



INTERNATIONAL HONORS PROGRAM

comparative study around the world

566 Columbus Avenue, Boston, MA 02118 phone: 617-375-8101 fax: 617-236-0162 info@ihp.edu www.ihp.edu

Health and Community Program 2 Public Health: From Biology to Policy IBPH- 3505 (4 credits) Spring 2009

Faculty:

Roberto De Vogli, PhD, MPH International Institute for Society and Health, Department of Epidemiology and Public Health, University College London. E-mail: r.devogli@ucl.ac.uk

COURSE DESCRIPTION

What is health? How do we measure it? What are the major determinants of health? How can we assess their relative importance in explaining why some societies are healthy and others not? How can we reduce health inequalities between and within countries? What is the role of public health movements in bringing about policy change and promote health and wellbeing at the national and global levels?

The course *Public Health: From Biology to Policy* brings all these questions together to investigate the relative contribution of different determinants of health to “produce” health-related outcomes such as life expectancy at birth and infant mortality.

In the first part of the course, students will analyze major conceptual frameworks for the determinants of health and the relative contribution of these determinants in influencing health and health inequalities. They will also examine the global health transition including recent trends of divergence in life expectancy at birth across different regions of the world. After having become familiar with the major theories of health determinants, participants will learn some basic epidemiological concepts and methods to evaluate evidence on the association between health determinants and health outcomes. Particular attention will be paid to health inequalities and international comparisons and health in critical periods of development such as childhood. In the second part, students will examine each of the major categories of health determinants. From bio-medical factors to health-related behaviours, from the physical and social environment to economic and political circumstances, students will learn how health determinants interact with one another in determining health differences across countries and populations. The last part of the course concentrates on applying scientific knowledge to advance policy reforms that promote health and reduce health inequalities nationally and worldwide. Throughout the course, students will be encouraged to use an evidence-based approach.

The course consists of lectures, site visits, discussions, readings and informal investigative work.

COURSE AIMS AND OBJECTIVES

By the end of the course, students will be able to:

- Describe major categories of determinants of population health (biology, behaviours, healthcare, the physical environment, the social environment, economic and political factors) and critically discuss some conceptual frameworks of health determinants;

HC S09 Program 2, Public Health: From Biology to Policy, Updated 2.13.09

- Understand the major interrelations between the different determinants of health at the micro, meso and macro levels, from biology to economic and political factors;
- Use basic epidemiological concepts and methodologies to analyse scientific evidence on the relative importance of major health determinants in determining population health;
- Analyse the major determinants of health inequalities between different countries and across different socioeconomic groups within countries;
- Describe how increased understanding and scientific evidence on the determinants of health can influence policies and improve population health and reduce health inequalities;
- Describe basic strategies of health promotion planning, community organizing and public health advocacy.

COURSE REQUIREMENTS

Forms of Assessment

Participation: students are expected to come prepared to actively engage with the topic at hand as well as classmates, faculty, and guest lecturers. If you miss a class due to illness you are responsible for catching up on all material before the next class. Participation grades are based on your willingness to voice your opinions, your ability to listen closely to others without interruption, and to treat each other with respect even when disagreeing strongly. Students are invited to talk to local people, key informants and members of the home-stay families about the topics discussed in class and encouraged to share what they have learned from these informal conversations/interviews with other participants.

Reading Presentations: Students are expected to critically discuss peer-reviewed articles describing major evidence on the effects of globalization on health. In order for this approach to work, we must all be committed to reading carefully and critically, to making a detailed synthesis of the observations and questions relevant to the subject, and to participate fully in class discussions.

During some of the lectures for this course, groups of 4 students will collaborate to lead a 15 minutes presentation of that week's readings. Each group will prepare for circulation a one-page reading guide consisting of:

- a summary of the article(s)/chapter(s) assigned (2-3 paragraphs) that shows careful reading;
- 2 critical comments (3-5 sentences each) on each author's argument or 2 country-specific examples that illustrate the argument;
- 2-3 thoughtful discussion questions that connect the author's argument to previous readings or an experience in the field or in another class.

At each presentation, the group will be responsible for presenting a joint summary and analysis of the readings and getting discussion started. We do not expect formal oral presentations, just a well-organized summary and analysis of the readings and some thoughtful questions to animate discussion.

Country Papers: In each country, students will be responsible for a 5-7 page interdisciplinary paper to synthesize readings, lectures, discussions, and experiences and deepen their thinking about a particular health-related issue within each country. This assignment will also be a chance for the students to integrate their learning across courses. At the beginning of the course, students are expected to pick a health-related problem (topic) for their country papers and explore different aspects of the same problem in each country. This does not mean simply rewriting old papers for the new context, but exploring a different dimension of this health-related problem in each country. The problem should be something the students are personally interested in thinking about more deeply during the semester. It can also be the subject of the final project at the end of the semester. The country papers will be compiled and published as a reference volume for future IHP students.

The papers will be assessed based on the following criteria:

- Thoughts are clearly presented through well-constructed arguments,
- Paper demonstrates good grammar and careful editing,
- Papers are well-organized with sections that logically follow each other and build the thesis,
- Effective transitions between major ideas and topics are clear, and;
- Lecture material, readings, and field visit learning are incorporated as appropriate and listed in the references.

Grading

Participation	20%
Reading Presentation	25%
Country Papers	45%
Final Project	10%

PROGRAM & READING SCHEDULE

Session 1: Health Determinants: Theories & Evidence (*Washington DC, United States*)

Lecture:

- Course Introduction and Theoretical Frameworks of Health Determinants
- Quantifying the Determinants of Health: A Global Perspective
- Evidence and Health Determinants: Historical Trends, International Comparisons and Inequalities

Required Readings:

- Evans RG, Stoddart GL. Producing Health, Consuming Health Care. In: Evans R, Barer M and Marmor T. Why Are Some People Healthy and Others Not? Social Science and Medicine 1990; 31: 1347-6.
- Lopez et al. Global and regional burden of disease and risk factors, 2001: systematic analysis of population health data. Lancet 2006;367:1747-57.

Additional Suggested Readings:

- WHO Commission on Social Determinants of Health. Closing the Gap in A Generation. Final Report of the WHO Commission on Social Determinants of Health, Geneva, 2008.
- Marmot M et al. Closing the Gap in a Generation: Health Equity Through Action on The Social Determinants of Health. Lancet 2008;372:1661-69.
- Evans RG, Stoddart GL. Consuming research, producing policy? American Journal of Public Health 93 (3): 371-379 Mar 2003.
- Adler N. Socioeconomic disparities in health: pathways and policies. Health Affairs 2002;21(2):60-76.
- Kawachi I, Subramanian SV, Almeida-Filho N. A glossary of health inequalities. J Epidemiol Community Health 2002;56:647-652.
- Documentary. Unnatural Causes: Is Inequality Making Us Sick? 2007.

Session 2: Measuring Health (*Washington DC, United States*)

Lecture:

- Definition of Epidemiology and Public Health
- Measuring Disease and Health Determinants
- Indicators of Population Health

Required Readings:

- Larson. Global Health Indicators: An Overview (including a Glossary of Global Health Indicators). Canadian Medical Association Journal, 2004;171(10).

Additional Suggested Readings:

- Etches V, Frank J, Di Ruggiero E, et al. Measuring Population Health: A review of Indicators. Annual Review of Public Health 27: 29-55 2006

- Beaglehole R. Basic Epidemiology. Geneva: World Health Organization 1993.
- Lasser KE, Himmelstein DU, Woolhandler S. Access to care, health status, and health disparities in the United States and Canada: Results of a cross-national population-based survey. *AJPH* 96 (7): 1300-1307 Jul 2006.

Session 3: Measuring Health Determinants (*Dar Es Salaam, Tanzania*)

Lecture:

- Assessing Evidence on Health Determinants
- Health Determinants Surveillance Systems
- Health Information Systems in Tanzania

Required Readings:

- Rommelman et al. Costs and Results of Information Systems for Health and Poverty Indicators in the United Republic of Tanzania. *Bull World Health Organization* 2005;85:

Additional Suggested Readings:

- Beaglehole R. Basic Epidemiology. Geneva: World Health Organization 1993.
- Walraven et al. Assessment of Maternal Mortality in Tanzania. *British Journal of Obstetrics and Gynaecology*. 1994;101(5):414-417.
- Krieger N. Painting a Truer Picture of US Socioeconomic and Racial/Ethnic Health Inequalities: The Public Health Disparities Geocoding Project. *American Journal of Public Health* 2005;95(2):312-323.

Session 4: Health Transition (*Dar Es Salaam, Tanzania*)

Lecture:

- Epidemiological, Economic and Demographic Transitions
- Absolute Material Deprivation, Psychosocial Disadvantage and Health
- Exporting Failures and Diseases of Development

Required Readings:

- Mc Michael A et al. Mortality Trends and Setbacks: Global Convergence or Divergence? *Lancet* 2004;363:1155-1159.
- Villamor E et al. Trends in Obesity, Underweight and Wasting Among Women Attending Prenatal Clinics in Urban Tanzania, 1995-2004. *Am J Clinical Nutrition* 2006;83:1387-94.

Additional Suggested Readings:

- Omran. The Epidemiological Transition. *Milbank Quarterly*, 2005.
- Walraven. Primary Reproductive Health Care in Tanzania. *European Journal of Obstetrics & Gynecology and Reproductive Biology* 1996;69:41-45.
- Richey LA. From The Policies to the Clinics: The Reproductive Health Paradox in Post-Adjustment Health Care. *World Development* 2004;32(6):923-940.
- Caldwell JC. Health transition: the Cultural, Social and Behavioural Determinants of Health in the Third World. *Social Science and Medicine*, 1993 Jan;36(2):125-35.
- Wilkinson RG, The epidemiological transition: from material scarcity to social disadvantage, from Daedalus, *Health and Wealth*, *Journal of the American Academy of Arts and Sciences*, Fall 1994.
- McKeown T, Brown RG. Medical evidence related to English population changes in the eighteenth century. *Population Studies*, 1955, 9: 119–141.
- Mc Michael A et al. Mortality Trends and Setbacks: Global Convergence or Divergence? *Lancet* 2004;363:1155-1159.
- Pappas G et al. The Increasing Disparities in Mortality Between Socioeconomic Groups in the United States, 1960 and 1986. *New England Journal of Medicine*, 1993; 329:1139.

- Ebrahim S and Davey-Smith G. Exporting Failures? Coronary Heart Disease and Stroke in Developing Countries. *Int J Epidemiology* 2001;30:201-205.

Session 5: The Life-Course Approach to Health (*Ifacara, Tanzania*)

Lecture:

- Poverty, Malnutrition and Early Life Circumstances
- Critical Developmental Periods and Long-Term Effects on Health
- Ageing and Health

Required Readings:

- Kuh D. et al. Life Course Epidemiology. *Journal of Epidemiology and Community Health*, 2003;57:778-783.
- Schellenger J et al. Inequities Among the Very Poor: Health Care for Children in Rural Southern Tanzania. *Lancet* 2003;361:561-66.

Additional Suggested Readings:

- Lopez et al. Global and regional burden of disease and risk factors, 2001: systematic analysis of population health data. *Lancet* 2006;367:1747-57.
- Black RE, Morris SS, Bryce J. Where and why are 10 million children dying every year? *Lancet*. 2003 Jun 28;361(9376):2226-34.
- Lindskog P. et al. How to Cut World Hunger in Half. *Science* 2005;310:1768.
- Halfon N, Hochstein M. Life course health development: An integrated framework for developing health, policy, and research. *Milbank Quarterly* 80 (3): 433+ 200

Session 6: Biological Determinants of Health (*Ifacara, Tanzania*)

Lecture:

- Biology and Health
- HIV/AIDS, TB and Malaria
- Socioeconomic Stress and Its Biological Translation

Required Readings:

- Walraven G. Perinatal Mortality in Home Births in Rural Tanzania. *European Journal of Obstetrics & Gynecology and Reproductive Biology* 1995;58:131-134.

Additional Suggested Readings:

- Bortz WM. Biological Basis of Determinants of Health. *Am J Public Health*. Mar 2005;95(3):389-392.
- Cooper RS. Gene-environment interactions and the etiology of common complex disease. *Ann Intern Med*. Sep 2 2003;139(5 Pt2):437-440
- Brunner E. Socioeconomic Determinants of Health: Stress and the Biology of Inequality. *BMJ* 1997;314:1472.

Session 7: Environmental Determinants of Health (*Dar Es Salaam, Tanzania*)

Lecture:

- Water, Sanitation, Malaria and Diarrhoeal Diseases
- Housing, Neighbourhood and Health
- Environmental Factors, Climate Change and Health

Required Readings:

- Tumwine J et al. Diarrhoea and Effects of Different Water Sources, Sanitation and Hygiene Behaviour in East Africa. *Tropical Medicine and International Health*. 2002;7(9):750-756.
- McMichael AJ, Woodruff RE, Hales S Climate change and human health: present and future risks. *Lancet* 2006;367 (9513): 859-869.

Additional Suggested Readings:

- Dasgupta S. Where Is the Poverty-Environment Nexus? Evidence from Cambodia, Lao DPR and Vietnam. *World Development* 2005;33:617-638.
- Bosma H et al. Neighborhood Socioeconomic Status and All-Cause Mortality. *American Journal of Epidemiology* 2001;153:363-371.
- Mitchell R and Popham F. Effect of Exposure to Natural Environment on Health Inequalities: An Observational Population Study, *Lancet* 2008;372:1655-60.
- Dunn JR, Hayes MV. Social Inequality, Population Health, and Housing: a study of two Vancouver neighbourhoods. *Social Science and Medicine* 2000 51 (4): 563-587.
- Avasthi A. Climate's Point of No Return. *Science*, 2005, March 17.
- Intergovernmental Panel on Climate Change (IPCC). *Climate Change 2007: The Physical Science Basis. Summary for Policymakers, IPCC, Paris, February, 2007.*
- Pearce F. *The Last Generation*. Transworld Publishers, 2007.
- Monbiot G. *Heat*. Penguin, 2006.
- Documentary: *Who Killed the Electric Car*, 2006.
- Documentary: *Thirst*, 2004.
- Documentary: *Global Warming, What You Need To Know* (Discovery Channel), 2006.

Session 8: Medical Determinants of Health (*Hanoi, North Vietnam*)

Lecture:

- Measuring Health Systems Performance
- Access to Health Services and Quality of Care
- User Fees for Health Services

Required Readings:

- Tuan T et al. Comparative Quality of Private and Public Health Services in Rural Vietnam. *Health Policy and Planning* 2005;20(5):319-327.

Additional Suggested Readings:

- Huong D et al. Rural Health Care in Vietnam and China: Conflict Between Market Reforms and Social Need. *International Journal of Health Services* 2007;37(3).
- Sepehri A et al. Penalizing Patients and Rewarding Providers: User Charges and Health Care Utilization in Vietnam. *Health Policy Planning* 2005;20:90-99.
- Glynn RJ, Buring JE, Manson JE, Lamotte F, Hennekens CH. Adherence to aspirin in the prevention of myocardial infarction. *Archives of Internal Medicine* 1994;154:2649-2657
- Pincus T et al. Social conditions and self-management are more powerful determinants of health than access to care, *Ann Intern Med* 1998;129:406-411.
- Documentary: *Sicko*, 2008.

Session 9: Behavioural Determinants of Health (*Hanoi, North Vietnam*)

Lecture:

- Health Behaviours and Health
- Health-Seeking Behaviours and Utilization of Healthcare Services
- Societal and Social Determinants of Health Behaviours

Required Readings:

- Johansson E. Gender and Tuberculosis Control. Perspectives on Health-Seeking Behaviour Among Men and Women in Vietnam. *Health Policy* 2000;52:33-51.

Additional Suggested Readings:

- Ali H, Mokdad, James S, Marks, Donna F, Stroup, Julie L, Gerberding. Actual Causes of Death in the US, 2000. *JAMA*. 2004;291:1238-1245.
- Lynch, JW, et al. Why do poor people behave poorly? Variation in adult health. Behaviours and psychosocial characteristics by stages of the socioeconomic life course, *Soc Sci Med* 1997;44:809-819.

- Lantz M et al. Socioeconomic Factors, Health Behaviours, and Mortality: Results From a Nationally Representative Study of US Adults. JAMA, June 3, 1998;279(21):1703-8.

Session 10: Social Determinants of Health (*North Mountains of Vietnam*)

Lecture:

- Social Cohesion, Crime Rates and Health
- Social Relationships, Psychosocial Factors and Health
- Happiness and Health

Required Readings:

- Carpenter J et al. Social Capital and Trust in South-East Asian Cities. Urban Stud 2004;41:853.

Additional Suggested Readings:

- Eng PM, Rimm EB, Fitzmaurice G, et al. Social ties and change in social ties in relation to subsequent total and cause-specific mortality 5 and coronary heart disease incidence in men. AMERICAN JOURNAL OF EPIDEMIOLOGY 155 (8): 700-709 APR 15 2002.
- Hemingway H Marmot M. Evidence-based cardiology: Psychosocial factors in the aetiology and prognosis of coronary heart disease: systematic review of prospective cohort studies. BMJ 1999;318;1460-1467.
- House JS, Landis KR, Umberson D: Social relations and health. Science 1988, 241:540-545.
- James WPT. The Fundamental Drivers of the Obesity Epidemic. Obesity Reviews 2008;9:6-13.
- Petrova M. Inequality and media capture. J Public Economics 2008 92;(1-2):183-212.
- Uslaner E and Brown M. Inequality, trust and civic engagement. American Politics Research 2005;33:868.
- Documentary: Bowling for Columbine, 2002.

Session 11: Economic and Political Determinants of Health (*Hanoi, Vietnam*)

Lecture:

- Economic Development, Income Inequality and Health
- Socioeconomic Status and Health
- Policies, Laws, Regulations and Health

Required Readings:

- Gorbach P et al. The Impact of Social, Economic and Political Factors on Emerging HIV Epidemics (Russia, China and Vietnam). AIDS 2002;16(4):S35-S43.

Additional Suggested Readings:

- Growth, Inequality and the Future of Poverty Reduction in Vietnam. Journal of Asian Economics 2002;13:635-657.
- Navarro V. et al. Politics and Health Outcomes Lancet 2006;368:1033-1037.
- Lundberg O. et al. The Role of Welfare State Principles and Generosity in Social Policy Programmes for Public Health: an International Comparative Study. Lancet 2008;372:1633-40.
- Adler N. Socioeconomic disparities in health: pathways and policies. Health Affairs 2002;21(2):60-76.
- Rodgers GB. Income and inequality as determinants of mortality: an international cross-section analysis. International Journal of Epidemiology 2002;31:533-538.
- Wilkinson RG, Pickett KE. Income inequality and population health: a review and explanation of the evidence. Soc Sci Med 2005 Oct 11.
- Kawachi et al. Income inequality and health: pathways and mechanisms. Health Services Research 1999;34:215-227.
- Dorling D et al. The Global Impact of Income Inequality by Age: An Observational Study. BMJ 2007;335:873.
- Documentary: Big Bucks and Big Pharma: Marketing Diseases and Pushing Drugs.

Session 12: Community Organizing for Health (*Mekong Delta, Vietnam*)

Lecture:

- Community Organizing for Health Promotion
- Participatory Approaches in Public Health Research
- Health Impact Assessment

Required Readings

- Davidson-Harden A et al. The Geopolitics of the Global Justice Movement. *Peace Conflict & Development* 2007, Issue 11.

Additional Suggested Readings:

- Minkler M. *Community Organizing and Community Building for Health*. Rutgers University Press, 1997.
- *The Struggle for Accountability: The World Bank, NGOs and Grassroots Movements*. MIT Press, 1998.
- Fielding JE, Briss PA. Promoting evidence-based public health policy: Can we have better evidence and more action? *Health Affairs* 25 (4): 969-978 Jul-Aug 2006.
- Northern and Yorkshire Public Health Observatory. *An Overview of Health Impact Assessment*. Occasional Paper #1. May 2001.

Session 13: Health Promotion Planning & Evaluation (*Ho Chi Minh, Vietnam*)

Lecture:

- Needs Assessment
- The PRECEDE-PROCEDE Model for Health Promotion
- Monitoring and Evaluation in Health Promotion

Required Readings:

- Giang L et al. Evaluation of STD/HIV Prevention Needs of Low- and Middle-Income Female Sex Workers in Hi Chi Minh City, Vietnam. *AIDS and Behaviour*, 2000;4(1):83-91.

Additional Suggested Readings:

- Green and Kreuter. *Health Promotion Planning: An Educational and Ecological Approach*. Mc Graw Hill, 1999.
- Hung L. Control of Malaria: A Successful Experience from Vietnam. *Bulletin of the World Health Organization* 2002;80:660-666.
- Rossi PH et al. *Evaluation: A Systematic Approach*. Sage Publications, 2003.

Session 14: Public Health Advocacy (*Ho Chi Minh, Vietnam*)

Lecture:

- Advocacy and Media Advocacy for Health
- Coalition Building and Public Health Campaigns
- Successful stories of Public Health Advocacy

Required Readings:

- People's Health Movement. *Global Health Watch 2008: An Alternative Health Report (Overview)*. Goba Equity Gauge Alliance, People's Health Movement and Medact, 2008.
- Erikson S. Getting Political: Fighting for Global Health. *Lancet*, 2008;371(9620):1229-1230.

Additional Suggested Readings:

- Labonte R. The Global Health Watch Report 2. *BMJ* 2008;337:a2144.
- Wiist W. Public Health and the Anticorporate Movement: Rationale and Recommendations. *A J Public Health*. 2006;96:1370-1375.
- Wallack L et al. *Media Advocacy and Public Health: Power for Prevention*. Sage Publications, 199

SEMESTER AT A GLANCE:

Session	Week	Topic	Readings	Country
1	1	Health Determinants: Theories & Evidence	Evans & Lopez	US
2	2	Measuring Health	Larson (& glossary)	US
3	3	Measuring Health Determinants	Rommelman	Tanzania
4	4	Health Transition	Mc Michael & Villamor	Tanzania
5	5	The Life-Course Approach to Health	Kuh & Schellenberg	Tanzania
6	6	Biological Determinants of Health	Walraven G	Tanzania
7	7	Environmental Determinants of Health	Tumwine & McMichael	Tanzania
8	9	Medical Determinants of Health	Tuan	Vietnam
9	10	Behavioural Determinants of Health	Johansson	Vietnam
10	11	Social Determinants of Health	Carpenter	Vietnam
11	12	Economic and Political Determinants of Health	Gorbach	Vietnam
12	13	Community Organizing for Health	Davidson	Vietnam
13	14	Health Promotion Planning & Evaluation	Giang	Vietnam
14	15	Public Health Advocacy	PHM & Erickson	Vietnam