

Environment Conditioning Human Health

Dr Meeta Rani¹

¹(Department of Physics, Mahila Vidyalyaya Degree College, University of Lucknow, India)

Abstract: Human health depends on various factors which decide the health trajectory of the individual. The various interactions of the human with the environment determine the health. Further the plasticity or adaptation potential of a human, internal culture and internal regulation are also key factors in determining human health.

Key Words: Human health, Physical environment, Economic environment, Biological environment, Cultural environment, Agricultural environment, Interaction

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I. Introduction

In this post Covid-19 era a person's health cannot exist absolutely healthy or unhealthy along a health continuum as health is not a set point, it is a bounded variable. The quality of health varies over time and space within the confinement of the hierarchical interaction of external and internal environmental influences which encourage or retard human development. The changing psychological and physiological fitness of the individual or of a group represents an ongoing adaptation to a diverse economic and natural environment. The ability of an individual to adapt can be strengthened by education whereas the ability of the community to cope can be enhanced by a culture promoting mutual cooperation. Further, human health is not the absence of disease and stress, it is human balance. Good health corresponds to dynamic stability, normal function and homeostasis control. Ill health corresponds to a state of instability, loss of function and failure of self-regulation.

II. External Environment Determinations

There is intense and continual interactions between the surrounding cultural environment, the economic environment, the physical environment and the biological environment. The sphere of human potential interacting within the range of environmental regulation and control .

The Physical Environment

The physical environment is strong and sometimes predominant force determining the productive potential of the land and the country, the success and failure of production, the economic and biological status of the people. The quality of the physical resources, the availability of raw materials, the nature and reliability of the climate, the access to market or the root area of the region, all enhance or limit development.

The Economic Environment

Economic factors and technological advancement are often emphasized as the key to all forms of development. The level of material development does not exist in a vacuum but is also the result of interactions between the cultural, physical and biological environment as a precursor of other parts of the total cycle of development. At any given point of time, technology may appear to be the driving force for economic development. But technological advancement is only the sum of total individual actions over long periods of time. However the only key of economic development would be the application of inanimate energy in the form of petrol, coal and hydropower, operating machinery in capital intensive factories, transforming low cost materials to produce high utility goods. Obviously, if the conflict and technological environment is highly developed, the resulting high level of material well- being will certainly influence lifestyles and ecosystems in both positive and negative ways.

The Biological Environment

The effect of health on development and the effect of environment on health is primary interest. Levels of health and disease vary between people and places over time. The study of regional variations in human health, the effect of environment on health and holistic causes of disease goes by many names. It is called medical geography, physical anthropology, medical sociology and epidemiology. These are all vast variations on the human ecology of health.

The Cultural Environment

The ternary cultural environment include socio- political elements such as government, degree of government pragmatism and morality on the other hand; balanced by the degree of bureaucratic rigidity and corruption on the other hand. These factors influence the potential for the material development and change the economic environment by facilitating or retarding both cultural and technical development. These cultural factors also affect the biological environment influencing the mental, the moral and the physical development of the individual within the state, city or country. Culture also influences the physical environment. State attitudes towards resource exploitation, control or expansion of industry and the provision of housing make clear geomorphological marks on the building landscape.

The Agricultural Environment

Food and crop preferences and degree of farm mechanization and cropping intensity are clearly visible in the physical environment. Social factors, including the caste system and varying work ethics are part of cultural baggage of different races and different regions, which strongly interact with other factors in regulation human development.

Environmental Interactions over time

The multiple interactions of the cultural, the economic, the physical and the biological environments determine an external sphere of human potential, setting both minimum and maximum so economic opportunities for an individual within this range of environmental regulation. However, the limits of opportunity are not set; they change over time. This change in environmental opportunity over time is internal development. During periods of cultural adjustment and stability, the range of environmental opportunity expands. This expansion of human potential is positive development. During periods of cultural misadjustment and instability, especially times of war, the outer limits of external environmental regulation and control contract limiting our opportunity. This reduction of human potential is the cause of under development.

Internal Cultural Determination

An individual is not only a product of heredity but also of upbringing, education and culture. In other words, nature and nurture interactions determine human potential. A truly healthy and nurturing education must not isolate an over- specialized student from the local living space, home and the community. The health of a community is not only determined by the economic and technological environment, but more importantly it is the outcome of the community's commitment to health, the community's knowledge of health needs and a moral commitment to altruistic, cooperative public health behavior. We individually and communal author our own health.

Individual Internal Regulation

Available evidence leaves no doubt that human beings possess the capacity for plasticity and versatility in action. Education can modify interaction between mind, body and environment. Developmental theories have overstated the importance of external change, understanding the importance of internal change in determining health and human potential. External developments in economics, agriculture and medicine will provide a supporting base for higher levels of individual human health and nutrition, but external forces do not fully determine the development of the individual.

Just as overemphasis on the external physical environment denies the greater importance of the cultural environment, genetic determinism negates education's primary goal of shaping behavior. While acknowledging environmental and genetic diffraction, many social scientists are also aware that we are what our culture and education make us.

III. Conclusion

The key to understanding these conflicting views lies in the inherent plasticity of man and the fact that none of us utilizes our full genetic endowment. There is confirmative evidence in humans which infers that large amounts of DNA do not get automatically transcribed and translated into RNA. Which specific genes are activated is determined by nurture and mind- body messages. It has been shown that the brain is fully developed only through learning after birth. The ability to process and analyze sensory inputs must be learned through experience by a well formed brain and intact sensory organs. During development certain neural pathways reactivated and thereby reinforce while others atrophy through disuse. The environment, diet, disease, places, priorities, practices, education and motivation serve as key casual factors in determining human health, potential and development in most fascinating human ecology.

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