



26th ANNUAL REPORT (2022-2023)

DELHI SOCIETY FOR PROMOTION OF RATIONAL USE OF DRUGS

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Highlights

The following activities were undertaken by DSPRUD during the year 2022-2023:

1. Project on capacity building on Diagnostic Stewardship

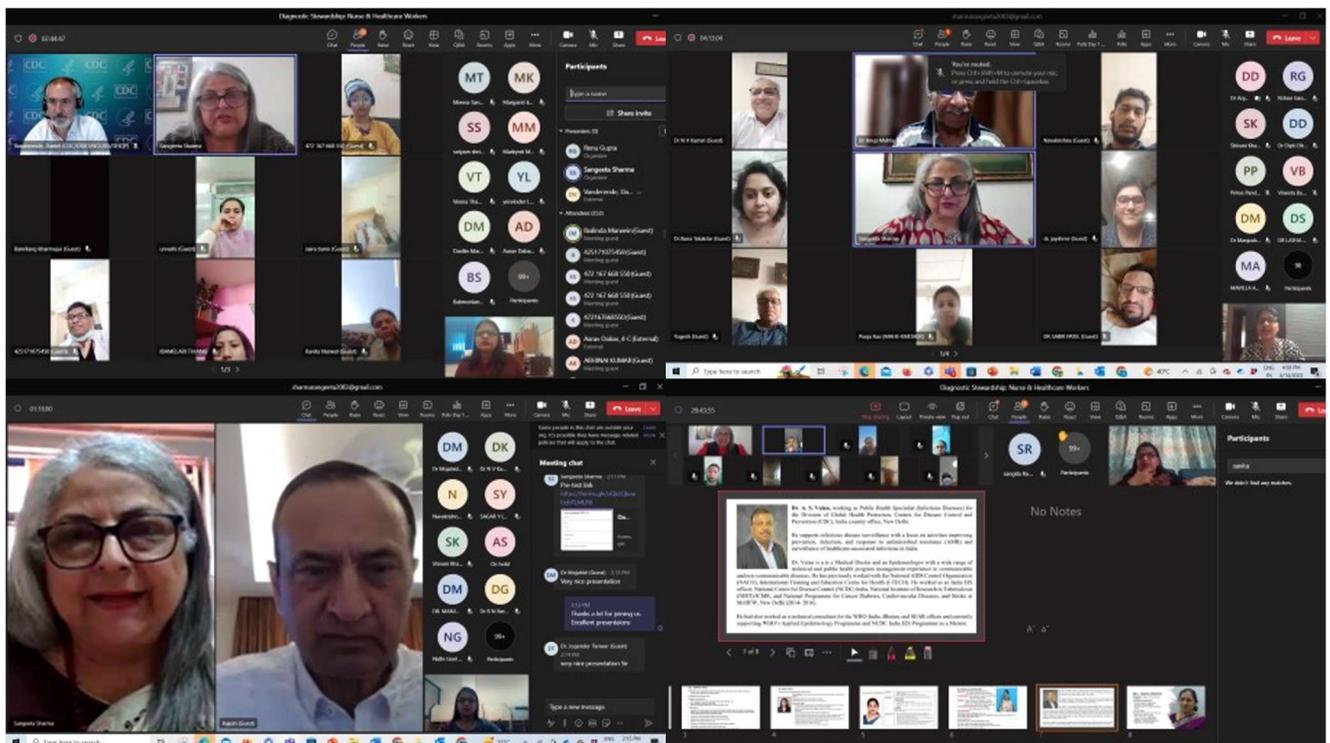
DSPRUD executed a memorandum of understanding (June 2022-May 2023) with MS Pfizer Pvt Ltd to create a comprehensive program focused on enhancing the knowledge and skills of doctors and nurses in diagnostic stewardship as a key component of antimicrobial stewardship. The project included:

- i. Identification of reputed faculty: Reputed national faculty with experience in antimicrobial stewardship was identified and inducted for the development of course modules and session delivery. The course content developers and instructors comprised a team of experienced and renowned multidisciplinary faculty and plenary speakers. These experts brought core expertise in various fields, including infectious diseases management, microbiology, rational use of antibiotics, and antimicrobial stewardship. Their collective knowledge and experience ensured that the course content was up-to-date, evidence-based, and aligned with best practices in the field.
- ii. In-Depth Curriculum Development: Two specialized training modules were created to cater to the distinct needs of doctors and nurses. These modules were centred around emphasizing the critical role that diagnostic stewardship plays in combatting antimicrobial resistance (AMR). Covering a wide array of subjects, the content included guidance on selecting the most appropriate diagnostic tests for specific clinical syndromes, highlighting the significance of accurate sampling techniques, delving into a diverse range of microbiological testing methodologies, interpreting test results, and formulating effective strategies for optimizing antimicrobial prescriptions.

The primary objective of these modules was to equip participants with a comprehensive understanding of the principles underpinning diagnostic stewardship. Additionally, the modules were enriched with the latest advancements, exemplary practices, and the challenges associated with diagnostic stewardship. To ensure quality, all modules underwent a rigorous external review process, with insights from experts thoughtfully integrated.

- iii. **Online Workshops:** Two online workshops were organized for nurses, and an additional workshop was held specifically for doctors. Accreditation from their respective councils was obtained for both the workshops tailored to the needs of doctors and nurses.

Nurses workshop: Two workshops were held on two separate occasions: November 21-22, 2022, and February 3-4, 2023. These workshops spanned across two days each, attracting the participation of 1538 nurses. Among them, 661 nurses who met the predetermined certification criteria were granted certificates along with credit hours.



Diagnostic stewardship workshop for nurses

Doctors' Workshop: The workshops designed for doctors took place from February 20 to 24, 2023. Sessions were held on five consecutive days; each day a 3-hour session was held. These workshops aimed to offer an in-depth understanding of Diagnostic Stewardship. The workshops garnered the attendance of a total of 387 doctors, out of which 156 doctors successfully fulfilled the pre-defined certification criteria and were awarded certificates.



Diagnostic stewardship workshop for doctors

2. Gap Assessment of Biomedical Waste Management Practices in National Capital Territory (NCT) of Delhi with UNOPS

- i. The Gap Assessment of Biomedical Waste Management Practices in the National Capital Territory (NCT) of Delhi, conducted in collaboration with the United Nations Operations Project Services (UNOPS), was done. The aim was to evaluate the state of biomedical waste management & practices followed in healthcare institutions. The project was conducted from December 2022 to January 2023.

- ii. **Scope of Assessment:** Thirteen hospitals were identified jointly by the DSPURD and UNOPS for the assessment. Among these, there were nine public health facilities, three private health facilities, and one veterinary hospital. The project obtained the necessary permissions from the Delhi Pollution Control Committee to carry out the assessment.
- iii. **Thorough Data Collection and Training:** To ensure accurate and comprehensive results, a specialized toolkit was developed for the assessment process. Data collection teams were carefully selected and trained to conduct the evaluation in the identified healthcare institutions.
- iv. **Findings and Identified Deficiencies:** The assessment covered 11 healthcare facilities, and the results revealed several significant deficiencies in the current biomedical waste management practices. The biomedical waste management practices in the veterinary hospital were found to be fragmented, requiring focused attention to align with the established BMW rules. The major areas of concern were:
 - Some institutions had shortcomings in adhering to essential statutory requirements, particularly concerning the authorization and consent to operate biomedical waste management facilities.
 - **E-Waste and Cytotoxic Waste Management:** There were noticeable gaps in the proper handling and management of electronic waste (e-waste) and cytotoxic waste.

3. Project on Good Pharmacy Practices with Empower School of Health Project, Dhaka Bangladesh

Between July 2022 and February 2023, DSPURD collaborated with Empower School of Health to undertake a project encompassing the creation of the following deliverables:

1. A policy brief aimed at establishing robust pharmacy practices in healthcare service delivery for the government of Bangladesh.
2. Development of comprehensive training materials centered around Good Pharmacy Practice (GPP).
3. Facilitation of a Training of Trainers workshop in Bangladesh to disseminate knowledge and skills.

The project was successfully executed. Dr. Sangeeta Sharma and Dr. N.K. Gurbani emerged as pivotal contributors, spearheading the development of policy briefs and training manuals that prioritized effective pharmacy practices for both hospital care and community pharmacies.



Master trainer Workshop on “Good Pharmacy Practices” with Empower School of Health Project, Dhaka, Bangladesh

5. Targeted Campaign to Raise Awareness about Medication Safety among School Teachers

A 6-month-long online campaign dedicated to raising awareness about medication safety among schoolteachers from Delhi schools was organized from July 2022 to January 2023 in collaboration with ECHO India. The primary focus of the campaign was to equip teachers with valuable knowledge and practices related to medication safety.

- i. A total of 184 schools registered for the program and 130 teachers actively attended all the sessions.
- ii. Sessions: A total of 8 sessions were conducted covering different aspects of medication safety. The sessions covered the pivotal role of patient vigilance in mitigating medication errors and adverse events. Hazards related to self-medication, polypharmacy, and drug interactions were discussed, alongside safe disposal practices for expired medicines. Valuable insights were shared

on the significance of documenting personal medical and adverse drug reaction histories, underlining the importance of adverse event reporting. Workshops were conducted to educate participants about identifying critical indicators of severe asthma, episodes of epilepsy, and panic attacks. Additionally, the sessions covered the proper and secure utilization of nutraceuticals. Two sessions were held to raise awareness about diabetes symptoms and management. Besides detailed management of diabetes type 1, insulin injection techniques and proper storage, were also discussed. The series was concluded with a focus on health education, equipping teachers with a comprehensive knowledge base for improved patient care and safety.

- iii. Collaboration with World Animal Protection: In a broader context of medication safety, the campaign addressed the issue of antibiotics' use in animals and its potential impact on the food chain. World Animal Protection, an NGO with expertise in this field, actively contributed to appraising the non-human use of antibiotics.

6. Certificate Course on Antimicrobial Stewardship (CCAMS) – Two Batches (5th and 6th Batch)

In partnership with the Public Health Foundation of India (PHFI), DSPRUD has been conducting clinician training programs since 2020. The technical aspects of developing the training modules and facilitating the sessions are managed by DSPRUD. These training courses consist of five modules, aimed at equipping doctors with the essential knowledge and competencies for effective antimicrobial stewardship practices.

The course curriculum comprehensively covers topics such as antibiotic resistance, principles of antimicrobial stewardship, infection control, diagnostic stewardship, and strategies for optimizing and evaluating antimicrobial stewardship programs.

Over the past years, four batches of participants have successfully completed the training, and this year, two additional training sessions have been conducted. This collective effort has resulted in the formation of a skilled group

comprising approximately 300 trained doctors. The details of this year's training sessions are outlined below:

- i. 5th Batch Training: The training for the 5th batch of participants took place from 19-23 September 2022. This batch comprised 46 enthusiastic participants who actively engaged with the course material and training resources.
- ii. 6th Batch Training: The training for the 6th batch of participants took place from 28th February to 4th March 2023. A total of 37 participants benefitted from the course.
- iii. Positive Response and Feedback: The course received an overwhelmingly positive response. Participants appreciated the course's well-structured content, practical approach, and relevance to real-world challenges in antimicrobial resistance.

Process measures

- Indication & planned duration of Abx therapy is documented
- Assess how often patients are prescribed unnecessary duplicate therapy, e.g., if a patient is prescribed two antibiotics to treat anaerobes.
- Assess how often patients are discharged on the correct antibiotics for the recommended duration
- Performing a medication use evaluation to assess courses of therapy for select antibiotics or infections to identify opportunities to improve use

Consumption of systemic antibiotics in India in 2019
lanct.com Vol 4 Month September, 2022

Total DDDs consumed in 2019 was 5071 (10.4 DDD/1000/day), contributed 54.9% (2783 million) DDDs, contributed 27.0% (1370 million) DDDs, and 16.8% (838 million) DDDs from formulations listed in the NLEM contributed 2486 million DDDs; Discouraged 1.7 million DDDs (0.3%), and over formulations contributed 47.1% (2398 million DDDs).

Category	Percentage	Value
Reserve	0.11%	0.06
Not classified	0.06%	0.06
Discouraged	1.7%	16.8%
Access	2.8%	27.0%
Watch	5.7%	54.8%

Certificate Course in Antimicrobial Stewardship (CCAMS)
 Batch -VII: 10th - 14th July, 2023
 Credit hours will be awarded by DMC

Salient Features

- 5 Modular Course
- Online Interactive Modality
- Integrated Case Studies
- Q&A Session with Subject Matter Experts
- Quiz after Each Session
- Certification after Completion of Course

Eligibility Criteria
 The course is open for medical graduates

Course Content

- Overview of Problems of Antibiotic Misuse & Antimicrobial Stewardship Programme
- Antimicrobial Stewardship

COURSE FEE
 INR 8,000/-
 Inclusive of taxes

Certificate course in Antimicrobial Stewardship

7. Training and Review Workshop of NAC-NET on Antimicrobial Consumption (AMC) and Point Prevalence Survey (PPS)

The NAC-NET workshop to review and validate the antibiotic consumption data collected by participating sites within the National Antimicrobial Consumption Network (NAC-NET) was organized jointly by the World Health Organization (WHO), the National Centre for Disease Control (NCDC), the Ministry of Health and Family Welfare (MoHFW), and DSPRUD, from 14-15 November 2022 at Hyatt Regency, Gurugram (Haryana). The workshop provided a vital platform for monitoring antibiotic consumption through the AMC tool, implementing the Point Prevalence Survey (PPS) methodology, and conducting prescription audits. A total of 35 sites actively participated in the workshop, with 62 delegates attending in-person and an additional 8 participants joining online. In total, 84 delegates contributed their expertise and insights to enrich the discussions and outcomes of the workshop.



Training and Review Workshop of NAC-NET

8. National Training of Trainers to Strengthen Infection Prevention & Control

Two successful National Workshops on Training of Trainers (nToT1 and nTOT2) were conducted to enhance the field of Infection Prevention and Control (IPC). These workshops took place on December 1-2 and December 13-14, 2022, in Gurugram. The collaborative effort behind these workshops involved the World Health Organization (WHO) Country Office for India, the National Centre for Disease Control (NCDC), the Ministry of Health and Family Welfare, and the Delhi Society for Promotion of Rational Use of Drugs (DSPRUD).

The primary objective of these workshops was to equip trainers with the essential skills and knowledge required to bolster Infection Prevention and Control practices within healthcare settings. By disseminating the most up-to-date guidelines and optimal practices, the workshops aimed to establish a uniform, evidence-based approach to infection prevention and control across different healthcare facilities.

nToT 1: A total of 77 delegates participated in the workshop and included 61 participants from 11 states (Chandigarh, Chhattisgarh, Goa, Haryana, Jammu & Kashmir, Ladakh, Odisha, Rajasthan, Telangana, Uttar Pradesh, Uttarakhand) along with 16 dignitaries and faculty.



National Training of Trainers workshop in Infection prevention and control 1

nTOT 2: A total of 66 delegates actively participated in the workshop, which included representatives from 11 states and union territories, namely Andaman, Arunachal Pradesh, Assam, Jharkhand, Lakshadweep, Manipur, Meghalaya, Mizoram, Nagaland, Puducherry, and West Bengal. The workshop also welcomed 14 dignitaries and faculty, enriching the learning experience.



National Training of Trainers Workshop in Infection Prevention and Control 1 (nTOT1)

9. 'Evidence to Action: Standard Treatment Guidelines concept'

Dissemination and capacity building towards implementation of Standard Treatment Guidelines (STGs)

DSPRUD in collaboration with ECHO India had started a series of webinars beginning July 2021 which continued till June 2022. The webinars aimed at disseminating and building capacity for the implementation of Standard Treatment Guidelines (STGs) among healthcare workers. This series consist of 12 sessions and covered a range of topics such as management of upper

respiratory tract infections in children, febrile seizures evaluation and management, TB challenges and opportunities, common mental disorders in general practice, blood safety solutions, anemia in pregnancy, diarrhea management, acute stroke management, dental infections, and issues in poisoning management. The webinars were made interactive by incorporating clinical practice-type questions followed by discussion and question and answer sessions.

A total of 1300 doctors attended these training sessions. Their active engagement and enthusiastic participation demonstrated the importance of disseminating STGs. The feedback collected from participants after each session was overwhelmingly positive, indicating that the training effectively met their learning needs.

Through this initiative, DSPRUD and ECHO India played a pivotal role in equipping healthcare workers with standardized treatment guidelines, promoting evidence-based clinical practices, and ultimately enhancing patient care and safety in the healthcare system.

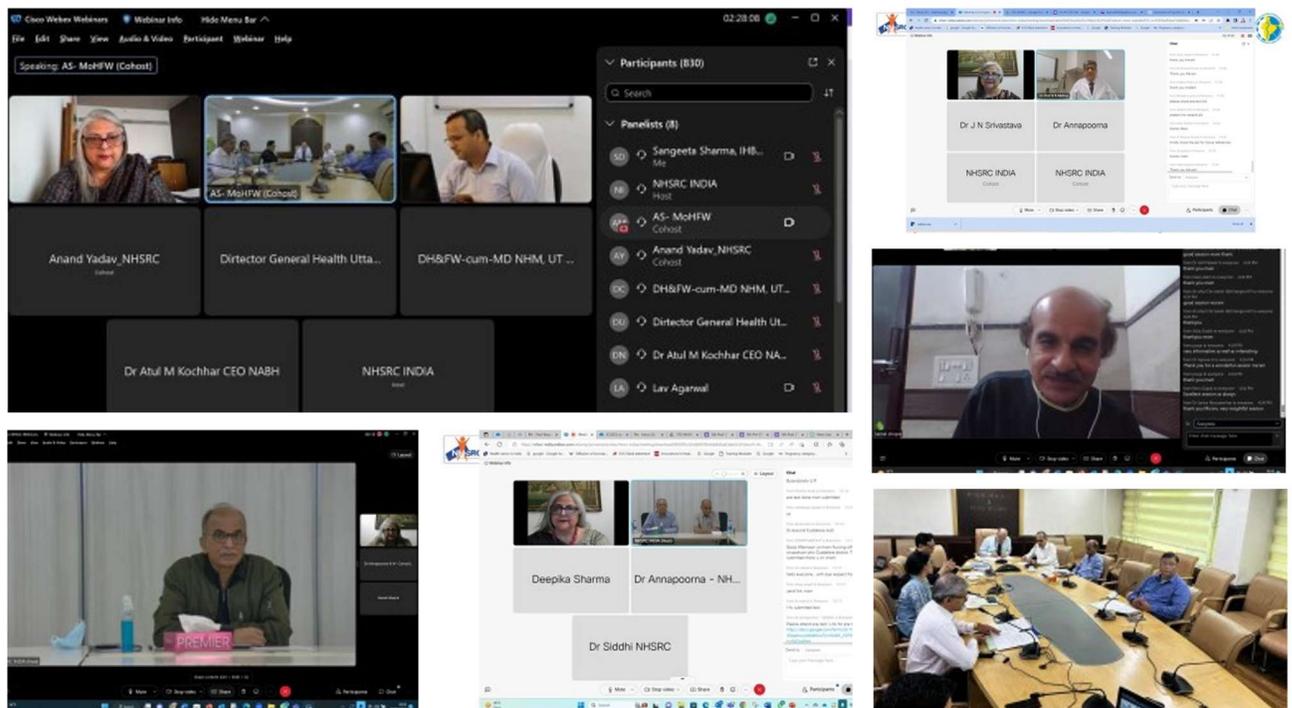
10. Dissemination and capacity building towards implementation of Standard Treatment Guidelines (STGs) with NHSRC

In collaboration with the National Health Systems Resource Centre (NHSRC), DSPRUD embarked on a significant initiative aimed on promoting the rational use of drugs, ensuring medication safety, safe prescribing practices, and facilitating the nationwide implementation of Standard Treatment Guidelines.

Beginning September 2022, DSPRUD effectively organized a series of comprehensive training sessions on the second Saturday of each month and delved into various critical facets of rational medicine usage. Esteemed and knowledgeable faculty members were meticulously identified to lead these sessions, ensuring high-quality and impactful learning experiences.

The training topics encompassed a wide spectrum of healthcare concerns, catering to the diverse needs of healthcare providers such as poisoning management, epilepsy best practices, hypertension guidelines, snake and dog bite management, diabetes care essentials, COPD challenges, burn treatment protocols, foreign body removal strategies, trauma management, CPR quality improvement, and post-operative cataract care. Each session included pre- and post-tests, and the feedback received has been highly positive.

This collaborative effort between DSPRUD and NHSRC has significantly contributed to the professional development of healthcare providers and approximately 5313 participants have attended the programme. By addressing crucial aspects of rational drug use, medication safety, and guideline adherence, the initiative has fortified the healthcare sector's ability to provide safe, effective, and evidence-based care to patients.



Dissemination and capacity building towards implementation of Standard Treatment Guidelines (STGs) with NHSRC

11. Representation of DSPRUD in various fora

DSPRUD actively participated in a series of forums, marking its commitment to advancing critical healthcare domains. Noteworthy among these engagements were:

- Speaker Role of 'Ensuring medication Safety in Hospital Care Settings' organized on World Patient Safety Day organized by NHSRC, MOHFW on September 16, 2022.
- Represented in the **National consultation meeting for the development of the National Action Plan on Antimicrobial Resistance (NAP-AMR-2)**, June 2022.
- DSPRUD's participated in the CSE-WHO National Workshop on "Development and Implementation of State Action Plan on Containment of Antimicrobial Resistance (SAPCAR) in non-human sector" at AAETI, Neemli, Rajasthan, August 8-10, 2022.
- The consultative workshop for formulation **Andhra Pradesh State Action Plan to Combat AMR**, November 24-25, 2022.
- Certificate Course in **Patient Safety and Quality in Public Hospitals** for National Health Mission Odisha organized by Administrative Staff College of India, Andhra Pradesh from August 1-5, 2022, in Hyderabad.
- Participated in National Workshop on "**Accelerating Patient Safety in India**" organized by Ministry of Health & Family Welfare, and World Health Organization, Country Office, held on February 16-17, 2023, at New Delhi.
- Participated in an online webinar on '**Rational Use of Medicines with special focus on Antimicrobials**' organized by WHO SEARO and Empower School of Health, Geneva on July 20, 2022.
- Participated in online webinar on '**Pharmacovigilance**' organized by Empower School of Health, Geneva in Tanzania on October 21, 2022.
- Speaker for the online webinar on '**Rational Use of Medicines**' organized by Empower School of Health, Geneva on July 12, 2022.
- Participated in '**Challenges of Implementing National Action Plan on AMR**' in the MARSCON 1st National conference on Microbiology, Antimicrobial resistance, and Antimicrobial Stewardship (AMR & AMS) organized by DY Patil Medical College, Pune held in hybrid mode on June 3-4, 2022.



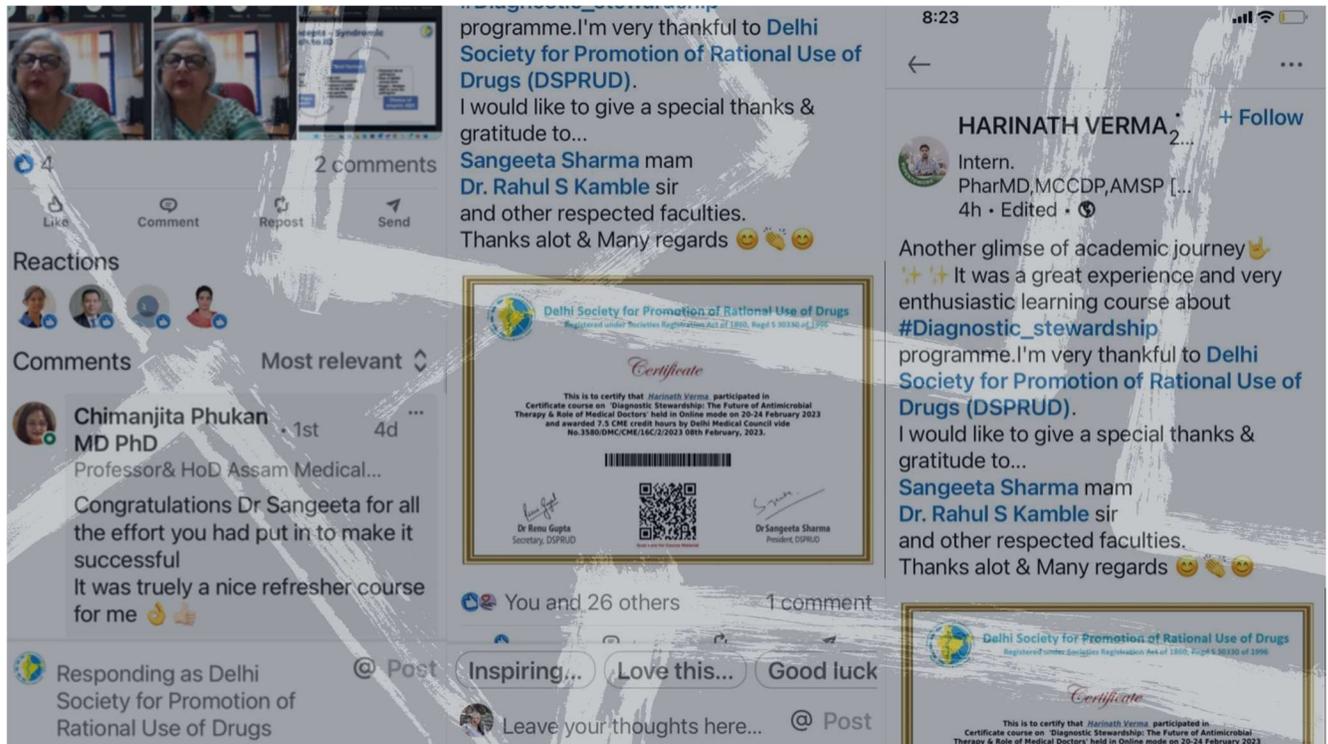
- Panelist “Policies and interventions for improving access to next generation antimicrobials in low-and middle-income countries” organized by Max Institute of Healthcare Management, Indian School of Business (ISB), and Center for Global Development (CGD) held on March 14, 2023, at Delhi.
- MediSafeCon **Medication without Harm**, organized by Peerless Hospital held on September 16, 2022, at Kolkata.
- Resource person in an Induction-cum-training Programme on Pharmacovigilance for Coordinators of newly recognized AMCs and newly recruited Pharmacovigilance Associates on ‘**Medication Errors and its importance in Pharmacovigilance**’ in the 19th Skill Development Programme, organized by National Coordination Centre-Pharmacovigilance Programme of India, Indian Pharmacopoeia Commission, Ministry of Health & Family Welfare, Government of India.
- Chairperson, Expert Committee established to develop **antibiotic use guidelines for informal prescribers**, OASIS Project.
- Co-chair, Expert Committee established to develop **antibiotic use guidelines in livestock**



DSPRUD representation in several forums

12. Activities on social media

DSPRUD was actively promoting public education on social media namely Instagram and Facebook and regularly creating awareness among public. So far, we have created ~400 posts/video's on raising awareness about several topics/themes as relevant from time-to-time which included antibiotics awareness, medication safety, patient safety, diabetes management, mental health, fever management, safe handling of medicines etc.



Wall of Accolades

13. Annual Accounts for 2022-2023

The annual accounts are placed before the committee.

14. Recognition/Publication/Participation

Dr. Sangeeta Sharma and Dr. Renu Gupta

Publications:

1. Lass-Flori C, Alastruey-Izquierdo A, Gupta R, Chakroborti A. Interpretation, Pitfalls of Biomarkers in Diagnosis of Invasive Fungal Diseases. Indian Journal of Medical Microbiology, 2022; 40 (4); 480-484.
2. Nasare NV, Bhardhwaj A, Bablani V, Gupta R, Kushwaha S, Sharma S. Antimicrobial Utilization Study in a Neurology Setting. Journal of Indian Medical Association. 2023;121;41-44.
3. Gupta R, Sharma S. Role of Alternatives to Antibiotics in Mitigating the Antimicrobial Resistance Crisis. Indian Journal of Medical Research. 2022; 156:464-477.

Chapters contributed.

1. **Gupta R**, Bhatia R. Combating Antimicrobial Resistance in India: the road ahead In. Handbook on Antimicrobial Resistance: Current Status, Trends in Detection and Mitigation Measures, edited by Mukteswar MP et al. Springer Nature Singapore Pvt Ltd. 2023. https://doi.org/10.1007/978-981-16-9723-4_1-1.
2. **Gupta R**, Sharma S. Antimicrobial use in humans In. Handbook on Antimicrobial Resistance: Current Status, Trends in Detection and Mitigation Measures, edited by Mukteswar MP et al. Springer Nature Singapore Pvt Ltd. 2023. https://doi.org/10.1007/978-981-16-9723-4_13-1.
3. Sharma S, **Gupta R**. Antimicrobial Stewardship in India: Success and Challenges Handbook on Antimicrobial Resistance: Current Status, Trends in Detection and Mitigation Measures, by Mukteswar MP et al. Springer Nature Singapore Pvt Ltd. 2023 https://doi.org/10.1007/978-981-16-9723-4_35-1.

Projects

- i. Antimicrobial Stewardship in Neurology setting. Self-funded, 2022.

Dr. Sangeeta Sharma

Books

- i. Lippincott Illustrated Reviews. **Sangeeta Sharma** and Dinesh Badyal, Wolters Kluwer 2nd South Asian Edition, 2023.
- ii. **Sangeeta Sharma**. Clinical Pharmacology of Antiepileptic Drugs. Essentials of Paediatric Neurology, Academia Publishers, 3rd edition, 2022.

Representation in other professional groups/committees

- i. Member, Technical Working Group, GARP-India, March 2023
- ii. Member, OASIS Steering Committee meeting, Public Health Foundation of India, since Feb 19, 2021.
- iii. Chairperson, Task Force for Developing STGs, OASIS Steering Committee meeting, Public Health Foundation of India, November 29, 2021.

- iv. Member Patient Safety Standard Development Committee, National Patient Safety Implementation Framework (2018-2025), National Health Systems Resource Centre (NHSRC) and Ministry of Health & Family Welfare, Government of India since November 12, 2020
- v. Member, National Working Group on Antimicrobial Resistance, Ministry of health & Family Welfare (PH Division), Government of India, since September 2016.
- vi. Guest Faculty for Post Graduate Diploma in Healthcare Quality Management (PGDHQM) conducted by School of Health Systems Studies, Tata institute of Social Sciences (TISS) Since 2016.

Dr. Renu Gupta

- i. Awarded Corona warriors award in April 2022 by Delhi Legislative assembly for rendering selfless services during COVID-19 pandemic.
- ii. Played a pivotal role in enhancing the skill set of healthcare professionals in Delhi towards. as a recognized faculty member of the Delhi State Health Mission. Conducted multiple informative sessions covering topics such as infection prevention and control, quality assurance in laboratories, antibiotic policy, and utilization of quality tools. Provided extensive guidance to numerous facilities to attain accreditation under the National Quality Assurance Scheme by the Government of India.

Dr. Ashima Dabas

Participated as an invited faculty for National Action Plan on Antimicrobial resistance (NAP-AMR) module for training of Prescribers, National Medical Commission Nov 2022.

15.Acknowledgements

The Executive Committee places on record its appreciation for the following:

We thank M/s SNSK & Associates, Statutory Auditors, for their advice and guidance in the finalization of the Society's accounts for the year 2022-23 and for their advice and assistance in taxation and other matters.

For & on behalf of the Executive Committee.

(Dr. Renu Gupta)
Secretary- cum-Treasurer