

Title: ECOSYSTEM MODEL OF PUBLIC HEALTH

An ecosystem model to understand public health basically focuses on the health perspective of an individual and the community to which he or she belongs and the relationships between the two (McLaren & Hawe, 2005). This ecological approach of studying public health is not new. However due to the deteriorating public health issues, it has recently become a major focus of research which is aimed to promote and attain sustainability of public health (Brown et al. 2005). Now it is well-known that approximately half of the population of the world are living in the cities (United Nations Department of Economic and Social Affairs, 2010) and hence importance to health particularly to urban populations and their environment have gain tremendous importance in the recent past.

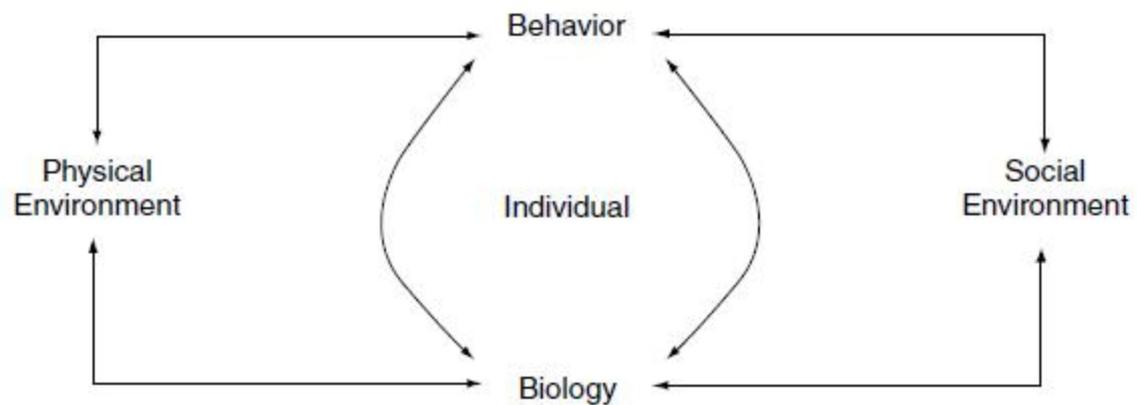


Figure 1. Ecological model of health (Schematic diagram)



Figure 2. Schematic diagram of ecological public health model (Bentley, 2013)

Literature survey revealed that there are various proposed models from the perspective of ecosystem. However, Lalonde Report of 1974 was instrumental in the genesis of the ecological approach in the study of public health not only in Canada but also worldwide. This report identified four key elements crucial to the approach. *Human Biology*: which is basically an individual's genetic make-up that determines their susceptibility to certain diseases; *Environment*: that includes all the external factors that majorly influence the health condition of the individuals; *Lifestyle*: refers to the habits of individuals like smoking, drinking alcohol, physical activities etc and lastly, *Health Care Organization*: basically refers to the quality of health care services available to the individuals and the whole communities (Lalonde, 1974). Human health modelling from the perspective of ecosystem has the major advantage in that human individuals become the focus of ecosystem management. This approach pointed out the significance that human individuals are influenced by various physical, social and economic elements that surround them. Another prospect of the ecosystem approach is that it illustrates the complexities of the interactions between various factors in the human ecosystem. This model of health has also the prospect to bring about balance between the individual level factors and also to the broader aspects of social and ecological factors. Ecological approach of human health is basically designed to overcome all the issues and problems caused in the past other approaches like social-ecological approach. Now ecological approach of health has been incorporated in the curricula of institutions worldwide.

However, convincing critics of this approach due to the past presence other perspectives from disciplines like sociology, geography, education, anthropology etc is one of the major difficulties in the success of ecological concept of health. Public health critics often questions and tries to study the underlying hypotheses, practices, and claims of the new public health by trying to understand them in an historical and socio-political perspectives (Lupton, 1998).

This model of health approach is bound to gain even more significance as climate change and environmental degradation has become major issues of our generation. The natural calamities and the newly emerging diseases is of paramount importance now. Hence this re-emerging new approach of health is going to be crucial to institutions and health professionals. Understanding of this approach by health professionals will help in the evolution of public health. This model reasserts and calls all the stake holders for stable management of ecosystems and other sustainable resources that directly impact the health of

the community and its individuals. In this model, now the human individual will no longer be the only component but one of the many components and attain sustainability which has now become a global responsibility.

References

1. McLaren L, Hawe P. Ecological perspectives in health research. *J Epidemiol Community Health*. 2005; 59:6–14. DOI: 10.1136/jech.2003.018044
2. Brown V, Ritchie J, Grootjans J, Rohan B. Living: public health and the future of life on the planet. In Brown, V., Grootjans, J., Ritchie, J., Townsend, M. and Verrinder, G. (eds), *Sustainability and Health: Supporting Global Ecological Integrity in Public Health*. Allen & Unwin, Sydney, 2005. pp. 1–37.
3. United Nations Department of Economic and Social Affairs. 2009 Revision of World Urbanization Prospects. United Nations, New York. 2010.
4. Lalonde M. A new perspective on the health of Canadians. Ministry of Supply and Services, Canadian Federal Government, Ottawa, ON, 1974.
5. Lupton D *The emotional self: A socio-cultural exploration*. Sage, London, 1998
6. Bentley M. An ecological public health approach to understanding the relationships between sustainable urban environments, public health and social equity *Health Promotion International*, 2013.