## CENTRE OF SOCIAL MEDICINE AND COMMUNITY HEALTH SCHOOL OF SOCIAL SCIENCE, JNU

#### **Monsoon Semester 2015**

Course No.	: SM 604/606
Course Title	: Research Methodology
Course Incharge(s)	: Prof. Ritu Priya Mehrotra & Dr. Prachikumar Ghodajkar
Credits	:2
Method of Instruction	: Lectures, Group Discussions & On-line Exercises
Evaluation	: Term paper and viva- 1 credit;
	Mid-semester viva, End-semester exam and viva-1 credit

### **Outline of Course**

This course introduces the various approaches to research and research methodologies in Public Health. Starting with an examination of the epistemology of the scientific method, the similarities and differences in social science and epidemiological research, it discusses some theoretical issues in interdisciplinary research. Then it shifts to methods of operationalising research, with specific examples relevant to public health. By the end of the course, the student is expected to be familiar with qualitative and quantitative research methods used in public health, as well as the importance of choosing the theoretical and conceptual framework within which they are to be placed when designing a study.

# I. Philosophy of Research in Public Health

### A. Approaches in Public Health Research

- a) Epidemiological research
- b) Interdisciplinary social science research
- c) Systems Analysis and Operational research

### **B.** Logic of Scientific Enquiry : Some Theoretical Issues

- a) Epistemology of science
- b) Science and social science
- c) Quantitative and qualitative research
- d) Causality
- e) Inductive and Deductive Research
- f) Rigor in Research
- g) Reliability and Validity in Research
- h) Ethics of Health Research

### II. Operationalising Research for Public Health : Designs, Methods and Tools

### A. Quantitative Approaches and Methods

- a) Demographic Methods
- b) Use of Published Data
- c) GIS Mapping and other IT uses in health research
- d) Epidemiological Designs
- e) Bio-statistics

# **Qualitative Approaches and Methods**

- a) Ethnography
- b) Grounded Theory
- c) Case Study analysis
- d) Narrative Approaches
- e) Phenomenological Analysis
- f) Community-based Participatory Research
- g) Interpretative, Constructivist and Critical Analysis
- h) Content Analysis
- i) Discourse Analysis

# B. Some Issues in Health Systems Research

- a) Issues of Measurement, Assessment, Monitoring and Evaluation
- b) Mixed Methods
- c) Policy Analysis
- d) Systematic Reviews

# C. Developing a Research Proposal

Written Assignment: Identify a research topic and develop a research proposal on a subject

of your choice using the understanding derived from the course.

Maximum Word Limit: 3000 words

Last date for submission of draft: 9<sup>th</sup> Nov. 2015

Date for Final submission: 23<sup>rd</sup> Nov. 2015

## Reading List

# **Essential Readings**

# **SECTION I:** Philosophy of Research in Public Health

## Approaches:

- 1. MacMahon B and Trichopoulos D. (1996). Epidemiology: Principles and Methods, 2<sup>nd</sup> ed., Little Brown and Company, Boston, Chapter 1.
- 2. K.R. Nayar (1993): Social Sciences in Health: Towards a Paradigm. *IASSI Quarterly* Vol. 2, No.1 & 2, pp.153-59.
- **3.** Alliance for Health Policy and Systems Research (2007). What is health policy and systems research and why does it matter? WHO and AHPSR.
- Le Roy J. and Sen K. (eds.) (2000): 'Introduction', in Health Systems and Social Development: An Alternative Paradigm in Health Systems Research, European Commission, Brussels, pp: 1-6.

# Logic of Scientific Enquiry:

- 1. John W. Ratcliffe and Amalia Gonzalexdel-Vaile (1988) Rigour in Health Related Research: Towards an Expanded Conceptualisation, *International Journal of Health Services*\_Vol. 18, No.pp. 361-392.
- 2. Neuman, W Lawrence, (2003). *Social Research Methods- Qualitative and Quantitative Approaches*. Allyn and Bacon, Pearson Education Inc. Boston USA.
- **3.** Baum, Francis (1995). Researching public health: Behind the qualitative-quantitative methodological debate. *Social Science and Medicine*, Vol.40, No.4, pp.449-468
- 4. Mukherji, B.N. (1985): The Reliability and Validity of the So-called Hard and Soft Data, Journal of Social and Economic Studies, pp.130-191.
- 5. NCE SSRH (2000) Ethical Guidelines for Social Sciences Research in Health

### SECTION II: Operationalising Research for Public Health: Designs, Methods and Tools

# Quantitative Approaches and Methods:

- 1. Premi, M. K. (1983) "The Nature and Scope of Demography and Sources of Demography Data," **An Introduction to social Demography**, Vikas Pub. Pvt. Ltd. New Delhi.
- 2. Das and Premi: Census 2011
- 3. Gatrell Anthony C. & Loytonen, Markku (eds.) (1998): GIS and Health, Taylor and Francis, London.
- 4. Premi, M.K. (2003): "Social Demography: A Systematic Exposition", Jawahar Publisher and Distributors, New Delhi, Chapter 1, 2, 4.
- 5. Srinivasan K. (1998): "Basic Demographic Techniques and Applications", Sage Publications, New Delhi, Part- II, III, IV, V, VI, XII.
- 6. Beaglehole, R. et al. (1993): Basic Epidemiology, WHO, Geneva, Chapter 3.
- 7. Mahajan, B K (1997): "Methods in Biostatistics: For Medical Students and Research Workers", Revised by Arun Bhadra Khanal, 7th ed. Jaypee Brothers, Medical Publishers, Pvt. Ltd, New Delhi.

## Qualitative Approaches and Methods:

- 1. Bowling, Ann (2002) Research Methods in Health- Investigating Health and Health Services. Open University Press. Buckingham. Section II, Chapters 5& 6
- 2. Seale, Clive (2004): Social Research Methods, Routledge Student Readers. Special Indian Edition, Part 1-5, 11, 14 and 15.

### Some issues in health systems research

- 1. Banerji, D. and Anderson, S. (1963): A Sociological Study of Awareness of Symptoms Suggestive of Pulmonary TB, *Bull WHO* Vol. 29, No. 5, pp. 665-83.
- 2. Susan P Phillips (2005) Defining and measuring gender: A social determinant of health whose time has come. International Journal for Equity in health 4: 11
- 3. National Human Development Report (2001). State of Human Development: Concepts, methodology and core indices.
- Linda Mcintyre and Mark Petticrew (2009) Methods of Health Impact Assessment: a literature review. Medical Research Council. Social & Public Health Sciences Unit. University of Glasgow, 4 Lilybank Gardens, Glasgow, G 12 8RZ. <u>http://www.msoc-mrc.gla.ac.uk/</u>
- 5. Padgett, Deborah K. (2012): Mixed Methods, chapter 3 in *Qualitative and Mixed Methods in Public Health, Sage Pub., pp:* 47-63
- 6. Coren, Esther and Fisher Mike (2006): The Conduct of Systematic Research Reviews For SCIE Knowledge Reviews: Systematic Research Review, Social Care Institute For Excellence (SCIE), London.
- 7. Hudson, John and Lowe, Stuart (2007). 'What is Policy Analysis?' in *Understanding the Policy Process,* The Policy Press, Bristol UK. (2004), Rawat Publications Jaipur. Indian Reprint. pp:1-14.

# Suggested Readings

# **SECTION I:** Philosophy of Research in Public Health

- 1. Chattopadhyay, Debiprasad (ed.) (1992) Studies in the History of Science in India, Vol-II, Asha Jyoti, New Delhi.
- 2. Krishna Bhardwaj (1980): On Some Issues of Method in the Analysis of Social Change, University of Mysore.
- **3.** Gould, Carol, C. (1983). Beyond Causality in the social sciences: Reciprocity as a model of non-exploitative social relation in R.S., Cohen and M. Wartofsky (ed.) *Epistemology, Methodology and the Social Sciences*
- 4. Mary Dixon-Woods et al (2004). Integrative approaches to qualitative and quantitative evidence, Health Development Agency.
- **5.** Ray Moynihan (2004). Evaluating Health Services: A reporter covers the science of Research synthesis. Milbank Memorial Fund.
- Booroah, Vani K (2010) 'Inequality in Health Outcomes in India- The Role of Caste and Religion' in Thorat, Sukhadeo and Katherine S Newman (eds.) Blocked by Caste-Economic Discrimination in Modern India. Oxford University press. New Delhi pp-179-207
- 7. Z. Bankowski, J.H. Bryant etal (Ed.) (1991): Ethics and Epidemiology: International Guidelines, CIOMS, Geneva.

# SECTION II: Operationalising Research in Public Health

- 1. Goode & Hatt (1981): *Method in Social Research*, Tata McGraw Hill, New Delhi.
- 2. Majumdar P.K. (2005): Research Methods in Social Sciences, Viva Books, New Delhi.
- 3. Friedman, Daniel J, Edward I Hunter and R Gibson Parrish II (2005) Health Statistics-Shaping Policy and Practice to Improve the Population's Health, Oxford University Press. Oxford.
- 4. Malczewski, Jacek (2004) 'GIS, Spatial Epidemiology and Health Care Planning' in Izhar, Nilofar (ed.) *Geography and Health-A study in Medical* Geography, APH Publishing Corporation, New Delhi pp 337-374.
- 5. Monitoring and evaluation: Some tools, methods and approaches. 2004
- 6. Yukiko Asada. (2005). A framework for measuring health inequity. Journal of epidemiology and community health vol. 59, pp. 700-705.
- 7. University of Liverpool and others. Health Impact assessment: A guide. May, 2004.

## Areas of Research in Public Health (For exploration of research in specific areas)

### a) Health Behaviour, Perception and Health Culture Studies:

- Marriot, McKim (1965): "Western Medicine in Village Northern India", in Paul B.D. (ed.) Health Culture and Community: Case Studies of Public Reactions to Health Programs, Russell Sage Foundation, New York, pp: 239-268.
- 2. Hasan K.A. (1967): The Cultural Frontier of Health in Village India: Case Study of a North Indian Village, Manaktalas, Bombay.
- 3. Banerji, D. (1982): "Poverty, Class and Health Culture", Prachi Prakashan, Delhi.
- 4. Sahu, S.K. (1980): Health Culture of Oraons of Rourkela and Its Hinterland, Unpublished Ph. D. Thesis, Centre of Social Medicine and Community Health, SSS, JNU, New Delhi.
- 5. Priya, Ritu (2000). A Study of Illness, Disease and Wellbeing Among a Group of Construction Workers in Their Ecological Context, Unpublished Ph.D. thesis, Centre of Social Medicine and Community Health, SSS, JNU, New Delhi.
- 6. Conner, Mark and Paul Norman (Eds.) (2001) *Predicting Health Behaviour- Research and Practice with Social Cognitive Models*. Open University press. Buckingham. Reprint.(chapters 1,2 and 7).
- 7. Bisht, Ramila (2004): "Hill Women of Garhwal: A Study of their Work and Health in the Context of Ecological Degradation and Male out Migration Unpublished Ph.D. Thesis, Centre of Social Medicine and Community Health,SSS/ JNU, New Delhi.
- 8. Acharya Sanghmitra S (2010) 'Caste and Pattern of Discrimination in Rural Public Health Care Services' in Thorat S and Katherine S Newman (eds.) *Blocked by Caste-Economic Discrimination in Modern India*. Oxford University Press, pp: 208-252.

# b) Studies on Health Personnel and Professions

- 1. Oommen, T.K. (1978): Doctors and Nurses: A Study in Occupational Role Structures, The Macmillan Company of India Ltd, Delhi.
- 2. Prakasamma, M. (1989): Analysis of Factors Influencing Performance of Auxiliary Nurse Midwives in Nizamabad District, Unpublished Ph.D. thesis, Centre of Social Medicine and Community Health, SSS, JNU, New Delhi.

**3.** Sheikh Kabir & George Asha (eds.) (2010): Health Providers in India: On the Frontlines of Change, Routledge, London.

## c) Studies on Health Problems, Programmes and Health Services

- 1. Wyon, J.B. and Gordon E. (1971): *The Khanna Study: Population Problems in the Rural Punjab*, Harvard University Press, Cambridge.
- 2. Mamdani, M. (1972), Myth of Population Control: Family, Caste and Class in an Indian Village, Monthly Review Press, New York.
- 3. Rao, K. G. (1974): *Studies in Family Planning*, Abhinav Pub. Chapters 1,6 &7.
- 4. Mishra, B.D. et al (1982): Organisation for Change: A Systems Analysis of Family Planning in Rural India, Radiant, New Delhi.
- 5. Sathyamala C. (2000): An Epidemiological Review of the Injectable Contraceptive, Depo-Provera, MFC & Forum for Women's Health, Pune.
- 6. Rao, Mohan (2004): From Population Control to Reproductive Health: Malthusian Arithmetic, Sage Publication, New Delhi.
- 7. Sagar, Alpana (1999): The Social Basis of Outcomes of Pregnancy in Gautam Nagar Slum. Unpublished Ph.D. Thesis, Centre of Social Medicine and Community Health, SSS, JNU, New Delhi.
- 8. Qadeer I (2010): New Reproductive Technologies and Health Care in Neo-Liberal India: Essays, Monograph, Nov. 2010, Centre For Women's Development Studies (CWDS), New Delhi.
- 9. Dutta, P.K. (1980): A Survey of Factors Responsible for Setback of NMEP at Unit level in Gurgaon District, Ph. D. Thesis, New Delhi, CSM&CH.
- 10. Rao, K.V. (1982): Study of Leprosy Control Programme in Rural Population in Chingleput., District, New Delhi, CSM&CH, Ph.D. Thesis.
- 11. Dasgupta R. (2012): "Urbanising Cholera: The Social Determinants of Its Reemergence", Orient Blackswan, New Delhi.
- 12. Kotwal, Atul, Priya, Ritu and Qadeer Imrana (2007): 'Goiter and Other Iodine Deficiency Disorders: A Systematic Review of Epidemiology Studies to Deconstruct the Complex Web, *Archives of Medical Research* 38, pp: 1-14.
- 13. Priya R & Mehta S (ed.) (2008): Dialogue on AIDS-Perspectives for the Indian Context, V.K.Pub., New Delhi.
- 14. Banerji, D. (1997). Landmarks in the Development of Health Services in the Countries of South Asia. Nucleus for Health Policies and Programmes, New Delhi.
- 15. Dasgupta Monica, Chen Lincoln C., Krishnan T.N. (1998). *Health, Poverty & Development in India*. OUP, New Delhi.
- 16. Rao, Mohan (1999): Disinvesting in Health: The World Bank's Health Prescriptions, Sage, New Delhi.
- 17. Qadeer, Imrana, Sen, Kasturi & Nayar K.R. (eds.) (2001): Public Health and the Poverty of Reforms: The South Asian Predicament, Sage Publication, New Delhi.
- 18. Baru, R. (1998): *Private Health Care in India: Social Characteristics and Trends*, Sage Publication, New Delhi.
- 19. Baru, Rama V. (ed) (2008): School Health Services in India: The Social and Economic Contexts, Sage Publication, New Delhi.

- 20. Priya Ritu and Shweta A.S. (2010). Status and Role of AYUSH Services and Use of Local Health Traditions under the NRHM: A Health Systems Study across 18 States (co-author: Shweta Awasthi Saxena), National Health Systems Resource Centre, 2010.
- 21. Acharya, Sanghmitra & Lhungdin Hemkhothang (2013): "Public Health Dimension of Development in North East India", Academic Pub, New Delhi.

### d) Wider Dimensions of Health

- a) PGK Panikkar (1980): Inter regional variation in Calorie intake. CDS, Trivandrum.
- b) Zurbrigg, S. (1994): The Hungry Rarely Write History and Historians are Rarely Hungry-Reclaiming Hunger in the History of Health, Paper presented at the Centre for Health Studies, York University, Canada.
- c) Lupton, Deborah (1996): Food, the Body and the Self, Sage Publication, London.
- d) Jacobs, Lawrence R (2005) 'Health Disparity in the Land of Equality' in Morone, James E and Lawrence R Jacobs,(eds.) *Healthy, Wealthy and Fair- Health Care and the Good Society*. Oxford University Press. Oxford. pp 37-64
- e) Sundaram, K and Suresh D Tendulkar (2010) 'Poverty Decline in India in the 1990s- A Reality and Not and Artefact' in Anand Sudhir, Paul Segal and Joseph E Stiglitz (eds.) Debates on the Measurement of Global Poverty\_ The Initiative for Policy Dialogue Series. Oxford University press. Oxford, pp:341-371.
- f) J. P. Majra and A. Gur (2009) 'Climate change and health: Why should India be concerned?' *Indian Journal of Occupational and Environmental Medicine*. 2009 April; 13(1): 11–16.
- g) Haines A, Kovats RS, Campbell-Lendrum D, Corvalan C (2006) Climate change and human health: impacts, vulnerability and public health. *Public Health.* Jul, 120 (7):585-96. Epub Mar 20.
- h) Thulasimala, D and N Sivanganam (2004) 'Health hazard in Northern Tamil Nadu- An Analysis for Estimating Health by Social Determinants' in Izhar, Nilofar (ed.) *Geography and Health-A study in Medical Geography*. APH Publishing Corporation, New Delhi pp 153-168.
- i) Nayar, K. R. (1998): *Ecology and Health: A System Approach*, APH Publishing Corporation, New Delhi.
- j) Reddy Sunita (2013): Clash of Waves: Post Tsunami Relief and Rehabilitation in Andaman and Nicobar Islands, Indos Books, New Delhi.