

The Study of Non-Communicable Diseases and its Risk Factors

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DESCRIPTION

A Non-Communicable Disease (NCD) is one that cannot be transmitted from one person to another. Parkinson's disease, autoimmune disorders, strokes, and the majority of cardiac illnesses, the majority of malignancies, diabetes, chronic renal disease, osteoarthritis, osteoporosis, Alzheimer's disease, cataracts, and others are examples of NCDs. NCDs can be either chronic or acute. Although there are certain non-communicable infectious diseases, such as parasitic disorders in which the parasite's life cycle does not entail direct host-to-host transmission, the majority are non-infectious.

NCDs are the main cause of mortality in the world. They were responsible for 68 percent of all fatalities (38 million) in 2012, up from 60 percent in 2000. Approximately half were under the age of 70, while the other half was women. Certain NCDs are more likely to occur as a result of risk factors such as a person's background, lifestyle, and environment. Every year, at least 5 million people die as a result of tobacco smoking, while another 2.8 million die as a result of being overweight. High cholesterol is responsible for around 2.6 million deaths [1-5].

Risk factors

Various risk factors, such as a person's upbringing, lifestyle, and environment, have been shown to enhance the chance of certain non-communicable illnesses. They include age, gender, genetics, air pollution exposure, and habits such as smoking, poor nutrition, and physical inactivity, which can contribute to hypertension and obesity, increasing the risk of several NCDs. Because they are caused by changeable risk factors, most NCDs are considered avoidable.

The World Health Organization's World Health Report 2002 recognized five key risk factors for non-communicable illness in the top ten greatest health concerns. These include high blood pressure, high cholesterol, and smoking, drinking alcohol, and being overweight. Other factors linked to an increased risk of NCDs include a person's economic and social circumstances, commonly known as the social determinants of health.

It is estimated that if the primary risk factors were eliminated, 80 percent of cases of heart disease, stroke, and type 2 diabetes, as well as 40 percent of malignancies, might be avoided. Interventions aimed at decreasing the primary risk factors might have a considerable influence on lowering the global illness burden. Efforts focused on a healthier diet and greater physical activity has been demonstrated to reduce the prevalence of NCDs.

Environmental diseases

NCDs encompass a wide range of avoidable and unavoidable human health disorders induced by external variables such as sunshine, diet, pollution, and lifestyle choices. Affluent illnesses are non-infectious diseases with environmental origins. Here are several examples:

There are several forms of cardiovascular Diseases (CVD)

- Tobacco smoking causes chronic obstructive pulmonary disease (COPD).
- Type 2 diabetes mellitus.
- Inadequate exercise causes lower back discomfort.
- Malnutrition induced by a lack of food or by eating the incorrect foods (e.g. scurvy from lack of Vitamin C).
- The sun's radiation causes skin cancer.
- Obesity.

Inherited disease

Genetic disorders are caused by errors in genetic information, which result in illnesses in those who are affected. These genetic mistakes can be caused by:

Errors or mutations in the genome that occur on their own: A chromosomal number alteration, such as Down syndrome. Cystic fibrosis is caused by a gene deficiency induced by mutation. An increase in genetic information, as in Chimerism or Heterochromia.

Cystic fibrosis is an example of a hereditary disease induced by a gene mutation. The defective gene disrupts the normal transport of sodium chloride in and out of cells, resulting in excessively

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thick mucus production by the mucus-secreting organs. Because the gene is recessive, a person must have two copies of the defective gene in order to acquire the condition. The respiratory, digestive, and reproductive systems, as well as the sweat glands, are all affected by cystic fibrosis.

CONCLUSION

If current trends continue, by 2020, NCDs would be responsible for 7 out of every 10 fatalities in developing nations, killing 52 million people yearly by 2030. With figures like these, it's no wonder that international organizations like the World Health Organization and the World Bank Human Development Network have highlighted NCD prevention and management as a growing conversation topic on the global health agenda. Thus, if policymakers and communities organize "and make prevention and focused treatment of such diseases a priority," long-term measures may be put in place to slow (and eventually reverse) the spread of this developing global health hazard. Potential measures currently being discussed by the (World Health Organization)-Food and Agriculture Organization

include lowering salt levels in foods, limiting inappropriate marketing of unhealthy foods and non-alcoholic beverages to children, imposing controls on harmful alcohol use, raising tobacco taxes, and enacting legislating to curb smoking in public places.

REFERENCES

1. Nathan DM, Cleary PA, Backlund JC. Intensive diabetes treatment and cardiovascular disease in patients with type 1 diabetes. *NEJM*. 2005;353(25):2643-2653.
2. Cooper C, Dewe P. Well-being-absenteeism, presenteeism, costs and challenges. *Occup Med*. 2008;58(8):522-524.
3. Danaei G, Vander Hoorn S, Lopez AD, Murray CJ, Ezzati M, Comparative Risk Assessment collaborating group of nine behavioural and environmental risk factors. *The Lancet*. 2005;366(9499):1784-93.
4. Karakas M, Koenig W. CRP in cardiovascular disease. *Herz*. 2009;34(8):607-613.
5. Venuraju SM, Yerramasu A, Corder R, Lahiri A. "Osteoprotegerin as a predictor of coronary artery disease and cardiovascular mortality and morbidity". *J. Am. Coll. Cardiol.*2010;55 (19): 2049-2061.