

MSP-E4.1

45 Hours

CONCEPTS AND MEASURES OF GLOBAL HEALTH

Learning Objectives: This paper introduces to the students the basic concepts of global health. This course emphasizes on understanding the global burden of disease and measuring population health. A key component of this course is to understand the determinants of health and health disparities. It will also provide student with a broad understanding of the relationship between environment and health. It also develops the understanding of the students about the health care delivery system, human resources for health, migration of human resources for health, etc. Finally, it introduces to students the issues related to policy and health. The topics that will be covered in the course are listed below:

- I. Concept and introduction:** Concept of global health; why is it important to study global health?; health and development in the global context; demographic, health and epidemiological transitions; major patterns of distribution of disease in the world; sources of data on disease and disability
- II. Global burden of disease:** Concept of burden of disease; hypotheses related to burden of diseases – compression of morbidity, expansion of morbidity and dynamic equilibrium; measures of burden of disease at the population level – health expectancy and health gap; methods for estimating DFLE, HALE and DALY; how does the burden of disease and mortality vary by geography, social class, race and gender? GBD 1990, 2010 and 2013 – changes and continuities; new and re-emerging infectious diseases; issues related to HIV/AIDS; introduction to NCDs; double burden of diseases in developing countries; impact of tobacco abuse; trends and challenges related to maternal and child health; maternal mortality
- III. Determinants of Health:** Culture, gender, age, race, social, political and economic determinants of health and health disparities; contribution of income, education and other factors to health; Factors responsible for variation in the global burden of disease across countries; poverty and health; income inequality and health; health risk factors

- IV. Environment and health:** Role of water, sanitation, indoor and outdoor air pollution and nutrition in explaining global health disparities; climate change and health; migration, disaster (man-made, natural), conflicts and epidemics
- V. Health care delivery systems:** Introduction to health systems; how to measure performance of health system?; health systems in different countries; factor responsible for better performance of health systems in developed countries; the distribution of human resources for health; quality of human resources for health; the push and pull factors associated with the migration of health care providers
- VI. Policy and health:** Human rights approach to health; national and international policies related to health; how are global health priorities set?; the role of international actors like WHO, World Bank, etc. in global health; influence of global health priorities on national priorities

Reading List

Essential readings :

1. Skolnik, R. (2008). Essentials of global health, Jones and Bartlett: Sudbury, MA.
2. Jacobsen, K.H. (2007). Introduction to global health, Jones and Bartlett: Sudbury, MA.
3. Markel, W.H., Fisher M., Smego R. (2007). Understanding global health, McGraw Hill: Columbus.
4. Merson, M.H., Black, R.E., Mills, A.J. (2001). International public health: diseases, programs, systems and policies, Gaithersburg, MD: Aspen Publishers.
5. Murray, C.J.L., Saloman, J.A., Mathers, C.D., Lopez, A.D. (2002). Summary measures of population health: concepts, ethics, measurement and applications, The World Health Organization: Geneva.
6. Murray, C.J.L., Saloman, J.A., Mathers, C. (2000). A critical examination of summary measures of population health, Bulletin of the World Health Organization 78(8): 981-994.
7. Cutler, D., Deaton, A., Lleras-Muney, A. (2006). The determinants of mortality, Journal of Economic Perspectives 20(3): 97-120.
8. Link, B.G., Phelan, J. (1995). Social conditions as fundamental cause of disease, Journal of Health and Social Behavior 35: 80-94.
9. Smith, J.P. (1999). Healthy bodies and thick wallets: the dual relation between health and economic status, Journal of Economic Perspectives 13(2): 145-166.
10. Shiffman, J. (2009). A social explanation for the rise and fall of global health issues, Bulletin of the World Health Organization 87(8): 608-613.

11. Gwatkin, D.R. (2000). Health inequalities and the health of the poor: what do we know? What can we do? *Bulletin of the World Health Organization* 78(1): 3-18.
12. Laxminarayanan, R. et al. (2006). Advancement of global health: key messages from the Disease Control Priorities Project, *Lancet* 367(9517): 1193-1208.
13. Murray, C.J.L., Frenk, J. (2000). A framework for assessing the performance of health systems, *Bulletin of the World Health Organization* 78(6): 717-731.
14. Mills, A., Rasheed, F., Tollman, S. (2006). Strengthening health systems, In *Disease Control Priorities in Developing Countries* (2nd Edition), pages 87-102, New York: Oxford University Press.
15. Hsiao, W.C. (2003). What is a health system? Why should we care? Harvard School of Public Health Working Paper.
16. Anand, S., Baernighausen, T. (2004). Human resources and health outcomes: a cross country econometric study, *Lancet* 364(9445): 1603-09.
17. Chen, L. et al. (2004). Human resources for health: overcoming the crisis, *Lancet* 364(9449): 1984-1990.
18. Pallikadavath, S., Singh, A., Ogollah, R., Dean, T., Stones, W. (2013). Human resource inequalities at the base of India's public health care system, *Health & Place* 23: 26-32.
19. Zurn, P., Dal Poz, M.R., Stilwell, B., Adams, O. (2004). Imbalance in the health workforce, *Human Resources for health* 2(13): 1-12.
20. Willis-Stattuck, M. et al. (2008). Motivation and retention of health workers in developing countries: a systematic review, *BMC Health Services Research* 8: 1-8.
21. Brown, T.M., Cueto, M., Fee, E. (2006). The World Health Organization and the transition from 'international' to 'global' public health, *American Journal of Public Health* 96(1): 62-72.
22. Ruger, J.P. (2005). The changing role of the World Bank in global health, *American Journal of Public Health* 95(1): 60-70.
23. Ravishankar, N. et al. (2009). Financing of global health: tracking development assistance for health from 1990-2007, *Lancet* 373(9681): 2113-2124.
24. London, L. (2008). What is a human-rights based approach to health and does it matter? *Health Human Rights* 10(1): 65-80.