A multi-stakeholder approach towards operationalising antibiotic stewardship in India's mixed health system community settings

(OASIS study)

Stakeholder Consultation with medical practitioners

23 July, 2021

5:00pm – 7:00 pm

Introduction

The OASIS study takes a One Health approach towards understanding antibiotic use and its drivers in human and animal health, with the ultimate goal of using the study findings to co-design an antibiotic stewardship intervention through multi-stakeholder engagement. The study consortium includes a multidisciplinary research team of five partner organisations in India and the United Kingdom.

The overall vision of this project is to a) generate a holistic understanding of the social, economic, structural and policy related drivers of antibiotic misuse and overuse in community settings, and b) develop an inclusive approach to address the key drivers; this will include achieving shifts in people's thinking and addressing policy barriers. The OASIS consortium is conducting a series of consultations with various stakeholders within the health and veterinary systems, including medical and veterinary practitioners (private and public), policymakers, pharmaceutical industry leaders, health and regulatory departments, academics and researchers, NGOs, health-workers and communities.

The high-level consultation on July 23, 2021 with medical practitioners from the public and private health sectors was the second; the first involved veterinary providers and academics. The consultations were co-organised with the Federation of Indian Chambers of Commerce and Industry (FICCI).

Key questions posed to stakeholders during this consultation were:

1. How does your experience relate with our one health study findings?
2. What practical solutions are needed to optimise the usage of antibiotics amongst medical providers? How should these solutions be prioritised?

Participants: There were 13 participants representing the public and private health sectors. There were ten OASIS study team members also present.

Agenda: The session began with a welcome address by Dr. Priya Balasubramanian, introductions and a presentation on the study findings by Dr. Meenakshi Gautham. This was followed by breakout group discussions on the key questions. The interventions proposed in the breakouts were summarised and detailed further in the final session.

One Health Antibiotic Stewardship in Society
OASIS

Summary of the discussion

Building on and corroborating the OASIS study findings, participants further identified the following **key challenges** to improving antibiotic practices in community settings and by different levels of health providers:

- Irrational use of antibiotics across primary, secondary and tertiary levels of care at all levels of the treatment chain, including informal providers, ASHA workers, physicians in primary health centers, senior doctors, and stockists.
- Easy over the counter access to scheduled drugs
- Inadequate training for both formal and informal providers; sparse inclusion of therapeutics in medical and nursing school curriculum.
- Inadequate number of both trained providers and facilities in rural areas.
- Self-medication leading to inappropriate use of antibiotics within households.
- Lack of necessary diagnostic capabilities.
- Mentoring relationships between formal and informal providers.
- Lack of coordination among microbiologists and clinicians.
- Economic relationships between pharmaceutical companies and professional bodies.
- Insufficient manpower and misalignment between working hours of formal providers and those of rural community members leading to over reliance on informal providers.

Recommendations for interventions

The following broad range of interventions were presented during the discussions:

- **Guidelines**:

Formulate primary, secondary and tertiary level tiered prescribing guidelines for antibiotics. National Medical Commission, previously the Medical Council of India, to enable wide spread dissemination of the guidelines.

- **Regulation**:

Restricting antibiotic prescription to only authorised and trained individuals.

Regular prescription audits at the health facility level, including district hospitals and medical colleges.

Necessitating antibiograms for appropriate antibiotic prescriptions. Efforts to improve diagnostic capabilities will need to be made simultaneously.

Regulating pharma supply chains, i.e., restricting availability of certain antibiotics based on the classification (for e.g., injectable third generation cephalosporin) to address economic incentives of practitioners.

- **Education and training**

Continuous medical education (CMEs) for providers across primary, secondary and tertiary care that are not sponsored by pharmaceutical companies.

Train providers on existing guidelines, classifications of drugs, both Schedule H and H1 as well as WHO's ACCESS, WATCH and RESERVE classification, mechanism of action of antibiotics, and appropriate dosage and duration of treatment.

Harness existing relationships between formally and informally trained providers; provide training on appropriate antibiotic use and repercussions of misuse.

Leverage community influencers and healthcare workers such as ASHA and anganwadi workers in sensitization and education efforts.

- **Awareness**

Continual awareness programs aimed at all stakeholders, including informal providers, pharmacies, retailers, doctors and communities/households are needed to illuminate the harmful effects of antimicrobial resistance, value of appropriate antibiotic use, existing prescription guidelines, national and international drugs classification and laws about sale and use of antibiotics.

Emphasis on awareness programs for communities/households to tackle the issue of self-medication through existing efforts, for e.g. through Village Health Nutrition Day (VHND) conducted in government setups.

Use diverse media for sensitization efforts including print, radio and social media.

- **Infrastructure**:

Improving diagnostic facilities to enable antibiotic prescription behaviour and improving salaries for providers to ensure private sector providers do not rely on antibiotic prescriptions as an additional source of income.

- **Practice**

Increase awareness among informal providers about referral systems, I.e., basic dos and don'ts about what they're able to treat and when to refer a patient to a higher facility.

- **Surveillance:**

Monitoring resistance patterns at the community level.