

Syllabus for PhD Epidemiology and Public Health

Research Methodology

Types of research, Qualitative, Quantitative research, Mixed method research, research ethics, IHERB, IBSC, IAEC, Basic concepts of Biostatistics, Types of data and data sources for Public Health, Sampling techniques and sample size estimation, Probability and Tests of significance, Data analysis, presentation and interpretation

Introduction of Public Health

History of Social Medicine and Community Health, History of Public Health and Its Milestones, Comprehensive Health Care, Social Development and Health, Dimensions and Determinants of Health, Concepts and Indicators of Health and Wellbeing, Natural History of Disease, Levels of Prevention, Globalisation and Its Impact on Health, Roles and Responsibility of State, Community and Private Sector in Health, Evolution of Health Policies and Health Services in India: Health Committees and Development of Health Services in Independent India, Constitutional Provisions, Federal Structure and Social Security, National Health Policies (1983, 2002, 2017), Population Policy, Nutrition Policy, Policy on Indian Systems of Medicine and Homeopathy, 2002, Important Health Legislations in India, Health Infrastructure in India-Public, Private, and Charitable, Public Private Partnership(PPP), Health financing and Health insurance, Out of Pocket expenditure, Civil society and Social Movements in Health, , All National Health Programs and data sources

International Health: Health problems of developed and developing countries, Health problems of South East Asia region, International agencies in Health, Emporiatrics, Health for All approaches- Primary Health Care (1978) to Universal Health Coverage, Millennium Development Goals (MDG) and Sustainable Development Goals (SDG)

General Epidemiology

Basic concepts and definitions in Epidemiology, Types of epidemiology, Uses of epidemiology, Measurements in epidemiology, Epidemiological Study Designs, Screening and surveillance, Validity of Screening and Diagnostic tests, Causation , Association and Biases, Confounding, Investigation of an epidemic

Epidemiology of Common Health Problems in India

Communicable Diseases-Common, Emerging and Re-emerging diseases, Hospital acquired infections, Antimicrobial resistance, Zoonoses, Non-Communicable Diseases—Cardio-vascular diseases, Diabetes, Cancers, Rheumatic heart disease, Blindness, Mental Health, Occupational Diseases, Genetic diseases, Accidents , Injuries and Disasters.

Basic Determinants of Health

Environment and Health

Water and sanitation, Environmental pollution and Health impacts, Built environment and Housing, Climate change and impact on health, Waste management, Hospital waste management

Nutrition, Ecology of malnutrition, Assessment of Nutritional status, Nutritional diseases and their management, Food and nutrition security and related legislations, National Nutrition programs, Socio cultural aspects of nutrition, Food safety, Food standards and related legislations

Social Sciences and Health

Definition, Scope, Concepts and Significance of Social, Economic, Cultural and Behavioral factors on Health and Disease, Social Theories of Causation of Disease, Implications of Social Structure and Socio-economic Status for Health, Political and Economic Aspects of Health, Health Perceptions and Behavior, Health Economics, Qualitative Research Methodology, Social Work Approach in Health Care

Reproductive and Sexual Health and Demography

Demography and Family Planning: Definition, concepts and indicators related to demography and family planning, Demographic cycle, Size, composition and distribution of India's population, Approaches and methods of contraception, Evolution of National Family Welfare Program, Social issues related to Family Planning, Felt need and unmet need in Family planning, Social marketing in family planning, Counseling in Family planning, PC and PNDT Act-1994, MTP Act 1971

Reproductive and Child Health: Evolution of Maternal/ Reproductive and child Health programs, Safe motherhood and essential newborn care with related schemes and programs, Gender issues in women's health, Major health problems of children in India and related National Health Programs, Adolescent health and related schemes and programs, Rights of child and related schemes and Programs, School Health Programme

Health Systems Research and Health Communication

Health planning and management, Health systems research- Operations Research, System analysis, Health Technology assessment, Monitoring and Evaluation, Health Management Information System, Medical and Social Audits, Health teams and their management, Human Resources in Health, Role of Ayush in local Health traditions, Health policy studies, Quality assessment of Health Services- parameters and standards, Ethics in Health Care, National Institutes of Public Health Research and Training

Health Communication: Concepts, objectives and approaches of health education, Methods, modes and barriers of communication, Planning, Management and Organization of health education programs, E-medicine, Distance education and associated legal issues, Role of media in Health Education, E Health and m Health