

## Epidemiology of Infection, Hospital Infection Prevention and Control Programs

Majdi Kayed

Sharurah Armed Forces Hospita, Jordan

### Abstract

Lately with the appearance of many infectious organisms (bacteria, viruses and fungi, MDROs) the hospitals are believed to be a safe areas where clients (patients, Visitors, Healthcare workers ...etc) are being served, many of this clients are people with chronic illnesses and old ages who are at high risk to be affected by this infectious agents as well as the healthcare workers who are indirect contact with patients and patients with infectious diseases. The impact of HCAI implies prolonged hospital stay, long-term disability, increased resistance of microorganisms to antimicrobials, a massive additional financial burden for health systems, high costs for patients and their families, and excess deaths. In Europe, HCAIs cause 16 million extra-days of hospital stay, 37 000 attributable deaths, and contribute to an additional 110 000 every year. Annual financial losses are estimated at approximately € 7 billion, including direct costs only. In the USA, approximately 99 000 deaths were attributed to HCAI in 2002 and the annual economic impact was estimated at approximately US\$ 6.5 billion in 2004. Information is again very scanty from low- and middle-income countries and no data are available at national or regional levels. According to a report on device-associated infections in 173 ICUs from 25 countries in Latin America, Asia, Africa, and Europe, crude excess mortality in adult patients was 18.5%, 23.6%, and 29.3% for CRUTI, CR-BSI, and VAP, respectively. A review of several studies showed that increased length of stay associated with HCAI varied between 5 and 29.5 days.

### Biography:-

Recent COVID-19 pandemic express the need for active infection prevention and control program to prevent, identify and manage outbreaks resulted from respiratory viruses. The published study by the international journal of environmental research and public health showed that, the SARS-CoV-2 hospital-acquired infection rate is 12–15%. With lacking of significant data for the mortality rates the appearance of new variants of SARS.cov2 adding extra challenges on healthcare systems to implement effective infection prevention and control programs which are able to prevent and decrease the risk spread of infections inside the healthcare facilities to be a (COVID-19 free areas) to provide safe care and promote healthcare quality. As well as protect the healthcare facilities from legal liabilities, taking in consideration cost- benefits of infection prevention and control program.

### Reference:

1. Report on the Burden of Endemic Health Care-Associated Infection Worldwide-2011
2. 2019 National and state healthcare –associated infections progress report
3. Y. Zhang et al. / International Journal of Infectious Diseases 89 (2019) 179–184