

Clinical epidemiology

Epidemiology can be considered a cornerstone of the Health Sciences, since it aims at studying factors affecting the health and illness of particular populations. The work done by the Epidemiologists can be useful as the foundation of health interventions realised in the fields of public health and preventive medicine.

While descriptive and analytical Epidemiology is classically intended to describe the patterns of occurrence of health-related states or events in groups (giving the answer to the questions of "Who?", "What?" "Where?", "When?" and "Why?"), the Clinical Epidemiology can be considered the application of the typical epidemiological concepts and methods to health problems according to the holistic Hippocratic way of thinking in Medicine (diagnosis, prognosis, treatment and prevention) that every day the clinicians are used to apply in the clinical settings for delivering care to individual patients (1). Following this approach, the population aspect of epidemiology is present because these individual patients are members of conceptual populations (2).

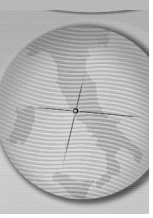
This special issue of the Italian Journal of Public Health deals with some interesting applications of Clinical Epidemiology, in different clinical settings and according to the diagnostic, prognostic and therapeutic approaches, that have in common the identification of diagnostic tools, risk factors for diseases and for determining optimal treatment approaches to clinical practice.

The paper by De Renzi et al. (*Clinical Epidemiology of IgE-mediated Cutaneous and Oculo-conjunctival Allergic Diseases*) has the aim of studying the relationship between gender and age of the patients and reactivity to specific allergens and different clinical presentations of IgE-mediated allergic disease, with a specific focus on eye-conjunctival and cutaneous symptoms, alone or in combination.

The work conducted by Groff et al. (*Use of non-invasive mechanical ventilation in the Emergency Department, clinical outcomes and correlates of failure*) is aimed at documenting clinical results of non-invasive mechanical ventilation application in the setting of acute respiratory failure, and to define the predictive factors of its success/failure in the daily operational practice of the Emergency Department.

The paper by D'Arista et al. (*Hormonal disturbances and cognitive-emotive functions in eating disorders*) investigates the relationship between hormonal disturbances and psychopathology in Eating Disorders.

The association between cardiovascular comorbidity in patients with chronic inflammatory skin diseases was studied by Schmitt et al., using a case-control approach and a population-based administrative database.



Finally, a paper deals with particular aspects of clinical epidemiology in the field of dentistry (*Comparing orthodontic treatment need indexes*) and demonstrates the usefulness of the epidemiological approach in this particular setting.

Giuseppe La Torre

Epidemiology and Biostatistics Unit
Institute of Hygiene
Catholic University of the Sacred Heart
Italy

References

- 1) Lopez F Il pensiero olistico di Ippocrate. Percorsi di ragionamento e testimonianze. Vol. I. Cosenza:Edizioni Pubblisfera, 2004.
- 2) Sackett D, Hayne B, Guyatt G, Tugwell P. Clinical Epidemiology: A Basic Science for Clinical Medicine. 2nd ed. Boston, Mass.:Little Brown, 1991.