



MICRO BULLETIN



DEPARTMENT OF MICROBIOLOGY QUARTERLY NEWSLETTER



AIMS Patron



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Guest lecture on “Hospital infection control practices”

Dr. Vijaya.D
Professor and HOD
Department of Microbiology,
AIMS



A guest lecture on “ Hospital infection control practices” was organized by Department of Microbiology, AIMS, B G Nagara on 4-12-2015 from 10 am to 2 pm. Dr.Satish Amarnath, Head, Quality, compliance and outreach services, Manipal hospital, Bangalore was the guest speaker.

The function was attended by nearly 350 delegates including the teaching staff of Pre and Para clinical departments, interns, post graduates, medical students, nursing staff of hospital, Para medical and nursing college students.

The programme was conducted with the divine blessings of Parama Poojya Jagadguru Padmabushana Sri Sri Sri Dr. Balagangadharanatha Mahaswamiji and in the divine presence of Parama Poojya Sri Sri Sri Nirmalanandanatha Mahaswamiji. Dr. Shivaramu, M.G, Principal, AIMS, Dr. Manohar. T.M, Medical Superintendent, AH & RC. Dr. Ramesh. B, Principal, Sri Adichunchangiri College of pharmacy, Dr. Narendra. B.K, Principal, BGSIT and Dr.Leela Srinivas, Director, Central Research Laboratory, AIMS were present.

In the first scientific session, the speaker covered the epidemiology of hospital acquired infection and good practices to control the hospital infections.

The second scientific session highlighted about the intravascular device safety and emphasis was given to health care professionals about prevention of hospital acquired infections, safety precautions to be taken by health care professionals, importance of hand hygiene, screening of healthcare workers for carrier stage, role of Central sterile supply department and outbreak investigation and compulsory vaccination of healthcare workers for Hepatitis B infection.

The programme was anchored by Miss. Jyothika Gupta and Amy Anna Alex, 3rd term MBBS students.

The programme was concluded by vote of thanks by Dr. Janakiram. K.



Dr. Vidyasagar. K, Assistant Professor

HAND HYGIENE



Adichunchangiri hospital and research centre observed HAND HYGIENE WEEK in the month of July and trained hospital staff nurses and group D employees about hand hygiene practices.

In the Adichunchangiri hospital and research centre, Department of Microbiology has put up Hand Hygiene Technique Posters in all wards and OPDs.

Thousands of people die every day around the world from infections acquired while receiving health care. Hands are the main pathways of germ transmission during health care. Hand hygiene is therefore the most important measure to avoid the transmission of harmful germs and prevent health care-associated infections.

Indications for hand hygiene are

- Before having direct contact with patients
 - Before donning sterile gloves when inserting a central intravascular catheter
 - Before inserting indwelling urinary catheters, peripheral vascular catheters, or other invasive devices
 - After contact with a patient's intact skin (e.g., e.g., taking a pulse or blood pressure, performing physical examinations, lifting the patient in bed)
 - After contact with body fluids or excretions, mucous membranes, non-intact skin, and wound dressings
 - After contact with environmental surfaces in the immediate vicinity of patients including medical equipment.
 - After removing gloves
 - If moving from a contaminated-body site to a clean-body site during patient care
- Any health-care worker, caregiver or person involved in direct or indirect patient care needs to be concerned about hand hygiene and should be able to perform it correctly and at the right time.

Techniques for hand hygiene are

1. **Hand washing:** Washing hands with soap and water, recommended when hands are visibly dirty or visibly soiled with blood or other body fluids or after using the toilet



When washing hands with soap and water, wet hands first with water, apply soap to hands, and rub hands together following 7 steps recommended by WHO for 20-30 seconds, covering all surfaces of the hands and fingers. Rinse hands with water and dry thoroughly with a disposable towel.

2. **Alcohol-based hand rubs:** rubbing hands with an alcohol-based formulation, recommended when hands are not visibly soiled.

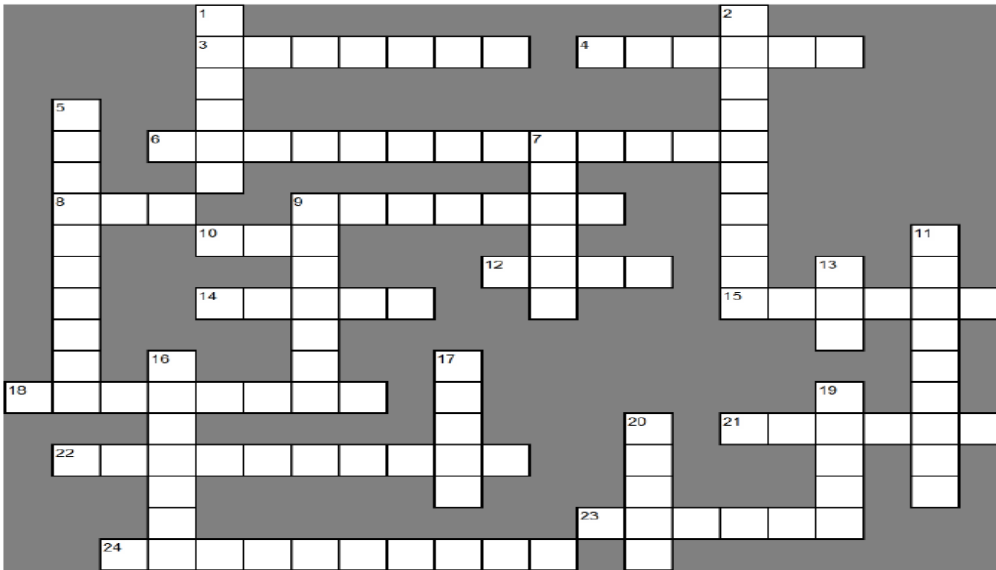


It is faster, more effective, and better tolerated by your hands than washing with soap and water.

When decontaminating hands with an alcohol-based hand rub, apply product to palm of one hand and rub hands together, covering all surfaces of hands and fingers, until hands are dry.

- Hand hygiene reduces the incidence of health-care-associated infections and morbidity, mortality, and costs associated with health-care-associated infections.

Crossword puzzle- Theme: Sexually transmitted infections



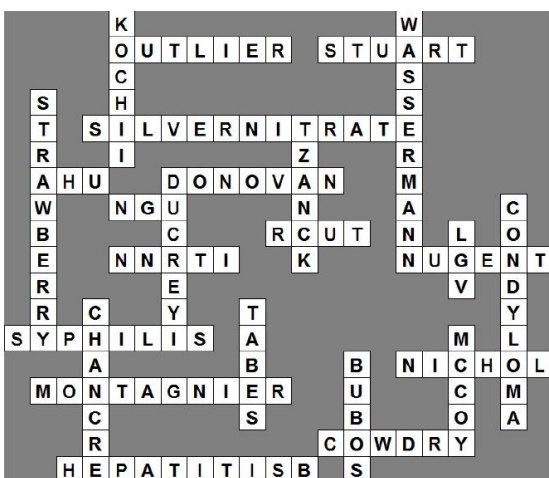
ACROSS

- 3 Genetic subgroup of HIV
- 4 Transport media used for N. gonorrhoeae
- 6 Solution used to prevent Ophthalmia neonatorum in Crede's method
- 8 Acronym for group of gonococcal strains associated with disseminated gonococcal infection (DGI)
- 9 Bodies present within phagosome of large macrophages in Granuloma inguinale
- 10 Acronym for genital chlamydia by C.trachomatis serotypes Dto K
- 12 Non growth dependent method for detection of acid production from carbohydrates in N. gonorrhoeae
- 14 Acronym for class of antiretroviral drugs
- 15 Scoring for Bacterial vaginosis
- 18 The great imitator disease
- 21 Virulent strain of T. pallidum
- 22 Nobel laureate for discovery of HIV
- 23 Inclusion bodies in HSV
- 24 Vaccine available for this STD

DOWN

- 1 Atypical subspecies of N. Gonorrhoea
- 2 Complement fixation test for syphilis
- 5 description for cervix infected with Trichomonas vaginalis
- 7 Another name for geimsa stained smear where multinucleated giant cells with faceted nuclei and homogenously stained 'ground glass' chromatin clinches the diagnosis
- 9 School of fish/ Railroad tracks appearance when infected with this Haemophilus species
- 11 lesions caused by HPV
- 13 Disease caused by C. trachomatis serovars L1-L3
- 16 Primary lesion in syphilis
- 17 CNS manifestation of Syphilis
- 19 Mouse fibroblast cell line used for growth of Chlamydia
- 20 Painful, tender inguinal lymph nodes

Solution:



Dr. Karthik. R, Assistant professor, AIMS.

Publications:

1. Sathish JV, Janakiram K, Vijaya D. Inducible clindamycin resistance in *Staphylococcus aureus*: reason for treatment failure. *Journal of International medicine and Dentistry* 2015;2(2):97-103.
2. Vijaya D., Vijaya S., Santhya ST., Shakthi R., Yashaswini. M.K. Onychomycosis caused by *Curvularia lunata* in an immunocompetent host –A case report. *Indian J Microbiol Res* 2015; 2(4):249-251.
3. Vijaya D, Janakiram K, Santhya ST, Megha S, Vidyasagar K, Shakthi R. A comparison of Ziehl-Neelsen staining and fluorescent staining techniques for the diagnosis of pulmonary tuberculosis. *Int J Current Res* 2015;7(11); 22596-9.

ICMR STS Project

01. Clinico-bacteriological profile of pyoderma with special reference to Methicillin resistant *Staphylococcus aureus*- Shipashree, II MBBS, Guide Dr.Dhanalakshmi T.A

Ongoing projects:

1. Comparative evaluation of latex agglutination with phenotypic methods for detection of Methicillin – resistant *staphylococcus aureus* – AIMS, B.G.Nagara, Dr.Santhya.S.T, Dr.Vijaya.D
2. Prevalence of ESBL, Amp C and Carbapenamase among Enterobacteriaceae – AIMS, B.G.Nagara. Dr.Megha.S, Dr.Vijaya.D
3. Speciation and antibiogram of Enterococci isolated from various clinical samples in a tertiary care centre. Dr.Shakthi.R, Dr.Vijaya.D
4. Coagulase negative staphylococci in collaboration with JIPMER, Pondicherry Dr.D.Vijaya, Dr. Yashaswini, Dr. Santhya. S. T
5. Prevalence, antibiogram and genotyping of Methicillin Resistant *Staphylococcus aureus* (MRSA) isolated from various clinical specimens in collaboration with department of Microbiology, JIPMER, Pondicherry Dr. D. Vijaya, Dr. Karthik. R.

6. “Prevalence, antibiogram and genotyping of Extended Spectrum Beta Lactamases(ESBL) among Gram negative bacilli belongs to family Enterobacteriaceae isolated from various clinical samples in collaboration with department of Microbiology, JIPMER, ,Pondicherry Dr.D.Vijaya, Dr.Vidyasagar K
7. 3 years review of bacteriological profile and antibiogram of clinical isolate and Hospital antibiogram. Dr.Dhanalakshmi T.A.
8. Evaluation of Conventional and CHROMagar methods for detection of group B Streptococci in antenatal cases. Dr. D. Vijaya, Dr. Vijaya. S, Dr. Santhya. S.T, Dr.Shakthi.R.

Conferences and workshops attended by faculty members:

01. Dr.K.Vidyasagar has attended “Work shop on Research &Publication ethics” organized by Sri Hasanamba Dental College & Hospital, Hassan on 23rd December 2015.
02. Dr. Santhya S.T. attended MEU programme on dissertation writing organized by AIMS, BG Nagara on 14.07.2015
03. Dr.Shakthi R has attended “Workshop on Microteaching” conducted by MEU, AIMS, B G Nagara from 10.12.2015 to 12.12.2015
04. Dr.Shakthi R attended “IAMM Microcon 2015” organized by JIPMER, Pondicherry, from 25/11/2015 to 29/11/2015.

Achievements of faculty members:

01. Dr. D. Vijaya was appointed as chairman of board of studies for UG para clinical subjects of RGUHS Karnataka, Bangalore