

# ***Impact On Morbidity, Mortality And Length Of Stay Of Hospital Acquired Infections By Resistant Microorganisms***

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## **Background:**

Antimicrobial resistance is one of the most important global threats to Public Health. It undermines our ability to fight infectious diseases in the general population and reduces the chances of controlling infectious complications in the most vulnerable patients. In addition, when the first line antibiotic treatment fails or is limited by the presence of resistance, it is necessary to use more expensive antibiotics that are, sometimes, more toxic and less effective, increasing care costs and putting safety and effectiveness at risk. In the United States it has been estimated that more than 2 million people suffer infection by some multi-resistant organism (MRO) each year and about 23,000 die as a direct result of these infections . In the European Union (EU), taking data from 2007, it has been estimated that MRO infections cause about 25,000 deaths annually and generate an overall cost of about 1,500 million euros per year . In 2050 about 10 million people a year could die in the world if the situation does not change MRO infections are particularly common in hospitals. Nearly 8% of hospitalized patients develop hospital acquired infection (HAI), 20% of which could be caused by an . It is also estimated that more than a third of the HAI are preventable and that prevention could be one of the most important mechanisms to reduce the MRO .The measures commonly used to assess the impact of MRO infections are mortality, length of stay (LOS) and cost. Sometimes other indicator of morbidity is used (stays in ICU, reoperations, etc.) . Most studies show that MRO infections cause an increased risk in mortality (RR= 1.5 to 4.0 ), an increase in stay of between 2.0 and 12.7 days and costs 1.2-1.5 times higher than those caused by susceptible strains .However, studies that are based on these results are very heterogeneous, even contradictory, and they have limited comparability . In addition, most studies have been limited to infections caused by a single organism in a single location, mainly bacteremia. In many cases, without differentiating whether the source of infection was hospital or community. In fact, very few studies have globally evaluated if nosocomial infections caused by main MRO have a greater impact in terms of morbidity, mortality and costs than susceptible microorganisms.

## **Conclusion:**

In order to reduce and prevent the impact of hospital infection on the degree of mortality and morbidity, it is necessary to identify the factors of hospital infection in a native hospital, as well as applied and executive strategies. used . The area should be applied to new knowledge and applied protocols and new clinical guidelines.

**Key word:** Morbidity, Mortality و length of stay و Resistant Microorganisms