

Course Title	Reproductive health and gender	
Third Year	Fifth Semester	Course code BPH 305.1-RHG
Credit Hours: 3	Full Marks: 100	Pass Marks: 50

Course Descriptions:

This course builds on the applied reproductive health and gender content deals with the application of the knowledge in the respective fields. Additional knowledge and skills are gained in the area of adolescent and sexual health, gender analysis and mainstreaming, gender sensitive health planning with a right based approach. Gender based violence as public health problem and the role of health Worker/manager in addressing the problem; the basic concept and the root causes of inequity and measures to address it in the health sector are also dealt with.

Learning Objectives:

Upon the successful completion of the course, students will be able to explain :

- Concept of adolescent health problems as social problems
- Concept of women's health , gender and development
- Gender and its effects on health
- Basic concept of gender analysis and mainstreaming
- Basic concept of marginalization and its impact on health
- Concept of gerontology, disability and rehabilitation

Course Contents

Existing	Micro-syllabus
Unit1: Adolescent and sexual health- 6 Hours	
<ul style="list-style-type: none"> ➤ 2) Concept , meaning , goal , objective of adolescent and sexual health ➤ 4) Adolescent health special need for growth and development of spiritual, physical emotional and social life. ➤ 5) Adolescent problems in Nepal, including teenage pregnancy, pre-marital sex, RTI, HIV/AIDS, drug abuse, alcoholism, smoking, accidents, violence, crime etc. ➤ 7) National Adolescent Health and Development Strategy of Nepal 	<ul style="list-style-type: none"> 1) Definition of adolescent by WHO and UNICEF 3) Importance of adolescent and sexual health 6) Adolescent health problems in the international contexts

<p>• Unit2 : Women health, gender and development 12 hours</p> <p>Introduction to women and health</p> <ul style="list-style-type: none"> o 1)Status of women’s health in national and international contexts, o Concept of women and health, difference between the health of men and women o 3)Women specific health problems: Uterine prolapse, breast cancer, cervical cancer, fistula, STI/PID, HIV/AIDS and its implication on family health. o 4)Difficult life circumstances and its impact on women, the policy and programs in place to meet the basic health needs of socially and politically displaced persons: <ul style="list-style-type: none"> - Destitute (society, family) - Refugee (political) - Internally displaced (political and social) - Disaster and war □6) Gender related health policy, program planning, monitoring and interventions programs □7) Basic concept of gender analysis o 8)Basic concept of gender mainstreaming including the national policy of mainstreaming gender o 9)Role of men in bridging the gender gap o 10)Gender friendly health services o 11)Women’s empowerment and agenda for empowerment (legislation, female education, social and political participation, labour saving technologies, economic upliftment opportunities) o 12)Empowerment and self-help of women 	<ul style="list-style-type: none"> 2) Difference between health status of women and men 5) Basic concept of gender issues too.
<p>Unit 3: Gender Based Violence 12 Hours</p> <ul style="list-style-type: none"> □ 2) Concept, Scope and evolution of gender based violence □ Scope and evolution of violence against women □3) Factors contributing to violence- illiteracy, low status, poverty, socio-cultural factors. □ Life cycle of violence 	<ul style="list-style-type: none"> 1)Definition of violence as given by WHO, UNFPA, typology of violence, nature of violence and definition of gender based violence and violence against women and girls 4) Ecological approach to violence 5) Life cycle perspectives of violence against men and women

<ul style="list-style-type: none"> <input type="checkbox"/> Social and health effect of violence on age groups: children, adolescents, youth and adult <input type="checkbox"/> 7) Types of violence <ul style="list-style-type: none"> o Domestic violence o Violence in school o Violence in work place o Violence in open place/Public space o Violence in correction centers including prison and detention centers o Violence in health care settings <input type="checkbox"/> 8) Steps towards eliminating gender based violence; <ul style="list-style-type: none"> o Public health responsibilities for preventing violence o Education for violence prevention, including the role of the media o Roles of family members for prevention of violence at home <input type="checkbox"/> 9) Roles of family members on STIs, HIV/AIDS cases along with other chronic problems, consequences of violence, drug abuse and sexual abuse 	<p>6) Social and health effect of violence on different age groups: infant, children, adolescents, youth , adults and elderly</p> <p>8) Men’s role in violence prevention i.e. white ribbon campaign</p> <p>10) Domestic violence crime and punishment act of Nepal</p>
<p>Unit 4: Gerontology 8 Hours</p> <ul style="list-style-type: none"> <input type="checkbox"/> Epidemiology of gender, ageing and development problem. <input type="checkbox"/> Socio-economic and legislative structure & their impact on care of elderly person. <input type="checkbox"/> Helping elderly to cope with hearing and visual impairment, disability in mobility. <input type="checkbox"/> Major problems of elderly including accidents, rehabilitation. <input type="checkbox"/> Role of the state in social security community based rehabilitations vs. institutionalization. 	<p>Definition of gerontology, Ageing, Population ageing, classification of elderly,</p> <p>Challenges of elderly population to public health system of Nepal</p>
<p>Unit 5: Gender, Disability and Rehabilitation 6 Hours</p> <ul style="list-style-type: none"> <input type="checkbox"/> Concept of impairment, disability and major factors leading to disability in relation to gender <input type="checkbox"/> Concepts of rehabilitation including community based rehabilitation <input type="checkbox"/> Preventive measures related to gender based 	

disability Policies, security and legal issues regarding persons who are differently able	
Unit-6: Gender, Equity and access <input type="checkbox"/> Basic concept of equality, equity and inequalities <input type="checkbox"/> Social exclusion and marginalization and its impact on health <input type="checkbox"/> Social inclusion and empowerment <input type="checkbox"/> Addressing equity and access issues in health sector	Basic concept of gender equity and gender equality

Teaching Learning Methods

Lectures, group discussions, presentations , review papers discussions in class room setting

Evaluation

Internal assessment in different forms 20%

Final examination 80%

Course Title		Clinical Epidemiology	
Third Year	Fifth Semester	Course code: BPH 305.2-CE	
Credit Hours: 3	Full Mark: 100	Pass Mark: 50	

Course Description

This course will give the epidemiological research perspective of clinical epidemiology. The course also aims to impart skills and techniques to evaluate, assess and examine different interventions, screening, surveillances and monitoring programs in the field of public health.

Learning Objectives

Upon the successful completion of the course, students will be able to:

Describe the clinical epidemiology of non-infectious disease and health problems.

Understand and describe the application of epidemiological principles and methods in prevention and control of communicable and non- communicable diseases

Implement epidemiological strategies in disease prevention, control and health promotion activities including screening.

Understand the emerging and re-emerging diseases in public health

Understand concept and principles of social epidemiology

Course Contents

Unit 1: Clinical epidemiology

36 Hours

- **Introduction- 4 Hours**

- ❖ **Clinical epidemiology in the context of Public Health**
- ❖ **Definition, element of clinical epidemiology**
- ❖ **Application of clinical epidemiology in Public Health**
- ❖ **Principles of clinical epidemiology in Public Health**
- ❖ **Uses of clinical epidemiology in Public Health**

- **Diagnostic test function and confounding- 4 Hours**
 - ❖ Functions of diagnostic test
 - Introduction and definition of normality and abnormality
 - Introduction and definition of ROC curve (receiver operating characteristic curve)
 - Prevention in clinical practice
 - ❖ Confounding of diagnostic test
 - Definition, type and importance of; reliability, validity, precision, assumption of independence, confounding

- **Screening-8 Hours**
 - ❖ Definition, aim, use and list of types of screening as a diagnostic test
 - ❖ Criteria and process of screening
 - ❖ Advantages and limitations of screening test
 - ❖ Screening during clinical setting

- **Types of Screening as a Diagnostic Test-2 Hours**
 - ❖ Qualitative diagnostic test
 - ❖ Quantitative diagnostic test

- **Description of performance of diagnostic test and calculation-8Hours**
 - ❖ Gold standard
 - ❖ Graphic and tabular representation of diagnostic test result
 - ❖ Definition, notation and calculation of test performance characteristics
 - Sensitivity
 - True positive
 - False positive
 - Specificity

- True negative
 - False negative
 - False negative rate
 - False positive rate
 - Positive predicative value
 - Negative predicative value
- Relation between test performance characteristic
 - Sensitivity and FNR
 - Calculating sensitivity in terms of FNR
 - Calculating of FNR in terms of sensitivity
 - Specificity and FPR
 - Calculating sensitivity in terms of FPR
 - Calculating of FPR in terms of sensitivity
 - Likelihood ratio and serial likelihood ratio
 - Uses of sensitivity and specificity test
 - Deference between sensitivity and specificity
- **Surveillance-6 Hours**
 - Definition, objective, types, component , composition, and importance of Surveillance
 - Overall process of surveillances
 - Surveillance system in Nepal
 - Active
 - Passive
 - Routine
 - Sentinel
 - Health risk factors surveillance
 - Early Warning Reporting and Response System in Nepal
- **Strategies of epidemiology -2 Hours**
 - Ways and means of assembling facts on types of people affected by disease and by various circumstances
 - Forming a hypothesis and testing it
 - - Reviewing various epidemiological studies
 - Standardization – rationale, direct and indirect standardization(Mortality and Mobility)
 - Review
 - Concept of risk, uses of risk, studies of risk and risk factors
 - Clinical risk factors of non- communicable diseases.

- Comparing and interpretation of the relative risk and odds ratio
- Review of Diseases mechanism :
 - Exposure, Lead time, Latency Period, Immediate cause
- Review
 - Concept of prognosis of disease and prognostic factors
 - Emerging and re-emerging infectious diseases and threat to clinical and public health

Unit 2: Genetic epidemiology 6 Hours

- ❖ Concept of gene, genetic and genetic epidemiology
- ❖ Classification of genetic disorder and disease related to genetic disorder
- ❖ Factor causing for genetic abnormalities
- ❖ Differences between congenital abnormalities and teratogenic effect
- ❖ Preventive and curative aspects of genetic disease

Unit 3: Social epidemiology 6 Hours

- ❖ Meaning, scope and application of social epidemiology
- ❖ Evolution of epidemiology with reference to social epidemiology
- ❖ Application of social epidemiology in public health
- ❖ Role of social epidemiology in designing disease, control plan and strategies
- ❖ Limitation of social epidemiology

Course Title		Applied Health Education
Third Year	Fifth Semester	Course code : BPH 305.3-AHE
Credit Hours: 3	Full Mark: 100	Pass Mark: 50

Course description

An education aspect of public health program is indispensable responsibility of health Professional specifically of preventive health care managers. The graduates need to have a clear concept of planning, Implementation and overall management of the health education program therefore, this course has been designed with a view to develop necessary skills on the essential components of health education with special emphasis to health education program in occupational and institutional setting.

Learning Objectives

Upon the successful completion of the course, students will be able to:

Describe the need for a planned health education program.

Analyze various models of planning of health education program.

Describe various components of planning, implementation and evaluation of health education program

Prepare plan for a health education program on any of the priority areas of EHCs and implement it in a real field situation

Describe the implementation and evaluation process of health education in various occupational and institutional settings.

Critically appraise policy, strategy and activities in health education and promotion in Nepal

Course Contents

Unit 1: Health promotion and education as intervention in health services- 8 Hours

- Health Promotion
 - Current Plan, policy and strategy regarding health promotion in Nepal
 - Review of historical development of health promotion activity from central to peripheral level of government
 - Role and function of institution responsible at various levels in designing and delivery health promotion program in Nepal
 - Identification of areas need in changes for effective accomplishment of national health promotion, goal as stipulated in current national health policy in Nepal
- Health Education
 - Current Plan, policy and strategy regarding health education in Nepal
 - Review of historical development of health education activity from central to peripheral level of government
 - Role and function of institution responsible at various levels in designing and delivery health education program in Nepal
 - Identification of areas need in changes for effective accomplishment of national health promotion, goal as stipulated in current national health policy in Nepal

Unit 2: Planning of Health Education and Health Promotion Program -6 Hours

- Planning of health promotion program
 - Concept, meaning, importance and steps of Health promotion program planning
 - Models of health promotion program planning
 - Classical Model

- Precede-Proceed Model
 - Concept, steps and its application in priority PHC program interventions by using both of the planning models
 - Characteristics of a good health promotion program plan.
- Planning of health education program
 - Concept, meaning, importance and steps of Health education program planning
 - Models of health education program planning
 - Classical Model
 - Precede-Proceed Model
 - Concept, steps and its application in priority PHC program interventions by using both of the planning models
 - Characteristics of a good health education program plan.

Unit 3: Implementation of Health promotion and Education program -6 Hours

- Concept, meaning and definition of implementation
- Implementation approaches and strategies.
- Definition, techniques, indicator and importance of supervising the health education / health promotion program
- Definition, techniques, indicator and importance of supervising and monitoring the health education / health promotion program

Unit 4: Evaluation of Health Promotion and education program- 6 Hours

❖ Evaluation of Health Promotion Program

- Concept, meaning, definition and importance of evaluating health promotion program
- Techniques and tools of evaluating the health promotion program
- Stages of evaluating the health promotion program
- Indicators for evaluating health promotion program at different stages

❖ Evaluation of Health Education Program

- Concept, meaning, definition and importance of evaluating health education program
- Techniques and tools of evaluating the health education program
- Stages of evaluating the health education program
- Indicators for evaluating health education program at different stages

Unit 5: Special focus on planning, implementation and evaluation of health education and health promotion program – 16 Hours

- **Health issues on public Health**

- Reproductive Health - Family planning, Safe motherhood, Immunization, Malnutrition
- Infectious Diseases- ARI,CDD, Tuberculosis, Leprosy, HIV/AIDS and STIs Gastro-intestinal diseases
- Non-Communicable Diseases- Diabetes, Heart diseases, Cancer, Mental illness,
- Vector borne diseases- Malaria, Kala-azar, Filariasis, Japanese Encephalitis
- Environmental and Personal Hygiene- Personal hygiene Environmental sanitation
- Social Problems- Substance abuse, rational use of drugs

Unit 6: Scope of Health promotion and education in Nepal- 6 Hours

- **Scope of Health Promotion in Nepal**
 - Overview of Health program of MoH, INGOs, NGOs and bilateral organizations in relation to scope of health promotion
- **Scope of health education in Nepal**
 - Overview of Health program of MoH, INGOs, NGOs and bilateral organizations in relation to scope of health education
 - Career opportunities in Health Education in Nepal
 - Health counselor in Insurance companies
 - Educational institutions: Higher education opportunities, specialization in health promotion and education,
 - Job opportunities in different position as health educator
 - Teaching in school and colleges
- Objectives, role, functions and activities of National Health Training Centre (NHTC) and other academic institutes in training and health education
- Objectives, strategy, role, functions and activities of National Health Education, Information and Communication Centre (NHEICC).

Course Title	Behavioural Science and Mental Health	
Third Year	Fifth Semester	Course code: BPH 305.4-BSMH
Credit Hours: 3	Full Marks: 100	Pass Marks: 50

Course description

This course cultivates the students a holistic understanding of psychology, behavioural science and mental health its application in public health.

Learning Objectives

Upon the successful completion of the course, students will be able to:

- Identity and trace out the sources and the impacts of mental health in Nepal
- Explain the issues and problems in mental health and its management.

- Analyze the factors influencing motivation in adopting of innovations on acceptance of modern health care facilities
- Health psychologists study the role of psychology in health and wellbeing;
- They examine health beliefs as possible predictors of health-related behaviours;
- Health psychology also examines beliefs about illness and how people conceptualize their illness;
- Stress is the product of the interaction between the person and their environment – it can influence illness and the stress–illness link is influenced by coping and social support;
- Beliefs and behaviours can influence whether a person becomes ill in the first place, whether they seek help and how they adjust to their illness.

Course contents

Unit 1: Psychology

12 Hours

• Introduction to Psychology

- Concept, definition, branches of psychology

• Motivation

- Meaning and definitions of motivation.
- Maslow's concept of human motivation, including hierarchy of needs.
- Motivation and adoption of innovation.
- Motivation towards utilizing modern health facilities.

• Perception

- Meaning and definition of attention perception and sensation.
- Role of perception
- Perception of health beliefs and practices

• Emotion

- Meaning, characteristics
- Theories of Emotions
- States of Emotions: Positive emotion (Love, Laughter, Hope, Optimism, Self Confidence and Negative emotion (Anger, Fear, Sadness, Boredom, Guilt)

• Psychological relation

- Terminology and concepts useful in studying health problem.
- Body mind relationship
- Level of consciousness
- Dynamic system of personality.
- Drivers and motives

Unit 2: Behavioural health

20 Hours

- **Health behaviour**

- Definitions of Health Behaviour and Health Status.
- Relation of behaviour with morbidity and mortality
- Behavioural risk factor related to health
- Models of Health Behaviour.
 - Social Cognition Models
 - The Health Belief Model
 - Self-efficacy Theory
 - The Theory of Reasoned Action and Theory of Planned Behaviour
 - The stages of change model
 - Precontemplation
 - Contemplation
 - Preparation
 - Action
 - Maintenance

- **Illness Behaviour**

Concept, definition, type and interpretations of illness behaviour

- **Illness beliefs**

- The dimensions of illness beliefs
- A model of illness behaviour
- Health professionals' beliefs

- **The stress-illness link**

- Stress models
 - Cannon's 'fight or flight' model
 - Selye's general adaptation syndrome
 - Life events theory
- Stress causing illness

- **Chronic illness**

- Profile of an illness
- Psychology's role
- Health professional beliefs

- **Sickness role behaviour**

- Concept, definition, type, importance of sick role behaviour.
- The sick role: an introduction to illness as deviance and sickness as social deviance and being sick.
- The influence of sex, age, race and ethnicity, and social class on the sick role.
- The physician- patient role relationship: model's of interaction and cultural difference in communication
 - Person's sick role model.
 - Swaz and Hollander's model.
 - Health service provider and patients relationship.

Unit 3: Mental Health in Public Health

16 Hours

- **Concept of Mental Health**
 - Concept of normalcy, normal mind, characteristics of abnormalities
 - Prevailing misconception about occurrence and treatment of mental illness
 - Description of measurable indicators of positive well-being, good psychological adjustment
 - Personality development including behavioural, psychodynamic, cognitive, moral and other schools of personality development
- **General psychopathology**
 - Providing information to the health community about type, causes, clinical features, treatment and prevention of the following groups of mental disorders
 - A. Organic, including symptomatic mental disorders
 - Mental and behavioural disorders due to psychoactive substance use [with special emphasis on prevention of substance abuse]
 - Schizophrenia, schizotypal and delusional disorders
 - Mood disorders
 - Neurotic, stress- related and somatoform disorders
 - Behavioural syndromes associate with physiological disturbances and physical factors
 - Disorders of adult personality and behaviour
 - Disorders of psychological development
 - Mental health education for the individual and the community
 - Providing information about the concept of integration of mental health with general health services
 - Techniques of case finding, information about treatment facilities
 - Epidemiology of mental illness
- **Applications of principles of prevention and control of mental illness**
 - Different level of prevention

- Rehabilitation
- Community Mental Health program
- Policy and strategy of prevention and management strategy of Nepal Government

Teaching learning methods

Teaching learning methods of this course include didactic lectures, group work, and presentations review papers discussion in class room setting.

Evaluation

Internal assessment in different forms 20%

Final examination 80%

References

1. Gldeifalis "Oxford Textbook of Psychiatry".
2. Gibbons, "Integrated Clinical Science Psychiatry".
3. Martin P "Care of the mentally ill. The essentials of Nursing "Macmillan Press. Londoeg
4. Nepal M. Wright C "Manual of Mental Health" HLMC. Kathmandu, 1994
5. Swift CR, "Mental Health" AMREF, Nairobi.
6. Wallace HM&Girk K, "Health Care of Women and Children in Developing Countries" 1990.
7. Bhatia & Bhatia - Psychology and Nurses.
8. Sharma, Sarita: Psychology, HLMD, IOM.
9. Volkov FM, et al edited Psychology: Progress Publishers: Moscow, 1986.
10. Wood - Fundamental of Psychology.
11. Bennett, P. (2000). An Introduction to Clinical Health Psychology. Buckingham: Open University Press.
12. A useful introduction to how the theories and research of health psychology can be put into practice.
13. Bowling, A. (1995). Measuring Disease. Buckingham: Open University Press.
14. An overview of the theory behind measuring quality of life and a clear review of the existing scales for assessing health status.
15. Connor, M., & Norman, P. (eds) (1995). Predicting Health Behaviours. Buckingham: Open University Press.
16. A thorough description of social cognition models and the extent to which they predict health-related behaviour.
17. Ogden J. (2004). Health Psychology: A Textbook. 3rd edn. Buckingham: Open University Press.
18. This book has formed the basis for this chapter and provides grounding in health psychology at a more advanced level.

Course Title	Community Health Diagnosis	
First Year	Fifth Semester	Course code BPH 305.5-CHD
Credit Hours: 3	Full Mark: 100	Pass Mark: 50

Course Descriptions:

Community Health Diagnosis is an integrated course comprising several sub-specialties within community medicine course at large. This course is designed to enable the students to apply the principles of Primary Health Care (PHC) in the process of community health diagnosis, The aim of the community health diagnosis is to acquire skills to apply basic methodologies of community medicine – epidemiology, biostatistics, demography, family health, environmental health, health education, and public health sociology/anthropology. The course will also be helpful in learning from the community..

Learning Objectives:

Upon the successful completion of the course, students will be able to:

- Concept, importance, components and process of community health diagnosis
- Able to design and plan community diagnosis process to implement in practical setting
- Carry out a community diagnosis in actual setting/community
- Collect, analyze and interpret information required of a community diagnosis.
- Prioritize real problem in the community and conduct micro health project based on real needs
- Prepare a report of community diagnosis exercise and presentation in their respective college.

Course Contents

Existing	Micro-syllabus
Unit 1: Community Health Diagnosis 48 Hours	
<p>Introduction to community health diagnosis 4 Hours</p> <ul style="list-style-type: none"> ○ Concept and objectives of community health diagnosis ○ Differences and relationships between community health diagnosis and clinical diagnosis ○ Discuss the importance and relevance of community health diagnosis for public health 	

Components and processes of Community Health Diagnosis 22 Hours

- Components of Community health diagnosis
- Steps and processes of community health diagnosis
- Different approaches to community health diagnosis
- Differences between community diagnosis and clinical diagnosis
- Concept, definition and types of social mapping
- Designing of methodology, including sampling method, survey instruments,
- Different method/techniques (observation, interviews, focus group discussion, participatory appraisal, etc.) and tools (observation checklist, questionnaire, discussion guideline, etc.) used in Community Health Diagnosis.
- Qualitative and Quantitative data management and analysis of collected data during community diagnosis process
- Preparation of Dummy table, data analysis procedures and interpretation
- Techniques of findings presentation in the community and college
- Ethnical aspects (Ethnical aspects of community diagnosis)
- Techniques of applying finding based recommendation
- Importance of community participation and ways to engage community people in community diagnosis
- Importance and ways of prioritization of the problems in the community: Observed need, felt need and real need
- Resource (internal and external) identification and mobilization
- Concept, designing, implementation evaluation and sustainability activities of micro health project in relation to Community Health Diagnosis

- Differences between community diagnosis and clinical diagnosis

• Format for report of community diagnosis 2 Hours

- Preparation of written community diagnosis report: steps, components and format.

<ul style="list-style-type: none"> • Orientation to the students 20 Hours <ul style="list-style-type: none"> ○ Orientation about the proposed community <ul style="list-style-type: none"> - Orientation about the community they will be posted ○ Designing of CD process for implementation in the field <ul style="list-style-type: none"> - Orientation about process of field work - Literature review: Review of epidemiological studies (Review of theories, formula and indicators) - Setting objectives; Development of the general and specific objectives by each group - Identification of variable based on objective to be met - PRA and PLA approaches - Development and pre-test of specific tools for data collection, - Development of work plan in the community - Logistic arrangement and its management. 	

Teaching Learning Methods

Lectures, group discussions, library study assignments and home assignments
 Students will be assigned a household in the selected community where they will visit and collect the information.

Evaluation

Internal assessment in different forms 20%
 Final examination 80%

References

1. Hale. C; Shrestha IB and Bhattacharya. A “Community Diagnosis Manual” HLMC,IOM 1996.
2. Mc Curker J “Epidemiology in Community Health; American Medical and Research Foundation” Rural Health series, Kong M.et. al.“Tropical Medicine”.

3. Programme. FJ Bennett [ED]: "Community Diagnosis and Health Action- a manual for tropical and rural areas" 1997.
4. Thapa J, Tandan M and Subedi RK., A Text book of Community Health Diagnosis, 2012
5. Sydney L. Kark MD. "The Practice of Community Oriented Primary Health Care". Appleton- Century Crafts, A Publishing Divisions of Prentice- Hall Inc 1987.
6. Vaughan JP and Morrow RH [ED]; Manual of Epidemiology for District Health Management". World Health organization. Geneva 1989.