

12th International Congress on**Microbial Interaction and Applications of Beneficial Microbes**

July 17-18, 2017 Munich, Germany

Is leptospirosis a disease that attack males more than females?Edmond Puca¹, Genti Stroni¹, Elda Qyra¹, Pellumb Pipero¹ and Entela Y Puca²¹University Hospital Center - Mother Teresa, Albania²American Hospital, Albania

Statement of Problem: Leptospirosis is a re-emerging zoonotic disease with global importance. It is a widespread and potentially fatal zoonosis that is endemic in many tropical regions and causes large epidemics after heavy rainfall and flooding. Human infection by leptospire has highly variable clinical manifestations, which range from subclinical infection to fulminant disease. Gender refers to the biological and physiological factors that define males and females, looks like to play an important role in the determination of the human leptospirosis.

Purpose: The purpose of this study is to determine potential relationships of environmental context to human exposure to *Leptospira*. At the same time we want to analyze if any connection between human leptospirosis and the male or female gender exist, because traditionally, more male leptospirosis cases were observed in surveillance data has been explained through occupational /recreational exposures that put men in greater contact with *Leptospira*-infected animals or contaminated water.

Methodology & Theoretical Orientation: For our ideas we did a search about human and animal leptospirosis studies. At the same time we did an observational study with human leptospirosis cases at the Service of Infectious Diseases, University Hospital Center, "Mother Teresa", Tirana, Albania.

Findings: In most of the publications, we concluded that clinical cases with leptospirosis are males. Anyway same European studies have found that, while the incidence of leptospirosis is higher in men, there is no sex difference in leptospirosis seroprevalence so maybe biological and/or hormonal differences may play as a possible, alternative factor for the male excess in reported leptospirosis cases.

Conclusion & Significance: Interpretations of dates from the observed sex/gender distributions from surveillance studies require careful thought, as there are important implications for public health actions. Male are more frequent presenting with clinical leptospirosis. More seroprevalence studies are needed to understand this connection or disconnection.

edmond_puca@yahoo.com

A preliminary investigation of novel putative non-stereo specific dehalogenase producing bacteria from Antarctic psychrotrophic *Bacillus* sp. IH1

Ismail Haruna

Bauchi State University, Nigeria

2, 2 dichloropropionic acids (dalapon) like most halogenated compounds are commonly used as herbicides and employed in agricultural areas and industries. Toxicity of these xenobiotic compounds causes serious environmental problems. *Bacillus* sp. IH1 was isolated from top cliff soil collected from Antarctica. The bacteria was first grown on Antarctic bacterial medium and later transferred to a minimal medium containing 2, 2, dichloropropionic acid as carbon source. It grew slowly in the minimal media in different concentrations of 10 mM, 20 mM, 30 mM and 40 mM of 2, 2 DCP. The best growth was observed in 20 mM of 2, 2-DCP with 32 hours as doubling time. To monitor the degradation activity of the bacteria, halide ion assay was carried out to check the release of chloride ion. The best release of chloride was 0.657 mMol/L in 20 mM of 2, 2-DCP. The bacteria was identification using 16S rRNA, genomic DNA extraction method and PCR amplification of 16S rRNA was performed using universal primers 27F and 1492R. Nucleotide blast (BLASTn) showed 97% similarity with *Bacillus* sp. Results from biochemical tests further confirm the bacteria as *Bacillus* sp. Using Phylogeny.fr, sequences from nucleotide blast result were used to build a phylogeny tree based on neighbor to neighbor joining.

ismailharuna68@yahoo.com