Journal Club Presentation

Present by**: Dr. Md. Ferdous Hasan, June 2011**

Associate Professor of Community Medicine

**Knowledge, Attitude and Practice Patterns of Hand washing in Major Public Sector Hospitals of Karachi**

**Aims:** To determine the knowledge, attitude, and practice pattern of hand washing in medical professionals of some public sector hospitals and determine the variations in different groups and also check the availability of hand washing facilities at these sites.

**Methods:** A questionnaire based study was conducted at 10 wards and 10 OPD’s of six major public sector hospitals of Karachi. From each unit, 5 staff members (2 doctors 3 paramedics) were selected A precoded proforma was used to collect the information

**Results:** A total of 386 individuals were interviewed and rest could not be accessed due to non availability. Of the total only 68.8% had sufficient knowledge about the benefits of hand washing while the facility was available at only 16.8% (16/96) units. Although 59% of those interviewed said that they were adopting the practice of hand washing but when observed only 8.9% doctors and staff were practicing it. Majority (62.7%) used the toilet soap for hand washing which they purchased themselves. Only 33.4% individuals thought that soap and water were adequate for disinfection whereas others (66.6%) did not think so. Attitude of 48.7% doctors and 66.2% paramedical staff was positive for adopting the hand washing practices provided the facility was available to them. Main reason for not washing hands was non availability of the facility and heavy rush of patients.

**Conclusion:** To prevent nosocomial infection, the hospital management should provide hand-washing facilities at all sites where patients are examined. Seniors should make sure that they adhere to this practice and also keep a check on their juniors. Health education should be provided regularly through print and visual media and workshops.

Seminar

Present by**: Dr. Md. Ferdous Hasan, December 2013**

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**Topic:** **BIOTERRORISM**

**Bioterrorism Attack:** According to the U.S. Centre for Disease Control & Prevention (CDC):

A *bioterrorism attack* is the deliberate release of viruses, bacteria, toxins or other harmful agents used to cause illness or death in people, animals, or plants.

**Evolution of Chemical and Biological Weapon**

**Phase I :** Gaseous chemicals like Chlorine & Phosgene were used in World War – I

**Phase II :** Use of Nerve Agents – Tabum, a choline-esterage inhibitors and marks beginning of Anthrax and Plague in World War – II

**Phase III :** Herbicides were used causing crops destruction

**Phase IV :** In recent time, biotechnological and genetic engineering revolutions are in progress

**Top Biological Weapons**

* Bacillus Anthracis
* Yersinia Pestis
* Smallpox Virus
* Clostridium Botulinum
* Vibrio Cholerae
* Ebola Virus
* Mycotoxin

**Top Biological Weapons – Newer Trends**

Products of microbes that can kill or incapacitate targeted hosts, e.g; Hormones, neuropeptides and cytokines, called as ‘designer substances’ to target a particular organ or a type of enemy

* Russia seems to have a new type o genetically modified Anthrax to elude the vaccine used by America
* Rumors are that Israelis are working to prepare “Ethnic Bomb”
* Parasite BW are under trial to affect cash crops and cause huge economic loss.

**The Next Target of Bioterrorism is our Foods.**

**Delivery of Biological Weapon**

* Scud missiles
* Motor vehicles with a spray
* Hand pump sprayers
* By an individual
* Book or letter
* Gums
* Remote control devices
* Robotic delivery

**Prevention & Control Measures**

* To create awareness among the public and doctors
* To stock pile drugs and vaccines
* Allocation of separate funds
* Preparedness
* International Collaboration: BW do not respect “Boundaries, Culture, Language or Territory”
* Microbiologists are the main focal point of action