

Syllabus - Critical Issues in Global Health
PUBH 711 – FALL 2014

Instructor:

Rohit Ramaswamy, Ph.D, MPH, Graduate Diploma (Biostatistics)
Clinical Associate Professor
Public Health Leadership Program
515-988-5124
ramaswam@email.unc.edu

Learning Objectives:

- To explore contemporary issues, problems, and controversies in global health through an interdisciplinary perspective
- To understand the roles and agendas of major players in global health
- To understand key global health problems, their distribution, and prevention strategies
- To examine social, economic, political, and environmental factors that affect public health outcomes
- To understand the complexities inherent in implementing health programs on a global scale

American School of Public Health Global Health Competencies

This course builds competencies in the following three domains identified by ASPH as abilities required by Master's level students in Global Health Programs:

- *Domain 4: Health Equity and Social Justice*, defined as the framework for the analysis of strategies to address health disparities across socially, demographically, or geographically defined populations.
- *Domain 6: Socio Cultural and Political Awareness*, defined as the conceptual basis with which to work effectively within diverse cultural settings and across local, regional, national, and international political landscapes.
- *Domain 7: Strategic Analysis*, defined as the ability to use systems thinking to analyze a diverse range of complex and interrelated factors shaping health trends to formulate programs at the local, national, and international levels.

Course Structure:

The course is organized into nine content modules, each spanning one - two weeks.

Readings: NO TEXT BOOK PURCHASE IS NEEDED FOR THIS COURSE

Unless otherwise indicated, all course readings and materials will be available on the course Sakai site (<https://sakai.unc.edu/portal>). You need a valid UNC Onyen and password in order to log in to this site.

Evaluation: Combination of individual work, group discussion and final exam

Grading: Students will be graded on the H, P, L scale.
Breakdown of grade scale is posted on Sakai under "Course Information"

Readings

Note: Some of these readings may be replaced by more recent or relevant readings during the course of the semester.

Module 1: August 19 – August 24

Introduction to Global Health

INDIVIDUAL ASSIGNMENT 1 DUE: AUGUST 25

KEY TOPICS:

- Comparing definitions of global health
- Global burden of disease
- Social determinants of health
- Key players in global health

VIDEO LECTURE:

Global Health 101: The Kaiser Family Foundation

REQUIRED READINGS:

1. Fried, L.P., Bentley M.E., Buekens P., Burke D.S., Frenk J.J., KlagM.J,et al. (2010). Global health is public health. *Lancet* 375, 535-537.
2. Koplan J.P., Bond T.C., Merson M.H., Reddy K.S, Rodriguez M.H., Sewankambo N.K. et al. (2009). Towards a common definition of global health. *Lancet* 373, 1993-1995.
3. Beaglehole R, Bonita R.(2010). What is global health? *Global Health Action* 3, 5142.

MODULE 2: August 25 – September 1

Global Burden of Disease

INDIVIDUAL ASSIGNMENT 2 DUE: SEPTEMBER 1

KEY TOPICS:

- Global burden of disease project overview
- Global burden of disease tools
- Global transitions in health from 1990-2010
- Global disparities in health

VIDEO LECTURES:

1. The Global Burden of Disease Study: What does it mean for NIH and Global Health Research?
2. Video on DALY definition
3. Video of Chris Murray on the use of the GBD tools

REQUIRED READINGS:

1. Murray CJ, Vos T, Lozano R, Naghavi M, Flaxman AD, Michaud C et al. (2013). "Disability-adjusted life years (DALYs) for 291 diseases and injuries in 21 regions, 1990-2010: a systematic analysis for the Global Burden of Disease Study 2010". *Lancet* **380** (9859): 2197–223.

2. Watts C, Cairncross S (2013). "Should the GBD risk factor rankings be used to guide policy?". *Lancet* **380** (9859): 2060–1

3. Johan P. Mackenbach JP, Stirbu I, Roskam R A-J, Schaap MM, Menvielle G, Leinsalu M, Kunst AE (2008), Socioeconomic Inequalities in Health in 22 European Countries, *N Engl J Med*; **358**:2468-81.

MODULE 3: September 2 – September 8

Global Health Players, Policy and Funding

INDIVIDUAL ASSIGNMENT 3 DUE SEPTEMBER 8

KEY TOPICS:

- Key entities active in the global health landscape
- US global health policy
- Global health funding mechanisms
- Setting global health priorities

VIDEO LECTURES:

1. Video of Laurie Garrett's lecture, Columbia University, September 2011.
2. Video of Global Health Diplomacy in the Second Obama Administration 2013

REQUIRED READINGS:

1. Michaud, J., Kates J. (2013). Global health diplomacy: advancing foreign policy and global health interests. *Global Health: Science and Practice*. 1(1): 24-31.
2. Morrison, S. (2013). U.S. Health Engagement in Africa. A Decade of Remarkable Achievement. Now What? Center for Strategic and International Studies Paper.
3. McCoy D. Chand, S., Sridhar D. (2009). Global Health Funding: How Much, Where it Comes from and Where it Goes. *Health Policy and Planning*. 24(6): 407-417.
4. Frenk J. and Moon S (2013). Governance Challenge in Global Health. *New England Journal of Medicine*. 368. 936-942.

Module 4: September 9 – September 21

Delivering Health: The Role of Health Systems

GROUP ASSIGNMENT 1 DUE SEPTEMBER 25

KEY TOPICS:

- Overview of health systems
- Components of a health system
- Financing models of health care
- Service delivery models
- Human resources for health
- Health information systems
- Health system reform

VIDEO LECTURE:

1. Health Systems in Action: The Tipping Point of Global Health? (2011). A lecture by Jonathan D. Quick, MD, MPH, CEO of Management Sciences for Health at George Washington University.
2. YouTube video: Training health workers in the Ivory Coast

3. YouTube video: Registering community members for National Health Insurance in Ghana
4. YouTube video: Efficient service delivery at Aravind Eye Clinics in India

REQUIRED READINGS:

- 1, World Health Organization (2000). Why Health Systems Matter. Extract from *World Health Report 2000*
2. World Health Organization (2010). Key components of a well-functioning health system.
3. Kruk, Margaret E., Freedman, Lynn P., (2008) Assessing health system performance in developing countries: A review of the literature. *Health Policy* 85, 263-276.
5. World Bank (2006). Collecting Revenue, Pooling Risk and Purchasing Services. Extract from *Health Financing Revisited*.
6. World Health Organization (2007). Service Delivery. Extract from *Everybody's Business. Strengthening Health Systems to Improve Health Outcomes*.
7. World Health Organization (2008). Integrated Health Services: What and Why ? Technical Brief.
8. World Health Organization (2006). Human Resources for Health. Extract from *Working Together for Health*.
9. World Health Organization (2007). Components and Standards of a Health Information System. Extract from *Framework and Standards for Country Health Information Systems*.
10. Nyamtema AS (2010). Bridging the gap in the Health Management Information System in the context of a changing health sector. *BMC Medical Informatics and Decision Making*. 10:36

MODULE 5: September 22 - October 5 Changing Economies, Changing Behaviors – The Paradox of Nutrition

INDIVIDUAL ASSIGNMENT 4 DUE OCTOBER 5

KEY TOPICS:

- Food security and under nutrition
- Maternal and child under nutrition: global patterns and trends
- Micronutrient deficiencies
- Short term impacts of under nutrition
- Long term impacts of under nutrition
- Nutrition transition
- Over nutrition: global patterns and trends
- Interventions to address under nutrition
- Interventions to address poor dietary habits and chronic diseases
- National and global policies: what works and what still needs to be done

VIDEO LECTURES:

1. Lancet Maternal and Child Nutrition Series – View Videos of *Paper 1 Presentation, Paper 2 Presentation and Call to Action Presentation*. **Total Playing Time: 1 hr 16 mins**
2. Dynamics of US and Global Nutrition: The World Is Fat (2011). Video Lecture by Dr. Barry Popkin of UNC at University of Michigan School of Kinesiology. **Playing Time: 1hr 12 mins**

3. Plumpy'nut: the miracle food that is saving lives (2010). Video clip from *The Guardian*. **Playing Time: 3 mins 15 secs**
4. Small Towns Struggle with Food Deserts (2010). Video clip from *PBS News Hour*. **Playing Time: 6 mins 25 secs**

REQUIRED READINGS:

1. Black RE, Victora CJ, Walker SP et al. (2013). Maternal and child undernutrition and overweight in low-income and middle-income countries. *The Lancet*, 382(9890), 427-451.
2. Bhutta ZA, Das JK, Rizvi, A et al. (2013). Evidence-based interventions for improvement of maternal and child nutrition: what can be done and at what cost? *The Lancet*, 382(9890), 452-477.
3. Swinburn BA, Sacks G, Hall KD et al. (2011). The global obesity pandemic: shaped by global drivers and local environments.? *The Lancet*, 378(9793), 804-814.
4. Gortmaker SL, Swinburn BA, Levy D et al. (2011). Changing the future of obesity: science, policy, and action. *The Lancet*, 378(9793), 838-847.

MODULE 6: October 6 - 26 The Need for Complex Interventions: Preventing and Treating HIV

GROUP ASSIGNMENT 2 DUE OCTOBER 26

Note: This module includes the fall break

KEY TOPICS:

- Complexity of HIV treatment interventions
- Current advances in biomedical interventions for HIV
- Biomedical interventions overview
- Behavioral interventions overview
- Structural interventions overview

VIDEO LECTURES

1. International AIDS, prevention strategies (2012). Lecture by Dr. Myron Cohen, Director, Institute of Global Health and Infectious Diseases, UNC School of Medicine, Chapel Hill. **Playing Time : 1 hr, 2 mins.**
2. AIDS 2012: Prevention Today : What's The Right Mix ? Video of panel discussion at the 2011 AIDS conference. **Playing Time: 1 hr, 23 mins.**

REQUIRED READINGS:

1. Piot, P, Bartos M, Larson, H. Coming to terms with complexity: a call to action for HIV prevention (2008). *The Lancet*, 372(9641), 845-859.
2. Padian NS, Buvé A, Balkus J et al. (2008) Biomedical interventions to prevent HIV infection: evidence, challenges, and way forward. *The Lancet*, 372(9638), 585-599.
3. Cohen MS, Holmes C, Padian N, Wolf M, Himschall G, Lo Y-R and Goosby E(2012). HIV Treatment As Prevention: How Scientific Discovery Occurred And Translated Rapidly Into Policy For The Global Response. *Health Affairs* 31(7): 1439-1449.

4. Coates TJ, Richter L and Caceres C. (2008). Behavioural strategies to reduce HIV transmission: how to make them work better. *The Lancet*, 372(9638), 669-684.
5. Gupta GR, Parkhurst JO, Ogden JA et al. (2008) Structural approaches to HIV prevention. Structural approaches to HIV prevention. *The Lancet*, 372(9640), 764-775.
6. Roberts ET and Matthews DD (2012). HIV and chemoprophylaxis, the importance of considering social structures alongside biomedical and behavioral intervention. *Social Science and Medicine* 75:1555-1561.
7. Chang LW, Serwadda D, Quinn TC, Wawer MJ, Gray RH and Reynolds SJ (2013). Combination implementation for HIV prevention: moving from clinical trial evidence to population-level effects. *Lancet Infectious Disease* 13: 65-76.

MODULE 7: October 27 - November 9 Engineering, Economics and Health: Water and Sanitation

INDIVIDUAL ASSIGNMENT 5 DUE NOVEMBER 9

KEY TOPICS:

1. Water and sanitation MDG goals and current progress
2. Effect of water and sanitation on global disease
3. Point of use water filtration interventions: effectiveness and scalability
4. Willingness to pay for water
5. Sanitation behavior modification
6. Water demand management
7. The economics of sanitation:

VIDEO LECTURES

1. Narrated power point lecture by John Borazzo, Chief of Maternal and Child Health, USAID. (2008)
Playing Time: 84 min 38 sec.
2. Atlantic Green Intelligence Forum 2010 - Panel Discussion - **Playing Time: 45 min 26 sec.**

REQUIRED READINGS:

1. Prüss-Üstün A, Kay D, Fewtrell L and Bartram J (2008). Unsafe Water, Sanitation and Hygiene. Chapter from *Comparative Quantification of Health Risks*, WHO publication.
2. UNICEF and World Health Organization (2013). Progress on Drinking Water and Sanitation. Extract from *Annual Monitoring Program Report*.
3. World Health Organization (2002). Water. Extract from *Healthy Villages: A Guide for Community and Community Health*.
4. UNICEF (2008). Promotion of Household Water Treatment and Safe Storage in UNICEF WaSH Programs.
5. IRC International Water and Sanitation Center (2007). Extract from *Sanitation for All*.
6. Schmidt W-P, Aunger R, Coombes Y, Maina PM, Matiko N, Biran A and Curtis V (2009). Determinants of handwashing practices in Kenya: the role of media exposure, poverty and infrastructure. *Tropical Medicine and International Health*. 14(12):1534-1541.

7. Bartram J, Charles K, Evans B, O'Hanlon L and Pedley S. (2012). Commentary on community-led total sanitation and human rights: should the right to community-wide health be won at the cost of individual rights? *Journal of Water and Health*. 10.4

MODULE 8: November 10- November 30 Health as a Human Right: Sexual and Reproductive Health

GROUP ASSIGNMENT 3 DUE NOVEMBER 30

KEY TOPICS:

- Family planning
- Safe motherhood
- Elimination of unsafe abortion
- Prevention and treatment of STIs, cervical cancer and other gynecological morbidities
- Promotion of healthy sexuality (sexual health, sexuality and sexual rights)
- Targets and indicators of MDG 5 and barriers to achieving targets
- Link between MDG 5 and other Millennium Development Goals
- Disparity in access to sexual and reproductive health
- Policies and social forces that prevent effective attainment of reproductive health

VIDEO LECTURES:

1. Tavrow, P (2012). Adolescent Reproductive Health in Sub-Saharan Africa. Video from Webinar at the UCLA School of Public Health. **Playing time: 56min 22sec.**
2. International Planned Parenthood Federation (2010). Declaration of Sexual Rights. **Playing Time: 20 min 11 sec.**
3. University of Montreal (2011). Maternal mortality in the Philippines. **Playing Time: 28 min 41 sec.**

REQUIRED READINGS:

1. Ronsmans C, Graham WJ (2006) Maternal mortality: who, when, where, and why. *The Lancet*, 368(9542),1189-1200.
2. Cleland, J, Conde-Agudelo A, Peterson H et al.(2012).Contraception and health. *The Lancet*, 380(9837),149-156.
3. Sedgh G, Singh S, Shah IH, Åhman E, Henshaw SK, Bankole A (2012). Induced abortion: incidence and trends worldwide from 1995 to 2008. *The Lancet* 379: 625–32
4. Hindin MJ, Christiansen CS, Ferguson BJ. (2013). Setting research priorities for adolescent sexual and reproductive health in low- and middle-income countries. *Bulletin of the World Health Organization* 91:10-18
5. Souza JP et al. (2013). Moving beyond essential interventions for reduction of maternal mortality (the WHO Multicountry Survey on Maternal and Newborn Health): a cross-sectional study. *The Lancet* 381: 1747-1755
6. Palitto CC et al. (2012) Intimate partner violence, abortion, and unintended pregnancy: results from the WHO Multi-country Study on Women's Health and Domestic Violence. *International Journal of Obstetrics and Gynecology*. 120(1): 3-9
7. Austveg B (2011). Perpetuating power: some reasons why reproductive health has stalled. *Reproductive Health Matters* 19(38): 26-34.

INDIVIDUAL ASSIGNMENT 6 DUE DECEMBER 7

KEY TOPICS

- Drivers of successful implementation
- Improving the quality of global health programs
- Approaches to scaling up global health programs

VIDEO LECTURE:

1. Fixsen, DL (2013), Senior Scientist, National Implementation Research Network. Barriers to Successful Dissemination and Implementation of Evidence-based Programs and Opportunities to Overcome Them. Video presentation at the Institute of Medicine workshop on *Evidence for Violence Prevention Across the Lifespan and Around the World*.

REQUIRED READINGS:

1. Bhattacharya O, Reeves S, Zwarensten M (2009). What is Implementation Science? Rationale, Concepts and Practice. *Research on Social Work Practice*, 19(5), 491-502.
2. El-Sadr WM, Philip NM, Justman J (2014). Letting HIV Transform Academia: Embracing Implementation Science. *New England Journal of Medicine*. 370(18), 1679-1681.
3. Yamey G (2011). Scaling up global health interventions: A proposed framework for success. *Plos Medicine* , 8 (6).

FINAL EXAM: DECEMBER 8-10