



MGM INSTITUTE OF HEALTH SCIENCES

(Deemed University u/s 3 of UGC Act, 1956)

Grade 'A' Accredited by NAAC

Sector-01, Kamothe, Navi Mumbai - 410 209


Tel 022-27432471, 022-27432994, Fax 022 - 27431094

E-mail : registrar@mgmuhs.com | Website : www.mgmuhs.com

Value Added Course

Antimicrobial Stewardship


Dr. Rajesh B. Goel
Registrar
MGM INSTITUTE OF HEALTH SCIENCES
(DEEMED UNIVERSITY u/s 3 of UGC Act, 1956)
NAVI MUMBAI- 410 209


Dr. Shashank D. Dalvi
Vice Chancellor
MGM INSTITUTE OF HEALTH SCIENCES
(DEEMED UNIVERSITY u/s 3 of UGC Act, 1956)
KAMOTHE, NAVI MUMBAI

Antimicrobial Stewardship ... Value added course.

Proposed by - Department of Pediatrics,

MGMs Medical College and Hospital, Aurangabad

Course Co-ordinator - Dr Avinash L Sangle./ dr.avinnashsangale@gmail.com

Introduction:

Antimicrobial resistance (AMR) is a major public health challenge, which is recognized as high priority area and it requires prompt precise comprehensive inclusion in the curriculum of both the undergraduate as well as post graduate students.

The increasing consumption of antibiotics is one of the key drivers of antimicrobial resistance seen in bugs of public health importance. Irrational prescription of broad-spectrum antibiotics, poor regulations around sale of antibiotics, self-medication, lack of education and awareness regarding responsible use of antibiotics have been identified as some of the key factors driving antimicrobial resistance in our country. So, we need to inculcate the appropriate knowledge, ethics about the rational use of antibiotics as well as the need and implementation of antimicrobial stewardship.

The 'National Health Policy' (2017), addresses antimicrobial resistance as one of the key issues and prioritises development of guidelines regarding antibiotic use, limiting the over-the-counter use of antibiotics, restricting the use of antibiotics as growth promoters in livestock, and pharmaco-vigilance including prescription audit inclusive of antibiotic usage in the hospital and community.

Hospital based programs dedicated to improving antibiotic use, commonly referred to as Antimicrobial Stewardship Program (AMSP) have been found helpful in improving the quality of patient care and safety through increased infection cure rates, reducing treatment failures, and increasing the frequency of correct prescription for therapy and prophylaxis.

Implementation of an effective AMSP requires a multidisciplinary approach involving a variety of experts. Unfortunately, most of hospitals in India lack structure and process of AMSP. Recognizing the importance to create AMSP structures, experts in health care institutions in our country, we are proposing this AMSP course by developing AMSP curriculum.

We hope that course will inform, encourage, and support health care workers and institutions to initiate the implementation of antimicrobial stewardship initiatives, as well as combating antimicrobial resistance.

The beneficiaries for this value added course are third year MBBS students, Interns, and even Post graduate students. Beneficiaries from this course will get an idea about the concept of antimicrobial stewardship, the extent of the problem of antimicrobial resistance, and the basic knowledge and cohesive team approach required to fight the current and future problems that we are and will face in this regard.

Value added course- Antimicrobial Stewardship –

Proposed by - Department of Pediatrics,

MGMs Medical College and Hospital, Aurangabad

Course Co-ordinator - Dr Avinash L Sangle.

Week 1-

1. Introduction
2. Definition of antimicrobial stewardship
3. Purpose of antimicrobial stewardship program
 - Primary goal
 - Secondary goal
4. Strategic approaches to antimicrobial stewardship

Week 2-

- 1) Essential elements of antimicrobial stewardship
 - a) Active strategies
 - Prospective audit with feedback intervention
 - Formulary restriction/preauthorization
 - b) Supplemental strategies
 - Didactic education
 - Facility specific clinical practice guidelines for common infectious Disease syndrome
 - Patient specific clinical practice guidelines for common infectious

disease syndrome

- Guidelines and clinical pathways
- Antibiotic cycling
- Antimicrobial order forms
- Antibiotic use measures
- Combination therapy
- Dose optimization
- Duration optimization
- Streamlining/de-escalation
- Switch from parental to oral therapy.

c) Other strategy

- Information technology
- Role of microbiology laboratory
- Monitoring of process
- Antimicrobial consumption outcome measures
- Human resources required for antimicrobial stewardship activities.

Week 3-

1. Importance of Standard Treatment Guidelines (STG)
2. Implement Policies and Interventions to Improve Antibiotic Use
 - Policies that support optimal antibiotic use.
 - Develop and implement facility specific treatment recommendations.
3. Rational use of antimicrobials in Dental, ENT, Dermatology, prophylaxis in surgery
4. AMSP in primary care to tertiary care hospitals, corporate hospital
5. Antimicrobial Self-assessment Toolkit
 - Antimicrobial Self-assessment Toolkit (ASAT)
 - TARGET
 - Start Smart Then Focus (SSTF)

Week 4-

1. Antimicrobial stewardship measures
2. Comprehensive Multidisciplinary Antimicrobial Management Programs
 - Antimicrobial stewardship team
3. Integrated stewardship model: antimicrobial, infection prevention and diagnostic (AID)
4. Diagnostic stewardship
 - Culture collection before antibiotic therapy
 - Use of Early Diagnostic kits for promoting specific antimicrobial...
 - Role of biomarkers in AMSP-
5. ASM program measures for quality improvement

6. Recent recommendations
7. Goal and Targets of the AMSP and the future vision
8. Expected threat if AMSP is not rigidly practiced.
9. Inappropriate disposal of leftover antibiotics: Risk to environment and man

Assessment-

At the end of every session set of 10 MCQs will be given to participants and it will be evaluated.

The marks scored would be considered in the final assessment as 25% of total assessment.

At the end of the course the participants will appear for a final MCQ exam of 50 questions. The final exam will carry a weightage of 75% of total assessment.

The total score of candidates will be calculated based on the scores in the session-ending exams and the final exam as mentioned above. The passing score is 50%.

After completion of this course the participants will be given certificates for Antimicrobial Stewardship – A short course.