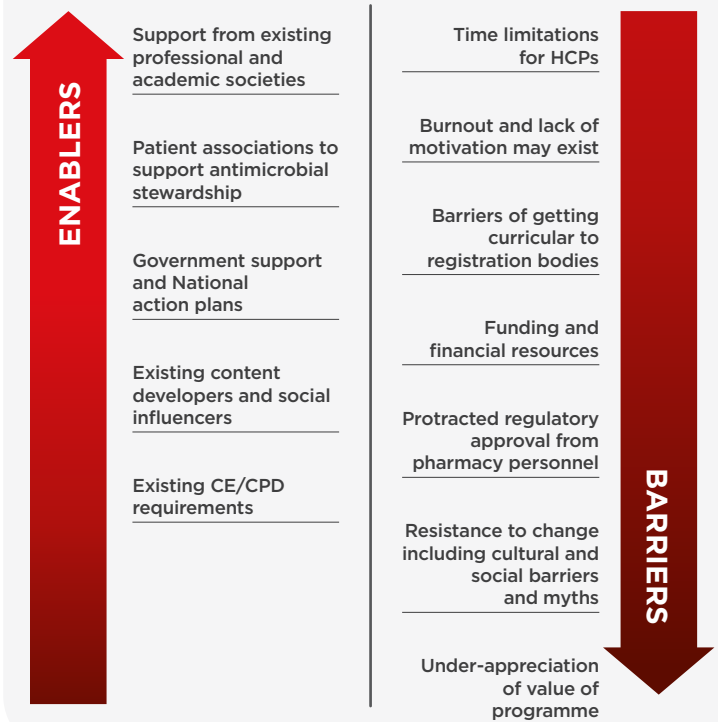


GRIP members and local KOLs discuss the implementation of AMR interventions

Implementation strategies were pressure-tested by the rest of the audience to ensure their strategy was feasible, scalable, and impactful, drawing on their global experiences. Discussions identified a range of common needs and critical success factors to implementation. Educational programmes required adaptation to the target audience, taking into consideration health literacy principles. Another key consideration was around who would be driving the education to ensure programmes were sustainable and effective. As agreed amongst the delegates, education should be about experience-sharing rather than teaching other individuals how to do their job. Finally, to ensure key players such as pharmacists continue to support adoption of interventions, it is critical that multiple touchpoints are in place, which could be supported by multi-level educational programmes completed over time.

As emphasised by the GRIP 5P framework, interventions across ENTs, GPs, Pharmacists that also invoke change amongst the public and policymakers, are critical to ensuring lasting change. As discussed across all implementation strategies, partnership underpins the success of interventions and will continue to be critical in GRIP's commitment to AMR mitigation.

### Potential enablers and barriers for implementation strategies discussed by meeting delegates



### Elements of implementation strategies across ENTs, GPs and Pharmacists

	ENT	GP	PHARMACIST
<b>Intervention summary</b>	Campaign to change behaviours and perceptions within society, endorsed by ENT societies	Shared decision-making and patient-centred consultation skills to break pre-conceived ideas about antibiotic treatment for URTI	Reducing inappropriate or non-judicious antibiotic dispensing amongst pharmacists by drafting a continuing education (CE) or continuing professional development (CPD) programme that is regulatory enforced
<b>Key actors</b>	ENT societies, Government	GPs, patients and regulatory agents	Pharmacy councils and associations, regulatory bodies, content creators
<b>Key target</b>	All healthcare providers and patients	Public with greater focus on younger individuals	Pharmacists, professional organisations
<b>Key actions</b>	Education of what makes a good prescriber and patient self-diagnosis support through an application	Consultation guide optimised for lower health literacy and supportive podcasts for GPs	Mandatory AMR CE points, set KPIs, committee funding and content development, accreditation of training

## ACHIEVING LASTING CHANGE THROUGH THE WORK OF GRIP

With the focus of this year's meeting on lasting change in AMR mitigation, GRIP members and local experts reflected on how GRIP can sustain momentum in their future goals and activities. Reflecting on progress around appropriate antibiotic use and AMR awareness, groups discussed the "big ideas" they wanted to achieve before 2027 across policy, healthcare professionals and within the public.

One of the overarching themes was making people care about AMR across policymakers, healthcare professionals and the public. Framing the impact of AMR beyond the individual, the importance of mitigating AMR should be likened to global warming or the COVID-19 pandemic, with everybody advocating for appropriate antibiotic use and an economic case for change made to enforce lasting change. To achieve this, delegates deemed it necessary for comprehensive public awareness of AMR and adherence to antibiotic regimens, with physicians 100% compliant to treatment guidelines. Changes in behaviours made possible by more regulated use of antibiotics by policymakers, continuing education programmes for appropriate prescribing for pharmacists, and education through school programmes, including expansion of the e-BUG programme.

Global GRIP members, regional experts and Reckitt came together for the 2023 GRIP

## GRIP CALL TO ACTION

Recognising the valuable insights from the STAR study, Reckitt plan to re-run the study in 2024 with Malaysia included to gain a greater global perspective and identify further data-driven insights to support the development of AMR interventions whilst providing key indicators of their success.

Mr Adrian Shephard, Global Medical Marketing Director at Reckitt, ended the meeting by thanking all attendees for their participation and ideas. Reckitt are keen to hear feedback on how the STAR study can continue to evolve as a tool to capture insights and track attitudinal shift which will likely require some changes. A key takeaway from the meeting was how GRIP should help bring greater consistency, clarity and focus to messages that can be delivered across the different Ps of the 5P framework. Mr Shephard said, "AMR remains a complex problem with no easy fixes, but driving awareness and understanding through consistent and clear communications is clearly one opportunity where proof points coming from implementation research could help drive better engagement. We will reach out in the coming weeks and months to call on your help as we define and refine the ideas discussed for implementation at a global level but also down at the individual level."

To close the meeting, a call to action was presented by Professor Sabiha Essack:

- Empower the community to support AMR mitigation
- Champion antimicrobial stewardship in the primary and secondary care setting
- Leverage available insights to support evidence-based advocacy and intervention for lasting change
- Build partnerships to facilitate multi-stakeholder messages aimed at changing behaviours and attitudes



# REFERENCES



1. Lim, Y. et al., (2013). Prescribing patterns and factors influencing the choice of antibiotics in upper respiratory tract infections in Malaysia. Poster available from the Clinical Research Centre, Ministry of Health Malaysia
2. Khurana MP, Essack S, Zoubiane G, et al. Mitigating antimicrobial resistance (AMR) using implementation research: a development funder's approach. *JAC Antimicrob Resist.* 2023;5(2):dlad031. Published 2023 Mar 27. doi:10.1093/jacamr/dlad031