DEVELOPING CHRONIC DISEASES IN THE RURAL AREA THAN THE URBAN ONE

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Abstract

Chronic diseases are the most common cause of morbidity and mortality in the general population. The most common are heart disease followed by lung disease. Due to the different living conditions in the rural area than the urban one, there must be a difference in the distribution of cornice diseases. But due to modernization these differences seem to disappear as a similar lifestyle is adopted.

Key words: atherosclerosis, dietary factors, pulmonary emphysema

Introduction

Atherosclerosis is an inflammatory disease that can lead to acute myocardial infarction and death, as well as stroke. (Tuttolomondo, 2012) (Ross, 1999) The cause of this disease is currently unknown, only known risk factors are known to increase the risk of developing disease. (Bondjers, 1991) Dietary factors are most often considered as implications in the development of atherosclerosis. This category includes fatty acids in cholesterol, and hydrogenated (trans) fat from margarine. (Rowsell, 1958) Other incriminating factors are increased inflammation by blurred mechanisms after eating sugar and smoking by increasing the reactive forms of oxygen that is thought to be a trigger for atherosclerosis. (Howard, 1998)Complications of atherosclerosis are redundant, being the leading cause of mortality and morbidity in developed countries. Atherosclerosis is clearly the causative factor of acute myocardial infarction and possibly malignant rhythm disorders followed by death. Cerebral atherosclerosis leads to ischemic vascular acupuncture and, at the level of the inferior mebra, leads to chronic obstructive asthenopathy often followed by lethal

complications. (Dutta, 2012) Chronic pulmonary diseases are the second leading cause of mortality and morbidity in both rural and urban areas. Chronic obstructive bronchopneumopathy is a complex condition considered to be the combination of two overlapping chronic diseases, respectively, chronic bronchitis and pulmonary emphysema. (Rabe, 2007) This disease is mainly caused by intensive smoking and environmental pollution or environmental pollution factors. Broncho-lung cancer is also associated with smoking in most cases. (Kills, 1999)

Material and method

An analysis of the rural and urban environment is not necessary to understand the differences in lifestyle, occupation, nutrition, occupational activity and exposure to the noxious substances and how these elements are involved in the occurrence of chronic diseases. (Dahly, 2007)

The urban environment has different living conditions than the rural one, in terms of population agglomeration, the type of profession it exercises, displacement, nutrition, and potentially toxic environmental factors (noxes). In rural areas, the population is distributed over a larger area of the population, occupation is mainly agrarian with a tendency industrialization, food is partly derived from its own sources, exposure to noxiousness begins to become similar to that in the urban environment due to distribution equal relative smoking in the two populations. (Dean, 2011) Food has a tendency to be less and less produced inside the household as a result of the expansion of the big chains of shops to rural areas or the ease of it to the products of these stores. Much of the rural population is working in the nearby industrial centers that are increasingly numerous. (Abel. 1999) Thus the rural population has access to a constant income that allows it to have a way of living both in terms of nutrition and custom with the urban one. In urban areas, lifestyle is mainly more sedentary due to permanent access to personal or shared transport and smaller movement space due to reduced living space. (McMichael, 2000)On the other hand, in rural areas, the means of transport are becoming more and more easy as a large part of the population can afford to purchase personal cars. Even though the living space is larger in the rural area, with the access to television and the Internet, the physical activity is becoming less and less. (Hoekman, 2017) (Kolodinsky, 2017)

Results and discussions

The main risk factors involved in the occurrence of chronic diseases (cardiac and pulmonary) are considered to be representations of food, the way of life and the consumption of toxic products and access to health care are present in both rural and urban areas. Atherogenic foods that are high-fat foods are found in products that are accessible to both urban and rural populations, as large chain stores sell the same products in all storesDue to the permanent work place, the rural population has less time to produce food in their own household, and on the other hand, thanks to the constant income, they can buy the same products as the urban ones. Sedenatrism is considered to be an important risk factor involved in the development of cardiovascular diseases through unclear pathophysiological mechanisms, tends to be similar in the two environments, through the access of the rural population to personal cars and by renouncing the use of the space for the physical activity and straightening the antenna to sedentary activity such as watching TV and browsing the internet. Due to similar incomes, the rural population has the same access to toxic products as cigarettes as well as urban populations.

Conclusions

Chronic heart and lung disease are the main causes of mortality and morbidity in the general population. These diseases are strongly correlated with risk factors such as nutrition, physical activity, toxic consumption, environmental or occupational pollution.

Due to the expansion of industrial parks, rural and urban life patterns tend to become similar. The distribution of diseases in the urban and rural population tends to be similar in recent years. The lack of difference in disease distribution between the two populations can be caused either by a misidentification of the causal factors of these diseases or by the similar living conditions between the two populations.

Future studies are needed for a precise assessment of the onset of onset and disease progression in the two populations for possible correlations with other risk factors or causal factors of the disease. Differences in the way of life of two populations are often useful in identifying the causes or association of a disease, by analyzing life patterns and different risk factors.

References

- Abel, M. H. (1999). Stress and burnout in rural and urban secondary school teachers. *The journal of educational research*, *92*(5), 287-293.
- Bondjers, G. G. (1991). Hypertension and atherosclerosis. Cause and effect, or two effects with one unknown cause? *Circulation, 84(6 Suppl),*, VI2-16. Dahly, D. L. (2007). Quantifying the urban environment: a scale measure of urbanicity outperforms the urban—rural dichotomy. *Social science & medicine, 64(7)*, 1407-1419.
- Dean, W. R. (2011). Rural and urban differences in the associations between characteristics of the community food environment and fruit and vegetable intake. *Journal of nutrition education and behavior*, 43(6), 426-433.
- Dutta, P. C. (2012). Myocardial infarction accelerates atherosclerosis. *Nature* 487(7407), 325.
- Hoekman, R. B. (2017). Sport participation and the social and physical environment: explaining differences between urban and rural areas in the Netherlands. *Leisure Studies*, 36(3), 357-370.
- Howard, G. W.-R. (1998). Cigarette smoking and progression of atherosclerosis: The Atherosclerosis Risk in Communities (ARIC) Study. *Jama*, 279(2), 119-124.
- Kills, S. &. (1999). Tobacco—the growing epidemic. *Nature medicine* 5, 15-17.
- Kolodinsky, J. M. (2017). Estimating the effect of mobility and food choice on obesity in a rural, northern environment. *Journal of Transport Geography*, 61, , 30-39.
- McMichael, A. J. (2000). The urban environment and health in a world of increasing globalization: issues for developing countries. *Bulletin of the World Health Organization*, 78(9), 1117-1126.
- Rabe, K. F. (2007). Global strategy for the diagnosis, management, and prevention of chronic obstructive pulmonary disease: GOLD executive summary. *American journal of respiratory and critical care medicine* 176(6), 532-555.
- Ross, R. (1999). Atherosclerosis—an inflammatory disease. *New England journal of medicine 340(2)*, 115-126.
- Rowsell, H. C. (1958). The experimental production of atherosclerosis in swine following the feeding of butter and margarine. *Canadian Medical Association Journal*, 79(8, 647.
- Tuttolomondo, A. D. ((2012)). Atherosclerosis as an inflammatory disease. Current pharmaceutical design. *Current pharmaceutical design*, 18(28), 4266-4288.