**CENTRE OF SOCIAL MEDICINE AND COMMUNITY HEALTH**

**SCHOOL OF SOCIAL SCIENCE**

**Monsoon Semester 2013**

**Course No. : SM 621**

**Course Title : Operational Research and Systems Analysis in**

**Community Health Research**

# Credits : 2

# Method of Instruction : Group Discussion

Method of Evaluation : Written Assignment and Viva-voce

**Course Incharge : Prof. Ritu Priya Mehrotra**

### **Course Outline**

##### Introduction

* Systems Analysis and Operational Research: An Introduction

***Conceptualising Health Systems***

* Health Systems as a Complexity
* Ecosystems and Social Systems
* Meaning Systems
* Health Care Systems and Health Service Systems

##### Application of Systems Research to Health Systems

* Systems Analysis and Operational Research as Applied to Health Systems
* Management and Information Systems
* Use of Mathematical Models
* Qualitative Methods, Health Perception Studies and Mixed Method Research

##### Examples of Health Systems Research and Its Application for Planning and Evaluation

* Application of Systems Analysis in National Health Programmes
* Systems Approach to Family Welfare Programme

**Politics of Health Systems Research and Planning**

* Politics of Health Systems Research and Health Services Research
* Systems Approach to the Problem of Planning

### **Reading List**

#### **Introduction**

1. Blumstain, Alfred et al (ed.) (1970): “The Role of Systems Analysis for Social Problems in **Systems Analysis for Social Problems**, Operations Research Council, Washington.
2. Ramo Simon (1970): “The System Approach” in **Century of Mismatch**, Mackay Company.
3. Jackson, M.C. and Keys, P. (1984): Towards a System of Systems Methodologies”, **Journal of Operational Research Society**, Vol. 35, No.6, pp. 473-486.

***Conceptualising Health Systems***

1. Pierce Jessica & Jameton Andrew (2004): “The Challenge of Environmental Responsibility” in **The Ethics of Environmentally Responsible Health Care,** Oxford University Press, New York.
2. Giddens, Anthony (2009): “What is Sociology”, in **Sociology, 6th edition,** Polity Press, Cambridge.
3. Baer, Hans A., Singer Merrill & Ida Susser (2003): “Medical Anthropology and the World System,” 2nd ed. Praeger Publisher, Westport, Connecticut London, pp: 3-15, 31-54.
4. WHO (2008): World Health Report 2008-Primary Health Care: Now More than Ever, WHO, Geneva.
5. Sathyamala, C. etal (1986): “Taking Sides: the choices before the health worker”, ANITRA, Asian Network for Innovative Training Trust, Madras, pp: 114-120.

##### Application of Systems Research

1. World Health Organisation (1976): “Application of Systems Analysis to Health Management”, Geneva, WHO.
2. Luck, G.M. et al (1971): Patients, Hospitals and Operational Research, London, Tavistock.
3. Anderson, Stig. (1964): “Operations Research in Public Health”, **Public Health Reports**, Vol. 79, No. 4, April.
4. Banerji, D. (1972): “Operational Research in the Field of Community Health”, **Opsearch,** Vol. 9, Nos. 3-4, September-December, pp.135-142.
5. Banerji, D. (1976): Research on Delivery of Health Care in the Countries of South East Asia Region, New Delhi, WHO SEARO.
6. World Health Organisation (1985): Uses of Health Systems Research, New Delhi, WHO SEARO.
7. Batu, Aung Than (1992): The Appraisal of Health Systems Research, New Delhi, NIHFW, December 14-18, 1992.
8. Ackoft, R.L. (1960): “Systems, Organisations and Interdisciplinary Research”, **General Systems of Year Books**, Vol. 5, pp.1-8.
9. Gibbs, R.J. (1978): “Use of Strategic Planning Model for Health and Personal Social Services”**, Journal of Operational Research Society**, Vol. 29, No.9, pp.875-883.
10. Burton, Richard M. et al (1978): “A role of Operational Research in Health, Health Care Planning and Management Teams*”,* **Journal of Operational Research Society**, Vol. 29, No.7, pp. 633-641.
11. Kazi, Mansoor A. F. (2003): Realist Evaluation in Practice: Health and Social Work, Sage Publication, New Delhi.

##### Examples of Health Systems Research

1. Population Council (1986): “Operations Research! Lessons for Policy and Programmes”, **Population Reports,** series J., No.31, May-June.
2. Banerji, D. (1993): “A Social Science Approach to Strengthening India’s National Tuberculosis Programme”**, India J. Tub**., Vol.40, pp. 61-82.
3. Qadeer I. (1985): “Social Dynamics of Health Care: The Community Health Volunteer Scheme in Sahadol District,” **Socialist Health Review**, Vol.2, No.2, pp: 74-83.
4. Dutta, P.K. (1980): A Study of Factors Responsible for the Setback of National Malaria Eradication Programme (NMEP) at the Unit Level in Gurgaon District, New Delhi, CSMCH/SSS, Ph. D. Thesis.
5. Rao, K.V. (1982): Study of Leprosy Control Programme in Rural Population in Chingleput District, New Delhi, CSMCH/SSS, Ph. D. Thesis.
6. Mishra, B.D. et al (1982): Organisation for Change: A Systems Analysis of Family Planning in Rural India, New Delhi, Radiant.
7. Banerji, D. (1992): “Combating AIDS as a Public Health Programme in India”, New Delhi, VHAI and Nucleus for Health Policies and Programmes.
8. Dutta, Amlan (1996): Some Aspects of the Public Health Services in Purulia District: A Systems Analysis, New Delhi, CSM&CH, SSS, Ph. D. Thesis.
9. Priya, Ritu (1993): “Town Planning, Public Health and Urban Poor: Some Explorations from Delhi”, **Economic and Political Weekly**, Vol. 28, No. 17, pp: 824-834.
10. Dasgupta R. (2012): “Urbanising Cholera: The Social Determinants of Its Re-emergence”, Orient Blackswan, New Delhi.
11. Arora N. K. (2004): “Assessment of Injection Practices in India”, Program Evaluation An IPEN Study 2004, Central Coordinating Team on behalf of IndiaCLEN Program Evaluation Network IPEN.

###### *Politics of Health Systems Research and Planning*

1. Commission on Health Research for Development (1990): “Health Research: Essential Link to Equity in Development”, Delhi, Oxford University Press.
2. Banerji, D. (1990): “Prescription without Diagnosis: Review of Report of Commission on Health Research Development”, **Economic and Political Weekly**, December 29, pp. 2823-2825.
3. Banerji, D. (1993): “Simplistic Approach to Health Policy Analysis: World Bank Team on Indian Health Sector”, **Economic and Political Weekly**, June 12, pp. 1207-1210.
4. Government of India, Ministry of Health and Family Planning (1976): “Operations Research for Improved Delivery of Health Services”, New Delhi, Ministry of Health and Family Planning.
5. Planning Commission (2011): “High Level Expert Group Report on Universal Health Coverage for India”, Planning Commission, New Delhi.
6. GOI (2012): Twelfth Five Year Plan (2012-2017), Social Sector, Vol-III- Chapter on **“Health**”, pp: 1-46, Planning Commission, New Delhi.
7. Ritu Priya (2005): “Public Health Services in India: A Historical Perspective” in Gangolli, Leena V; Ravi Duggal and Abhaya Shukla (eds) **Review of Healthcare in India,** Cehat, Mumbai pp: 41-74.

Suggested Readings

1. Campbell, Bruce Benner (1997): Health Management Information Systems in Lower Income Countries, An Analysis of System Design, Implementation and Utilisation in Ghana and Nepal, New York, Geboren Te Niagara Falls.
2. World Health Organisation (1995): Applying Planned Market Logic to Developing Countries, Health Systems: An Initial Exploration, Geneva, WHO (WHO/SHS/NHP/95.7).
3. Mills, Anne (ed.) (1990): Health System Decentralisation: Concepts, Issues and Country Experience, Geneva, WHO.
4. Priya, Ritu & Shweta Anand (2010): “Status and Role of AYUSH Services and Use of Local Health Traditions under the NRHM: A Health Systems Study across 18 States”, National Health Systems Resource Centre (NHSRC), New Delhi.
5. Priya, Ritu (2011): "UAHC with 'Community Participation' OR 'People Centre-stage'? Implications for Governance, Provisioning and Financing". **MFC Bull***.* Nos. 345-347, Feb-July, 2011, pp. 9-15.
6. Priya, Ritu (2011):"Conceptualising UAHC 'Bottom Up': Implications for Provisioning and Financing". **MFC Bull***.,* Nos. 345-347, Feb-July, 2011, pp. 15-25.
7. WHO (2004): “World Report on Knowledge for Better Health: Strengthening Health Systems”, Summary, WHO, Geneva.
8. Rayner Geof & Lang Tim (2012): “Ecological Public Health: Reshaping the conditions for good health”, Routledge, London, pp: 3-66.
9. Issel, L. Michele (2004): “Health Program Development and Evaluation”, in **Health Program Planning and Evaluation: A Practical, Systematic Approach for Community Health***,* Jones and Bartlett Publishers, Boston, pp: 3-35.
10. Rowitz, Louis (2009): “A Systems and Complexity Perspective” in **Public Health Leadership: Putting Principles into Practice, 2nd edition,** Jones and Bartlett Publishers, Boston, pp: 65-87.
11. A Collection of **Lancet papers** to inform debate at the Ministerial Summit on Health Research and Global Forum for Health Research, November 1—20, Mexico City, Mexico, **The Lancet (2004): Vol. 364, September- October, pp: 1-22.**
12. Bajpai, Nirupam,Sach, Jeffrey D. & Dholakia Ravindra H. (2010): “Improving Access and Efficiency in Public Health Services: Mid-term Evaluation of India’s National Rural Health Mission”, The Earth Institute Columbia University, NY and Sage Publication, New Delhi.
13. Tangcharoensathien Viroj etal. (2004): “Knowledge-based changes to health systems: the Thai experience in policy development”, **Bulletin of the World Health Organization**, October, 2004 Vol. 82, No.10, pp: 750-763.
14. The bitter**e**st pill of all: the collapse of Africa’s health systems.
15. Q. Meng… et al. “(2004): “Health policy and systems research in China”, Special Programme for Research and Training in Tropical Diseases (TDR), UNICEF/UNDP/World Bank/WHO, 2004.
16. Thunhurst, Colin(2012): Public Health System analysis-the transfer of learning between developed and developing countries, Health Care Management Science, 15, pp: 283-291.
17. Hugh J. Miser (1980): Operational Systems Analysis”, International Institute for Applied Systems Analysis, Luxemburg, Austria.

Holland, Jeremy (ed) (2013): “Who Counts? The power of participatory statistics, Practical Action Publishing, U.K.

Rayner Geof & Lang Tim (2012): “Ecological Public Health: Reshaping the conditions for good health”, Routledge, London.

Service Provider’s Manual: Understanding Health Management Information System, (2011): Volume-1, National Rural Health Mission (NRHM), MHFW & NHSRC, New Delhi, p. 17.

Gulati, S.C. Singh Raghubansh M., Raushan Rajesh and Arundhati (2011): “Evaluation Study of NRHM” by Institute of Economic Growth, University of Delhi, NHSRC, New Delhi.