conditions were enough mature to start the first residency program in major medical and surgical specialties. The graduates of this program played and continue to play an important role in the Palestinian health system.

The first faculty of Medicine was established in 94 at Al-Quds university and 5 years later 2 other campus were established in Gaza and at Annajah national university. It is expected that the yearly number of local graduates will reach 200 in 3 years which is still insufficient to cover the needs of a rapidly growing population.

The rapid changes in the medical demography worldwide endanger the health situation in the developing country. Doctors have a lot of temptations to immigrate to developed countries and these same countries are more and more reluctant to produce doctors for the poor world. Palestinians surfer already from this situation and less and less qualified specialists return back working in Palestine

A major Step was to be taken to alleviate the expected consequences of such conditions. The development of modern teaching hospital structures related academically to the existing faculties of medicine and the establishment of a National training program for the formation of qualified specialist. Annajah National University and the ministry of health have taken decisive steps to realize the first. The Palestinian medical council with the participation of all partners have launched the National training program and the first qualifying national examination entrance exam was held in October 2008.

These two events are major steps in shaping the future of medical education in Palestine

3) <u>Speaker:</u> Dr. Amin Thalji M.D,F.A.A.P, *Chief of neonatal service, Red Crescent hospital, Jerusalem*

'Management of MDRO(multidrug resistant organisms) in health care facilities'

Multidrug resistant organisms are microorganisms, predominantly bacteria, that are resistant to one or more classes of antimicrobial agents. Although the names of certain MDROs describe resistance to only one agent e.g.,methicillin resistant staph(MRSA),vancomycin resistant (VRE), these pathogens are frequently resistant to most available antimicrobial agents. In addition to MRSA and VRE, certain gram negative bacteria (GNB), including those producing extended spectrum beta-lactamases (ESBLs) and others that are resistant to multiple classes of antimicrobial agents, are of particular concern

Risk factors that promote antimicrobial resistance in healthcare settings include Extensive use of antimicrobials ,transmission of infection and susceptible hosts

Drug-resistant pathogens are a growing threat to all people, especially in healthcare settings. Each year nearly 2 million patients in the United States get an infection in a hospital. Of those patients, about 90,000 die as a result of their infection. More than 70% of the bacteria that cause hospital-acquired infections are resistant to at least one of the drugs most commonly used to treat them. Persons infected with drug-resistant organisms are more likely to have longer hospital stays and require treatment with second- or third-choice drugs that may be less effective, more toxic, and/or more expensive. GNB resistant to ESBLs, fluoroquinolones, carbapenems, and aminoglycosides also have increased in prevalence.

- *For example,* in 1997, the SENTRY Antimicrobial Surveillance Program found that among *K. pneumoniae* strains isolated in the United States, resistance rates to ceftazidime and other third-generation cephalosporins were 6.6%, 9.7%, 5.4%, and 3.6% for bloodstream, pneumonia, wound, and urinary tract infections, respectively.
- In 2003, 20.6% of all *K. pneumoniae* isolates from NNIS ICUs were resistant to these drugs

***Clinical importance of* MDROs:** In most instances, MDRO infections have clinical manifestations that are similar to infections caused by susceptible pathogens. However, options for treating patients

with these infections are often extremely limited. Although antimicrobials are now available for treatment of MRSA and VRE infections, resistance to each new agent has already emerged in clinical isolates.

• Similarly, therapeutic options are limited for ESBL-producing isolates of gram-negative bacilli. These limitations may influence antibiotic usage patterns in ways that suppress normal flora and create a favorable environment for development of colonization when exposed to potential MDR pathogens (i.e., selective advantage).

• Increased lengths of stay, costs, and mortality also have been associated with MDROs.

Prevention and Control of MDRO transmission

Successful control of MDROs has been documented in the United States and abroad using a variety of combined interventions. These include:

- Improvements in hand hygiene,

- Use of Contact Precautions until patients are culture-negative for a target MDRO,

- Active surveillance cultures (ASC),

- Education,

- Enhanced environmental cleaning, and improvements in communication about patients with MDROs within and between healthcare facilities.

MDROS in Palestine?

Recent observations both in governmental and nongovernmental hospitals have confirmed the presence of MDROs among hospitalized patients leading on occasions to significant morbidity and mortality.

Do we need a Campaign to Prevent Antimicrobial Resistance? We definitely need this campaign sooner than later and Clinicians *hold the solution!*