

## **IAP-ICMR Call to Action to Tackle the Antimicrobial Resistance**

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In continuation with my write up on Antimicrobial resistance – a ticking bomb [1], I am happy to announce another forward step taken by the Academy in this direction – ‘Call to Action to tackle the antimicrobial resistance (AMR)’ (*Annexure I*). The Indian Academy of Pediatrics (IAP) and the Indian Council Medical Research (ICMR) came together in the month of April 2014 – perhaps for the first time – to discuss and deliberate over the magnitude of the problem, reasons and possible solutions to tackle the antimicrobial resistance among children in India. Dr. Katoch, Secretary HR and Director General-ICMR addressed the meeting and rendered support from ICMR, and recommended to work out interventions keeping in mind the local needs and constraints.

The data presented by microbiologists from different regions of the country showed that though the magnitude of resistance is higher in gram negative organisms, the resistance among gram positive bacteria is also showing a worsening trend. It was noted that most of the data presented were from the intensive care units, and there is scarcity of representative data from the community. Indiscriminate use of antibiotics appears to be the single most important factor responsible for the menace of AMR. Over-the-counter availability of antibiotics, laxity of regulatory bodies in approval of antibiotics, lack of public awareness about antibiotic resistance and the injudicious use in veterinary practice

are some other causes. Overburdened health infrastructure and inequity in health care are other obstacles for rational use of antibiotics. There is also a lack of awareness about tremendous potential of, and implementation of the infection control policies in the small hospitals and nursing homes to prevent resistant infections.

A 4-point plan has been chalked out with time frames based on the above deliberations:

1. Developing and disseminating National Antibiotic Guidelines for Children 2014 – The IAP-ICMR document;
2. Educating doctors – both pediatricians and others – and public on rational antibiotic practice;
3. Developing infection control guidelines for small hospitals and nursing homes, training the owners of such establishments and ensuring compliance by the members; and
4. Collecting and collating data on antimicrobial resistance from the clinicians.

The tasks are challenging but not impossible. We must aggressively chase the goal to save the antibiotics for what we know as curatives of today.

### **REFERENCE**

1. Yewale VN. Antimicrobial resistance – a ticking bomb! *Indian Pediatr.* 2014;51:171-2.

## Annexure I: IAP CALL TO ACTION DECLARATION

<i>Topic</i>	<i>Need</i>	<i>Action Plan</i>	<i>Time frame</i>
Developing and disseminating National Antibiotic Guidelines for Children 2014	Lack of evidence-based National guidelines on use of antibiotics in children	<p><i>Prepare ' IAP-ICMR National Antibiotic Guidelines for Children 2014'</i></p> <p>100 pages ready reference manual</p> <p>Focus on antibiotics rather than on investigations or management</p> <p>The categorization will be system-wise for specific infectious disease with age groups wherever applicable</p> <p>Compile the existing guidelines from different specialty chapters of IAP, or from WHO/CDC, etc.</p> <p>ICMR can provide us with existing data on etiology/AMR and guidelines</p> <p>Endorsement by ICMR before release</p> <p>Free distribution to members, upload on IAP website</p>	4 months
Educating doctors and public on rational antibiotic practice	<p>Irrational prescription practice rampant among doctors across all fields</p> <p>Lack of awareness among public on use of antibiotics and the threat of resistance</p>	<p>IAP Workshops on Rational Antibiotic Practice (RAP), RTI-GEM, PSPID, Diarrhea Management to be continued</p> <p>New module on infection control in nursing homes</p> <p>Scaled down case based module on RAP for General Practitioners with the help of IMA and other associations</p> <p>Promote National Guidelines on use of antibiotics</p> <p>Articles in journals of IAP – IP, IJPP, PID</p> <p>Pediatric ID Consult blog on IAP website for online consultation</p> <p>Strengthening infectious disease surveillance on <i>idsurv.org</i></p> <p><i>Teaching tools for public</i></p> <p>Print media</p> <p>Posters in doctor's clinic</p> <p>School Children</p> <p>National antibiotic day – articles in newspapers, shows on radio &amp; TV</p> <p>Social media</p> <p>Prepare catchy slogans for public (messages)</p>	<p>Already ongoing</p> <p>100 workshops on RAP in 2014</p> <p>Antibiotic Day on Sep 28</p> <p>2 day national conference on antimicrobials in Aug/Sep</p>
Developing infection control guidelines for small hospitals and nursing homes and ensuring compliance by the members	<p>Hospital Infection Control guidelines available for tertiary facility and agencies like NABH offer accreditation</p> <p>Lack of practical, implementable guidelines on IC for nursing homes and small hospitals</p> <p>Small hospitals and nursing homes unable to comply with some point in the tertiary-</p>	<p><i>Guidelines</i></p> <p>Separate guidelines for OPD, non ICU inpatient, ICU</p> <p>Guidelines to be disseminated through IAP website, handbook and posters (to be distributed to all IAP members)</p> <p><i>Training modules</i></p> <p>Training module with pre-test and post-test (IAP Infection Control Initiative Certification)</p> <p>Certification for individuals who successfully complete the module</p>	3 months

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	care HIC guidelines and not comfortable with accreditation agency	<p>online Infection Control team to be formed (one observer to report compliance) Small modules for nurses and handout for other healthcare workers like ANMs to be prepared</p> <p><i>Research</i> Make protocol to demonstrate feasibility of proposed interventions Select small community hospitals Describe intervention (training modules, posters, etc) Outcome measures such as hand hygiene compliance, hand disinfectant usage, antibiotic prescription in nearby pharmacies and surveillance cultures</p>	
Collecting and collating data on antimicrobial resistance from the clinicians.	<p>There is lack of national data on antimicrobial resistance from the community Microbiology lab based data available is inadequately stratified ICM AMR nationwide study initiated Clinician based data from the community may help augment the ICMR initiative</p>	<p>Developing IAP-ICMR AMR portal or mechanism for monitoring antimicrobial resistance through microbiological surveillance</p> <p><i>Preliminary steps</i> Inputs from grassroots: clinicians, peripheral laboratories (primary level) Commercial laboratories (secondary level) Tertiary/secondary care hospitals (tertiary levels)</p> <p><i>Where to report?</i> Reporting within an existing ID portal by creating an additional AMR link Through <i>idsurv.org</i> portal Link above portal to ICMR-AMR network database AMR link should have a proforma with diagnosis and antibiotic prescribed Clinicians must focus at this point on reporting</p> <p><i>What to report?</i> Organism/pathogen based AMR data Clinical diagnosis based data Antibiotic treatment prescription data</p> <p><i>Implementation component</i> Linking IAP standard treatment protocols Clinical definitions Linking to existing antimicrobial stewardship programs</p>	3 to 4 months