



Occupational Epidemiology, a Tool for Health Workers

Deschamps A*

Association Interprofessional of the Medical and Social Centers for Occupational Health, France

*Corresponding author: Deschamps A, Association Interprofessional of the Medical and Social Centers for Occupational Health, France, Email: ambardeschampsp@gmail.com

Editorial

Volume 6 Issue 2

Received Date: April 14, 2022

Published Date: April 26, 2022

DOI: 10.23880/eij-16000232

Editorial

Working and employment conditions have important health consequences, both positive and negative. This is the basis on which the concept of work is raised as a means of supporting health. Work satisfies various human demands of vital importance, such as earning a living in order to survive, personal satisfaction as a human being, and feeling like a creator, producer and contributor to the common good of society. Work satisfies various human demands of vital importance, such as earning a living in order to survive, personal satisfaction as a human being, and feeling like a creator, producer and contributor to the common good of society [1]. The International Labour Organization has stated that every citizen has the right to healthy and safe work, and to a work environment that allows them to live a socially and economically productive life, so Occupational Health must ensure that these conditions are met [2].

Coupled with technological development, a series of risks have arisen in the productive activity that have sometimes caused an unjustified deterioration of health, for which Occupational Medicine is responsible for ensuring the control and prevention of diseases. Accidents and deviations from the health of workers, as well as health promotion. Occupational Medicine rests on Epidemiology, a science that allows it to achieve these purposes.

The French Revolution incorporated the interests of the community into the social organization of the State. In a sense, public health already existed before It could be argued that the quarantine measures of the 14th century were public health measures, and isolating sick people was done even earlier. But those measures had not been designed to protect the entire community, only part of it: the nobility, the king or the merchants; its scope was always very limited. The French Revolution broadened that scope, thereby signalling the beginning of public health for the community as a whole.

The changes in the social and economic structure that have occurred in the world during the last 100 years have had a fundamental effect on the prevailing attitudes in Epidemiology .Of the many factors that have led to this situation, two are of their own importance: the first is the “shrinking” of the world, which, measured in terms of travel times, is getting progressively smaller, and which, more and more, it tends to become a single epidemiological universe; and the second is the influence of an aging population, a condition that currently characterizes most modern civilizations [3].

With the rise of the Industrial Revolution, after the middle of the 18th century, it is when they investigate occupational diseases and toxicology for the first time. However, it is suggested that the first study in the field of Occupational Medicine that could be labelled epidemiological was published in 1775 by Sir Percival, who drew attention to the high incidence of scrotal cancer among chimney sweeps. Despite his isolated observations, it took more than 150 years to reach the establishment of epidemiological methods in the study of work-related diseases [4].

The identification of asbestos associated with diseases occupies an important place in the history of Occupational Epidemiology. Fatal or non-fatal forms of asbestosis were identified in many exposed populations, and an excess risk of lung cancer suggested a potential carcinogenic effect of asbestos fibers. The carcinogenic power of asbestos has been repeatedly confirmed in epidemiological studies of occupationally exposed people since 1950.

Epidemiology, together with the complementary disciplines of Physiopathology and Toxicology, provide scientific bases for Medicine and Occupational Epidemiology for medical practice, such as that related to the interaction between health and work.

According to the Dictionary of Epidemiology, edited by John M. Last in 1983, Epidemiology is the study of the distribution and determinants of the relative health states that occur in the population, and the application of this study to the control of health problems. The epidemiological method has been widely used in the field of occupational medicine to describe the health status of a specific working population. estudiar su morbilidad en relación con el tipo de ocupación, identify specific occupational risks, generate and test cause-effect hypotheses, and evaluate interventions [5].

Epidemiology as a science that deals with the study of population health problems, by definition has a social approach, since we cannot see community without society, since when man meets other men and interacts in the ecosystem that surrounds, it ceases to be a natural being to become a social being. When there are social changes in a given population, this is also reflected in their health picture above all, when these changes are fundamentally based on a social welfare approach in which health and education play a leading role.

Occupational Medicine is the area of Public Health dedicated to the prevention of work-related illnesses and injuries. Like Public Health, Occupational Medicine rests on Epidemiology, a science that allows monitoring of processes and conditions, describing patterns of disease presentation, identifying potential causal factors, adopting the necessary control measures and evaluating the effectiveness of the interventions.

The term Occupational Epidemiology can be considered as an abbreviation for Epidemiology of Occupational Diseases, which would be in accordance with a disease-centred classification. On the other hand, Occupational Epidemiology could also be considered determinant-focused, in which case it would encompass the study of all health consequences, deleterious and preventive, resulting from occupational factors.

The epidemiological study of work-related diseases can be both descriptive and etiological. The main function in Occupational Epidemiology is to associate the presence of morbidity to exposures at work, that is, the study of the occurrence of diseases in relation to work-related determinants. Therefore, Occupational Epidemiology deals with the relationship of occurrence between work-related diseases and the factors that determine their appearance and course.

In summary, this discipline is the systematic study of the distribution and causes of illnesses and injuries related to the risks of the work environment. The analytical designs and methods used in it are essentially the same as those

applied in studies of non-occupational diseases. However, there are some important characteristics of Occupational Epidemiology that distinguish it from other areas of Epidemiology, for example, some diseases are primarily occupational in origin such as pneumoconiosis (silica, asbestos, coal dust), musculoskeletal disorders caused by the vibration of the pneumatic hammer, and eye injuries due to occupational exposure to laser rays, etc. On the other hand, there are many diseases and injuries that have not been confirmed as work-related, so the clarification between distinguishing occupational risk factors or not that causes them is a task for epidemiologists. Another peculiarity of this specialty is that the population under study is the worker king class.

It can be said that Occupational Epidemiology has two fundamental purposes: Identification and investigation of hypotheses about the causal relationship between risk and disease and Identify and quantify these risks.

It is a fundamental tool to determine the negative and positive phenomena in the work environment, so that once the first ones are identified, actions are taken in order to minimize or eliminate them; the second is to promote them in such a way that they improve health and safety conditions in the work environment, from the concept that Occupational Epidemiology not only focuses its objective on diseases and injuries, but also and as I stated above, it has to do with the risk factors of the environment to which the worker is exposed during his working day.

References

1. (1991) Work for health: Briefing book to the Sundvall Conference on Supportive. Environments, Sundvall.
2. WHO (1995) Global strategic in occupational health for all. The way to health at work.
3. Gordon EJ (1988) Watch epidemiology and new. In: El desafío de la epidemiología Washington. OPS. Publications centrifuges 505.:140-148.
4. Hernberg S (1955) Introduction to occupational epidemiology. Daz Santos, pp: 348.
5. Karvonen M (1986) Epidemiology in the context of occupational health. In: Epidemiology of Occupational Health. WHO, pp: 1-15.

