

SEPSIS

SEPSIS: AWARENESS AND PREVENTION IN THE LIGHT OF RECENT RESEARCH

**Advanced Research and Creativity in Honors (ARCH) 2015-2016**

Rosemary Trewin

Florida International University

Project Advisor: Prof. Mary Lou Pfeiffer

Sepsis has a significant presence in emergency departments and intensive care units, representing 10% of all ICU admissions. Due to varying causes of infection that progress from local sites to systemic effects, sepsis has long been a mystifying illness with no one cure. The objective of this study is to examine the major causes and symptoms associated with sepsis in order to understand and evaluate current treatment approaches and research methods. In addition, this project is aimed at evaluating local sepsis awareness and prevention techniques in the local community. It is a continuation of a group project started in the class "Biomedical Ethics" provided by the FIU Honors College during the 2015 spring semester. Methods to carry out this research project include literature searches through online databases (journal articles, periodicals, current and past studies) to gather information regarding the nature of sepsis, success rates of prevention techniques, documented mortality rates, and current awareness efforts in the general public. Literature searches focus on sepsis epidemiology, mortality, and survival. Local data will be obtained through available statistics and potential surveys, likely through internet sources as well. This project may help understand the difficulties surrounding current sepsis research and the intricacies of possible treatment plans. The use of more successful techniques lowers the overall mortality rate due to sepsis and improves patient outcomes. Awareness is limited, perhaps because sepsis usually begins as a primary infection that starts out locally and becomes systemic, leading to a variety of symptoms depending on the location of the original infection. Sepsis is ultimately related to many other health drawbacks, including most healthcare-associated infections and HIV/AIDS. Increased awareness and implementation of early detection guidelines should be promoted with the goal to decrease the cases of sepsis which progress to septic shock and fatalities. This project affects the field of medicine and society as it is part of a larger, global effort to increase awareness of sepsis and evaluate treatment methods.