

Course Name: Health Economics

Course Number: HS654

Credits: 4-0-0-4

Prerequisites: HS 202 Principles of Economics or teachers consent

Intended for: UG/PG

Semester: Even/odd

Course Preamble: The course aims at sharpen the ability of students to think critically about health issues and how to apply microeconomic tools and economic thinking to analyze health and medical care issues. Students will start with the demand for health and medical care services, economic explanations for the behaviour of medical care providers and the functioning of insurance markets. They will discuss the price of health care, pharmaceutical industry and technology innovation in health care sector. They will examine the role and economic justification for government involvement in the medical care system. Finally, they will use the tools learned to compare different healthcare systems in the world and review and analyze various proposals for health care reform in India.

Course Outline:

Module –I [4 Lectures]

Overview55

Readings:

- Arrow, (1963). Uncertainty and the Welfare Economics of Medical Care. *American Economic Review*, 53(5), 941-973.
- Fuchs, (1996). Economics, Values and Health Care Reform. *American Economic Review*, 86(1),1-24.
- Weisbrod, (1991). The Health Care Quadrilemma: An Essay on Technological Change, Insurance, Quality of Care and Cost Containment. *Journal of Economic Literature*, 29(2), 523-552.
- Mehrotra, A., Adams, D., &Harod, L. (2003). What’s Behind the Health Expenditure Trend? *Annual Review of Public Health*.

Module –II [10 Lectures]

Micro Economic Tools for Health economics

Readings:

- Gertler, P., Sebastian, M., Patrick, P., Laura, R., & Christel, V. (2011). Impact Evaluation in Practice. The World Bank, Washington DC.
- Martin, R. (2001). The Mystery of the Vanishing Benefits: An Introduction to Impact Evaluation. *The World Bank Economic Review*, 15(1), 115-140.
- Kakwani, N C., Wagstaff, A., & Doorslaer, E. V. (1997). Socioeconomic Inequalities in Health: Measurement, Computation and Statistical Inference. *Journal of Econometrics* 77(1), 87-104.
- Social Determinants of Health: How Social and Economic Factors Affect Health (2003). County of Los Angeles Public Health.
- Torrance, G. (1986). Measurement of Health Status Utilities for Economic Appraisal: A Review. *Journal of Health Economics*, 5(1), 1-30.
- Wagstaff, A. (2002). Inequalities in Health in Developing Countries- Swimming against the Tide? The World Bank, Policy Research Working Paper No. 2795.
- Garcia, P. & McCarthy, M. (2005). Measuring Health- A Step in the Development of City Health Profiles, World Health Organisation.
- Ontario Agency for Health Protection and Promotion (Public Health Ontario) (2013). Summary measures of socioeconomic inequalities in health. Toronto, ON: Queen's Printer for Ontario.
- Evers, S. (1993). Health for all indicators in health interview surveys. *Health Policy*, 23, 205-218.

Module –III [4 Lectures]

Demand for health

Readings:

- Wagstaff, A. (1986). The Demand for Health: Theory and Applications. *Journal of Epidemiology and Community Health*, 40(1), 1-11.
- Manning, et al. (1987). Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment. *American Economic Review*, 77(3), 251-277.
- Deaton, A. (2003) Health, Inequality and Economic Development. *Journal of Economic Literature*, 41(1), 113-158.
- Sarma, S. (2009). Demand for Outpatient Health Care: Empirical Findings from Rural India. [*Applied Health Economics and Health Policy*](#). 7(4), 265-77.

Module –IV [4 Lecture]

Technological Change and the price of health care

Readings:

- Newhouse, (1992). Medical Care Costs: How Much Welfare Loss? *Journal of Economic Perspectives*, 6(3), 3-21.
- Cutler & McClean, (2001). Is Technological Change in Medicine Worth It? *Health Affairs*, 20(5), 11-29.
- Mokyr, (1993). Technological Progress and the Decline of European Mortality. *American Economic Review* 83(2): 324-330.
- Cutler et. Al. (1996). Are Medical Prices Declining? Evidence from Heart attack Treatments. *Quarterly Journal of Economics*, 113, 991-1024.

Module – V [6 Lectures]

Health Insurance, moral hazard and adverse selection

Readings:

- Cutler & Zeckhauser, (1999). The Anatomy of Health Insurance. *NBER Working Paper No. 7176*
- Cochrane, (1995). Time-Consistent Health Insurance. *Journal of Political Economy*, 103(3), 445-473
- Pauly, M.V. (1974). Overinsurance and Public Provision of Insurance: The Roles of Moral Hazard and Adverse Selection. *The Quarterly Journal of Economics*, 88(1): 44-62.
- Cawley & Philipson, (1999). An Empirical Examination of Information Barriers to Trade in Insurance. *American Economic Review*, 89(4), 827-846.
- Bhattacharya, J., Goldman, D., & Sood, N. (2004). Price Regulation in Secondary Insurance Markets. *Journal of Risk and Insurance*, 71(4), 643-675.
- Ahuja, R. (2005). Health Insurance for the Poor in India: An Analytical Study. ICRIER, Working Paper No. 161.
- Ahuja, R., & Jutting J. (2003). Design of Incentives in Community Based Health Insurance Schemes. ICRIER Working Paper No. 95.

Module – VI [6 Lectures]

Health Policies and Reforms

Readings:

- Medicare Trustees, (2013). Annual Report of the Board of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Fund. Washington DC.

- Or, Z., Cases, C., Lisac, M., Vrangbaek, K., Winblad, U., & Bevan G. (2010). Are health problems systematic? Politics of access and choice under Beveridge and Bismarck systems. *Health Economics, Policy and Law*, 5(3), 269-93.
- Peters D., Yazbeck, A.S., Sharma R., Ramana G.N.V., Pritchett L., Wagstaff, A. (2002). Better Health Systems for India's Poor. Findings, Analysis and Options. Washington DC, World Bank.
- Cutler M. D. (1996). Public Policy for Healthcare. NBER Working Paper No. 5591.
- Watts J. J., & Segal, L. (2009). Market Failure, Policy Failure and other Distortions in Chronic Disease Markets. *BMC Health Services Research*, 9:102.
- GiZ (2012). Evaluation of Implementation Process of RashtriyaSwasthaBimaYojana in select districts of Bihar, Uttrakhand and Karnataka.
- Shariff, A. (1995). Health Transition in India. NCAER Working Paper No. 57.

Module – VII [16 Lectures]

Health and Development

I) Economic epidemiology

Readings:

- Philipson, (1996). Private Vaccination and Public Health: An Empirical Examination for U.S. Measles. *Journal of Human Resources*, 31(3), 611-630.
- Duraisamy, P. (1995). Morbidity, Utilisation of and Expenditure on Medical Services in Tamil nadu. Project Report, Studies on Human Development in India, CDS.
- Gumber, A. & Berman, P. (1995). Measurement and Pattern of Morbidity and Utilisation of Health Services: A Review of Health review Surveys in India. Gujarat Institute of Development Research, Working Paper No. 65.
- Krishnan, T.N. (1993). Access to Health and Burden of Treatment in India: An Inter State Comaprison. UNDP Research Project, CDS, Discussion paper No. 2.
- Sen, A.K. (1998). Mortality as an Indicator of Economic Success and Failure. *The Economic Journal*, 1-25.
- Duraisamy, P. (2001). Health Status and Curative Health care in India. NCAER, Working Paper No.78.
- Donnell, O', Q., Doorslaer, V., Ravi, P., Garg, C., &Somanathan, A. (2005). Explaining the the incidence of catastrophic expenditures on health care: Comparative Evidence from Asia. EQUITAP Project, Working Paper No. 5.
- Garg, C., & Karan, A. (2005). Health and Millennium Development Goal 1: Reducing Out-of-pocket Expenditure to reduce income poverty- Evidence from India. EQUITAP Project, Working Paper No. 15.
- Dror, M. D., Putten, O.V., &Koren, R. (2008). Cost of Illness: Evidence from a Study in Five Resource-Poor Locations in India. *Indian Journal of Medical Research*, 347-361.

- Mahal, A., Karan, A., & Engelgau, M. (2010). The Economic implications of Non-communicable Disease in India. Washington, DC: World Bank.
- Mondal, S., Kanjilal, B., Peters, H., David, & Lucas, H. (2010). Catastrophic Out-of-Pocket payment for Health care and its Impact on Households: Experience from West Bengal India. *Future Health Systems*.
- Kumar, R., & Sharma, S.K. (2013). Trends of Communicable and Non- Communicable Morbidities in Uttarakhand State: A Systematic Review. *Indian Journal of Community and Health*, 25(2), 178-187.

II) Health & Obesity

Readings:

- Lakdawalla, and Philipson, (2002). The Growth of Obesity and Technological Change: A Theoretical and Empirical Examination. NBER Working Paper No. 8946.
- Bhattacharya, J., & Bundorf, K. (2005). The Incidence of the Health Care Costs of Obesity. NBER Working Paper NO. 11303.
- Lakdawalla, Philipson & Bhattacharya (2005). Welfare-Enhancing Technological Change and the Growth of Obesity. *American Economic Review*, 95(2), 253-257.

III) Health & ageing

Readings:

- Fries, J. (1980). Aging, natural death and the compression of morbidity. *New England Journal of Medicine*, 303(3), 130-135.
- Emanuel, E.J. (1994). The economics of dying: the illusion of cost savings at the end of life. *New England Journal of Medicine*, 330(8).
- Alam, M. (2007). Ageing, Socio- Economic Disparities and Health Outcomes: Some Evidence from Rural India. Institute of Economic Growth, Working Paper No. E/290/2008.

Module –VIII (1 Lecture)

Cost Benefit analysis of Health care

Readings:

- Marthe, G., David, S., & Dennis F. (2002). HALYs and QALYs and DALYs, Oh My: Similarities and Differences in Summary Measures of Population and Health. *Annual Review of Public Health*. 23, 115-34.

Module – IX [6 Lectures]

Health infrastructure and financing

Readings:

- Selvaraju, V. (2001). Budgetary subsidies to the health sector among selected states in India. *Journal of Health management*, 3(2), 261-281.
- Selvaraju V., & Annigeri V. B. (2001). Trends in public spending on health in India. Commission on Macroeconomics and Health, ICRIER, 1-26.
- Selvaraju V. (2003). Health care expenditure in rural India. NCAER, Working Paper No. 90.
- Beaglehole, R., & Poz, D. (2003). Public Health Workforce: Challenges and Policy Issues. *Human Resources for Health*, 1-7.
- Joe, W., & Mishra, U.S. (2009). Household Out-of-Pocket Health Expenditure in India-Levels, Patterns and Policy Concerns. Centre for Development Studies, Working Paper No. 418.
- Anand, S., & Barnighausen, T. (2011). Health Workers at the Core of the Health System. *Health Policy*, doi:10.1016/j.healthpol.2011.10.012.
- Rao, M., Rao, K.D., Kumar, S.A.K., Chatterjee, M., & Sundaraman, T. (2011). Human Resources for Health in India. *Lancet*, 377, 587-598.
- Rao, G.M., & Choudhary, M. (2012). Health care Financing Reforms in India. National Institute of Public Finance and Policy, Working paper No. 2012-100.
- Hazarika, I. (2013). Health Workforce in India: Assessment of Availability, Production and Distribution. *WHO South-East Journal of Public Health*, 2(2), 106-112.
- Behera, M. R. (2014). Human Resources of Health in India. *International Journal of Health sciences and Research*, 4(11), 244-252.

Reference Books:

1. Jay Bhattacharya, Timothy Hyde & Peter TU (2014), Health Economics, Palgrave Macmillan.
2. Folland Goodman and Stano (2012), The Economics of Health and Health Care, Pearson Prentice Hall Press.
3. McDowell I, and Newell C. (1987) "Measuring Health: a guide to rating scales and questionnaires," Oxford University Press.
4. Glied S. and Smith P.S. (2011), the Oxford Handbook of Health Economics, Oxford University Press, Oxford.

Further Readings:

- Garber, & Skinner, (2008). Is American Health Care Uniquely Inefficient? *Journal of Economic Perspectives* 22(4), 27-50.
- Laura, R. (2005). A New Approach to Social assistance: Latin American's Experience with Conditional Cash Transfer Payments. *International Social Security Review* 58(2), 133-161.

- Kingsley, D. (1956). The Amazing Decline of mortality in Underdeveloped Areas. *American Economic Review*, 46(2), 305-318.
- Gaynor, H.W., & Vogt, W. (2000). Are Invisible Hands Good Hands? Moral Hazard, Competition and the Second-Best in Health Care Markets. *Journal of Political Economy* 108(5), 992-1005.
- Crocker, & Moran (2002). Contracting with Limited Commitment: Evidence from Employment – Based Health Insurance Contracts. Mimeo, University of Michigan Business School.
- Manning, W. G. (1987). Health Insurance and the Demand for Medical Care: Evidence from a Randomised Experiment. *American Economic Review*, 77(3), 251-277.
- Gumber A. (2002). Structure of Indian Health Care Market: Implications for Health Insurance Sector. *Regional Health Forum*, Vol.4.
- Bhattacharya, J. & Vogt, W. (2008). Employment and Adverse Selection in Health Insurance. NBER Working Paper No. 12430.
- David, C. (2010). How Health Care Reform Must Bend the Cost Curve. *Health Affairs*, 29(6), 1131-35.
- Douglas H.E., & Michael J. R. (2010). “Health Care Reform is Likely to Widen Federal Budgets Deficits, Not Reduce Them,” *Health affairs*, 29(6), 1136-41.
- Propper, C. (2010). The Disutility of Time Spent on the United Kingdom’s National Health Service Waiting Lists. *Journal of Human Resources*, 30(4), 677-700.
- Quarterly NRHM-MIS Report, 2013.
- NCMH (2005). Report of the National Commission on Macroeconomics and Health, New Delhi, Ministry of Health and Family Welfare, Government of India.
- Bhattacharya, J. & Sood, N. (2011). Who Pays for Obesity? *Journal of Economic Perspectives*, 25(1), 139-158.
- Philipson, & Posner, (1995). A Theoretical and Empirical Investigation of the Effects of Public Health Subsidies for STD Testing. *Quarterly Journal of Economics*, 110(2), 445-474.
- Dow et al. (1995). Disease Complementarities and the Evaluation of Public Health Interventions. NBER Working Paper No. 5216
- Goldman, Lakdawalla, & Sood (2004). HIV Breakthroughs and Risky Sexual Behaviour. NBER Working Paper No. 10516.
- Lakdawalla, D., Bhattacharya N., & Goldman, D.P. (2004). Are The Young Becoming More Disabled? *Health Affairs*, 23(1), 168-176.
- Goldman, D., Cutler D., Shang B, & Joyce G.F. (2006). The Value of Elderly Disease Prevention. *Forum of Health Economics & Policy*, 9(2).
- Bhattacharya, J., Shang B., Su C.K. & Goldman, D.P. (2005). Technological Advances in Cancer and Future Spending By the Elderly. *Health Affairs*, 24(2), 53-66.

- Garg, C., & Anup, A.K. (2009). Reducing Out-of-Pocket Expenditures to Reduce Poverty: A Disaggregate Analysis at Rural Urban and State Level in India. *Health Policy and Planning*, 24, 116-128.
- Mahal, A. et al. (2001). Who Benefits From Public Health Spending in India? NCAER, New Delhi.