# **Community Health Strand**

## Curriculum



Department of Public Health Faculty of Medicine University of Kelaniya



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#### **COMMUNITY HEALTH STRAND**

#### Introduction

The community health strand provides you with learning opportunities during the first four years of the five year course. In order to achieve the institutional aims and objectives a wide range of learning activities are used. These include traditional lectures, small group discussions, a research project, community medicine clerkship and a community attachment lasting almost one year.

At the end of the four years you would have

- 1. gained knowledge about the social, environmental, behavioral and biological determinants of health and disease
- 2. acquired the necessary attitudes and skills required for lifelong learning
- 3. developed the knowledge, attitudes and skills necessary to deliver Primary Health Care

Achievement of learning outcomes is assessed by utilizing a wide range of assessment methods.

This handbook provides the course contents, details of the various learning activities and the assessments/ evaluations.

### 01. LEARNING OBJECTIVES AND COURSE CONTENT

#### 01.1 Phase 1

### i. Health and Health Care services – (Lectures - 7 hours + Tutorials - 2 hours)

Objective	Content	T-L Activity	Time Hrs.
Define Health Describe concepts of disease	Definition of Health & well being Concepts and Determinants of Health and Disease Measuring health	Lecture	1
Describe the 'level of prevention' and relate them to the 'natural history of disease; Describe broad categories of activities, each level of prevention Describe the importance of the knowledge on levels of prevention to health professionals	Natural history of the disease Levels of prevention broad categories of activities The importance of the knowledge	Lecture	1
Explain the term 'healthy lifestyle' and identify its importance in health	Factors that influence 'lifestyle' of an individual / community Methods that can be used to promote healthy lifestyle	Lecture	1
Describe the different social organizations and the ways in which its influence health of an individual / community	Concepts in medical-sociology, social structures, social organization, family lifecycle, Social and cultural influences on health and illness	Lecture	1
Describe Primary Health Care (PHC)	Definition Components of PHC Implementation in Sri Lanka	Lecture	1
Describe Health Care Delivery System in Sri Lanka	Concept of health care Patient Care Services Public Health Services Levels of health care Functions of Health Care Institutions Health man Power	Lecture	1
Describe the impact of economy on health and health care	Define Health Economics Health economy linkage Demand and supply for health care Health expenditure	Lecture	1

Objective	Content	T-L	Time
		Activity	Hrs.
Describe the factors that affect the size	Definition of Demography		
and composition of the population	Fertility, Mortality & Migration	Lecture	1
	Age & sex composition		
	Age pyramids		
Describe the sources of population data	Population census		
	Demographic & Health Surveys	Lecture	1
	Registration systems & their		
	limitations		
	Field visit and student presentations		8

## ii. Demography – (Lectures - 2 hours + Tutorials - 1 hour)

## iii. Environmental Health – (Lectures - 8 hours + Tutorials - 4 hours)

Objective	Content	T-L	Time
		Activity	Hrs.
Describe the sources of	Air pollution		
environmental pollution and health	Out door & indoor, sources of pollution,		
effects	pollutants, measurement or monitoring	Lecture	2
	of pollution / pollutants, health effects		_
	and extend of problem		
	Water pollution		
	Water environment, sources of		
	pollution, pollutants,		
	measurement of pollution / pollutants,		
	health effects		
	(including water related diseases),		
	extend of problem and water		
	conservation)		
	Soil pollution		
	Pollution by energy sources(Noise,		
	heat, light, electro-magnetic waves and		
	vibration)		
Describe the causes and effects of	Causes		
climate change related to health	Effects	Lecture	1
	Mitigating the climate change		
Discuss effects of unplanned	Causes of increasing urbanisation and		
urbanization and industrialization	industrialisation	Lecture	1
	industrialisation and health issues		
	urbanisation and health issues		

Objective	Content	T-L	Time
		Activity	Hrs.
	urban underserved settlements		
	sustainable urbanization		
Describe measures related to habitable	Housing		
housing and related health effects	Legislations related to housing	Lecture	1
	features of habitable house		
	role of PHI related to housing		
	health effects related to poor housing		
	Fire safety/Electrical safety		
	Prevention of home accidents		
Describe the categories of waste and	Sources of waste		
waste management technique	Domestic, streets and market,	Lecture	1
	healthcare and industrial wastes		
	Hazards of waste and hazardous waste		
	Waste management techniques		
	Rural, urban and marine setting		
Describe the strategies for prevention of	Conventions and legislatures on		
environment pollution	environmental health / International and	Lecture	1
	national		
	Prevention and control of		
	environmental pollution		
	Health policies related to environment		
	Green environment		
	Green building concept in hospitals		
	Environmental friendly buildings		
	NCD and the second and the second second		
	NCD prevention and environment		
	Environmental and Health Impact		
	Bisk assessment, Risk management		
	and risk reduction		
	Use of GIS in environmental health		
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Describe measures related to food safety	Food safety and health		
	Legislations related to food safety /	Lecture	1
	Authorities		

## iv. Normal growth – (Lectures - 3 hours)

Objective	Content	Method	Time
			Hrs
Describe normal	Attributes of normal growth		
growth	Growth chart, Breast feeding	Lecture	3
	Weaning food, Balanced diet		

### 01.2. Phase II

## i. Basic Epidemiology (Lectures - 12 hours + Tutorials - 4 hours)

Learning Objectives	Content	Activity	Time
Describe concents of	Definition of epidemiology		
epidemiology	Enidemiologic approach	Lecture	1
	Descriptive epidemiology in terms of time	Lootare	1
	place and person		
	History – Evolution of epidemiology		
	Uses of epidemiology		
	Natural history of disease		
Define, calculate and interpret	Measurements in epidemiology: Rate.		
measures of morbidity	Proportion and Ratio	Lecture	1
	Measures of disease frequency:	200000	-
	Cumulative incidence. Special incidence rates:		
	Uses of incidence . Prevalence Rate:		
	Point prevalence/ Period prevalence		
	Relationship between incidence and prevalence		
	Uses of prevalence		
Define, calculate and interpret	Measures of mortality:		
measures of mortality	Crude death rate	Lecture	1
	Specific death rates: age, sex & cause		
	Proportionate Mortality		
	Proportionate Mortality Ratio		
Describe different	Classification of study designs		
epidemiological study designs,	Descriptive studies, Case control studies	Lecture	2
uses and limitations	Cohort studies, Cross sectional studies		
Calculate and interpret measures	OR, RR, AR, ARP, Mean difference		
of effect	CI, 95% CI for effect measures	Lecture	1
	Interpretation / application of effect measures		
Describe and critically read a	Experimental studies:		
research paper on controlled trial	Difference between experimental and quarsi-	Lecture	1
research paper on controlled that	experimental studies	Lecture	1
	Different types of exp. Study designs		
	Community trials/ Drug trials		
	Before and after designs		
	Pararalled group designs		
	Phase I II III and VI trials		
	Selection of experimental group		
	Selection of control group/s:		
	Application of simple randomization –		
	advantages /disadvantages		
	Single / double blinding.Intention to treat		
	analysis		

Learning Objectives	Content	Activity	Time
Describe a screening test	Screening criteria		
	Sensitivity, specificity, FPR, FNR, Predictive	Lecture	1
	value		
	Likelihood ratio		
Describe factors considered to	Causal criteria		
determine causation of disease		Lecture	1
Describe quality of data	Selection bias, information bias and		
	confounding bias	Lecture	1
	Reliability		
	Validity		
Describe "Evidence Based	Definition of EBM and EBPH. level of		
Medicine" (EBM)	evidence,	Lecture	1
	Advantages of systematic review and Meta-		
	analysis		
	Steps involved in designing a systematic review		
	Interpretation of a forest plot		
Explain the importance of	Different between quantitative and qualitative		
qualitative research	research	Lecture	1
	Focus group discussions		
	In depth interviews		

## ii. Statistics - (Lectures - 8 hours + Tutorials - 4 hours)

Objective	Content	T-L	Time
		Activity	Hrs.
Summarize and present a	Data types	Lecture	2
data set using appropriate	Scales of measurement		
summary statistics & graphical	Measures of central tendency:		
methods	Average- Mean, Median, Mode		
	Measures of dispersion:		
	Range, Quartiles, Standard Deviation		
	Significant figures, Rounding, Tables		
	Graphs: Histograms, Stem & Leaf Plots, Box		
	plots, Bar & Pie Charts: (simple, compound and		
	component), Pictogram,		
	Scatter diagram, Line Graph		
Describe the sampling	Sampling techniques: simple		
methods and comment on the	random, systematic, stratified,	Lecture	1
appropriateness of the	multistage, cluster		
sampling method used for a	Table of random numbers,		
particular study	computer generated random, numbers		

Objective	Content	T-L Activity	Time Hrs.
Explain confidence intervals	Standard error of mean, Standard error of percentage/ proportion, SE of difference between two means, S E Of difference between two proportions	Lecture	2
Perform the following significance test – Normal test (for means and percentages), X2 test	Null hypothesis Normal test/Z test, t test, Chi square test Type I error and Type II error	Lecture	1
Interpret correlation coefficient and linear regression	Correlation coefficient, Linear Regression, Regression Coefficient.	Lecture	1
Explain the need for standardization of mortality and morbidity statistics.	Standardized Mortality rate/ratio - Direct standardization, Indirect standardization	Lecture	1

## iii. Reproductive Health – (Lectures - 25 hours + Tutorials - 3 hours)

Learning Objectives	Content	Activity	Time
Describe Reproductive Health	Definition of RH/ Components of RH		
concepts	Family health program in Sri Lanka	Lecture	1
	– objectives and strategies		
	Safe motherhood		
	Mother Baby package		
	Life cycle approach		
Describe pre-natal, natal and	The need for provision of field maternal and		
post-natal care	child care	Lecture /	1
	The role of MOH, PHN and PHM in the	Clerkship	
	provision of maternal care, Pre conceptual		
	counseling, Antenatal care		
	Objectives of home visits		
	Clinic activities – health education,		
	Anthropometric measurements, Investigations,		
	vitamin, mineral and Food supplementation,		
	immunization proper Maintenance of records and		
	returns		
	Screening for high risk conditions and referral		

Learning Objectives	Content	Activity	Time
	Natal care Importance of hospital delivery The need for trained assistance for home deliveries Hospital delivery: Infection control at the labour room Post natal Visits Objectives of home visits for mother and neonates Early identification of puerperal complications and referral, Nutrition during lactation		
Describe child health services	Child health services – Institutional and Field Role of public health staff in Delivery of child health services.	Clerkship	
Describe activities of the CWC	Organization Facilities available	Clerkship	
Describe Infant feeding practices	Breast feeding: Composition of breast milk, Advantages – mother & infant, Contraindications, Assessment of adequacy Formula feeding: Concepts of formulae I,II,& III Special formulae, Advantages & Disadvantages Absolute indications Complementary feeding: Concepts of complementary feeding, Planning to complementary feeding, Value of different complementary foods (CF), Conjee, Fruit juices, home made CF, commercial CF Composition / Constitution Frequency Errors/ Misconceptions	Lecture	2
Describe feeding during second year	Appetite during this period Disadvantages of force feeding Self selection of diet Self feeding/ Independence of a Child eating habits	Lecture	1/2

Learning Objectives	Content	Activity	Time
Describe Nutritional assessment	At national and individual level		
methods	Anthropometric	Lecture	1
	Biochemical, Bio physical	Clerkship	
	Clinical, Dietary assessment		
	Advantages and disadvantages of each method		
Interpret nutritional status using	Gomez's classification		
different classifications	Waterlow classification	Lecture	1⁄2
	Welcome classification		
Describe the Child Health	Content of CHDR		
Development Record (CHDR)	Growth monitoring	Lecture	1
	Early detection of PCM / Growth faltering,	Clerkship	
	underweight, westing and stunting		
	Management of PCM		
	Advantages and limitations of the CHDR		
Describe failure to thrive (FTT)	Definition		
	Causes: Nutritional deprivation	Lecture	1 1/2
	Pathological conditions		
	Investigation of FTT		
	Principles of management		
Describe the nutritional status	Epidemiology of malnutrition:		
	Under nutrition, Obesity	Lecture	1
	Sri Lankan situation with regard to Protein		
	Energy Malnutrition (PEM)		
	Kwashiorkor & Marasmus:		
	Clinical picture/ Investigations		
	Management principles		
	Diet formulation/ Feeding methods		
	Nutritional advice/ Follow up		
	Childhood obesity:		
	Complication		
Describe nutritional anaemia	Definition		
Describe nutritional anaenna	Prevalence – global and National Actiology	Lecture	1
	Importance as a public health problem	Lecture	1
	Prevention		
Describe IDD	Classification (WHO)		
	Prevalence – global and national	Lecture	1/2
	Aetiology		
	Importance as a public health problem		
	Prevention		

Learning Objectives	Content	Activity	Time
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Describe vitamin A deficiency	Classification (WHO)	T (	1/
	Prevalence	Lecture	1/2
	Actiology		
	Importance as a public health problem		
Describe community or no sch	Prevention East a magnetic structure		
Describe community approach	Food related programs	Lastura	1
deficiencies	Nutritional education	Lecture	1
deficiencies	Nutritional education		
Describe the Current FPI	EPI program Cold chain		
programme	Management of 'missed immunisation' and	Lecture/	1
	absence of BCG scar	Clerkship	1
	Contraindications	crementp	
	Absolute, Relative, False		
	Adverse Events Following Immunisation and		
	management		
	Non EPI vaccines and their		
	advantages		
	Vaccination coverage		
Describe Mental health	Concepts of ECCD		
promotion in childhood	Life skills	Lecture/	1
	Parenting skills	Clerkship	
	Services available		
Describe the school health	School health programme:	<b>T</b> ( )	1
services	Objectives	Lecture/	1
	Components	Clerkship	
Describe Adolescent Health	Deficiencies		
Describe Adolescent Health	Haplth problems social and montal	Locturo	1
	Nutrition Euture changes	Lecture	1
Describe methods of	Millennium Development Goals (MDG)		
minimizing childhood	Childhood mortality rates:	Lecture	1 1/2
mortality	Still birth rate	Lecture	1 /2
literative	Perinatal mortality rate (PMR)		
	Neonatal mortality rate (NMR)		
	Infant mortality rate (IMR)		
	Child mortality rate		
	Main causes of childhood mortality		
	Methods / strategies to minimize		
	childhood mortality		
Describe different family	Benefits, Classification of FP methods		
planning methods available in	Each method to be described in terms of	Lecture/	3
SL	Mode of action	Clerkship	

Learning Objectives	Content	Activity	Time
	Indications and contraindications		
	Eligibility criteria		
	Effectiveness, effective period & return of		
	fertility		
	Side effects and management		
	Relevant Advice		
	Follow up		
	Counseling – "GATHER"		
	Emergency contraception		
Describe the fertility control	Measures of fertility – CBR, GFR,		
policy in Sri Lanka	ASSR, ASFR, TFR, GRR, NRR,	Lecture	1
	Replacement level fertility		
	Goals, targets and objectives		
	Contraceptive prevalence and FP indicators		
	Incentives offered		
	Unmet need of FP		
Describe measures of	Definition of maternal death		
preventing maternal deaths	Epidemiology	Lecture	1
	The need for investigation	2000010	-
Describe gender issues	Equity, Gender discrimination		
	Violence against women	Lecture	1
	Issues of human rights		
Describe activities of Well	Objectives		
Woman Clinic	Activities -	Lecture/	1⁄2
		Clerkship	
Describe monitoring and	Importance of monitoring and		
evaluation of maternal and	evaluation	Lecture	1/2
child health services	Indicators – ante and post natal and outcome		
	indicators		

## iv. Communicable Diseases – (Lectures - 20 hours + Tutorials - 3 hours)

Learning Objectives	Content	Activity	Time
Define epidemic, endemic and	Definition of terms indicated		
pandemic	Different types of epidemics	Lecture/	1
Describe notification of	Definition of incubation and	Clerkship	
communicable diseases	communicable periods		
	Epidemiological transition		
	List Groups A & B notifiable diseases		

Learning Objectives	Content	Activity	Time
Describe the notification system	Describe the notification system		
	Role of medical practitioner treating the patient		1
	Role of MOH		
	Role of PHI		
Describe investigation of an	List the steps		
epidemic		Lecture	1
Describe control and prevention	Epidemiology – Global and Local	T .	
of diarrhoeal diseases	Diarrhoeal Disease Program –	Lecture	1
	Objectives and strategies		
	Management of Diarrhoea		
	Definition of diarrhoea		
	Asses dehydration state – A.B.C plan		
	3 rules of home management of		
	diarrhoea: Prevention of dehydration		
	Nutrition during Diarrhoeal episode and		
	thereafter Referral when relevant		
	When to use antibiotics		
	Prevention of Diarrhoea		
	Safe food		
	Safe water		
	Good personal hygiene		
	Sanitary facilities		
	Measles immunization		
Describe management of upper	Acute respiratory tract infections		
respiratory tract infections	Epidemiology – global and local	Lecture	
	ARI program – objectives and		
	strategies		
	Management		
	Assessment of a child with		
	respiratory difficulty		
	Classification according to severity		
	When to refer		
	Treatment		
	Prevention		
	Identify risk factors		
	Ear Infections		
	Management of the child with an ear infection /		
	sore throat		
	Assess,Classify		
	Treatment/ Prevention		
Describe control and prevention	Importance as a public health problem		
of Tuberculosis	Epidemiology	Lecture/	1
	National Program for Tuberculosis	Clerkship	
	Control and Chest Diseases –		

Learning Objectives	Content	Activity	Time
	Objectives		
	Organizational structure		
	Diagnosis		
	Treatment-regime + DOTS		
	programme		
	Notification and follow up		
	Role of immunization with BCG		
Describe control and prevention	Importance as a public health		
of Leprosy	problem	Lecture	1
	Epidemiology		
	Role of ALC – current situation		
	Control activities		
	Diagnosis and treatment regimes		
Describe control and prevention	Importance of J.E. as a public		
of JE	health problem	Lecture/	1/2
	Epidemiology	Clerkship	
	Details of Vector	-	
	Control activities carried out in Sri Lanka at		
	present		
	Immunization		
Describe control and prevention	Importance of Dengue/DHF as a public health		
of Dengue/ DHF	problem	Lecture/	1/2
	Fnidemiology	Clerkshin	/ _
	Vector and transmission with life cycle	Chemisinp	
	Control activities		
	Identification of cases		
	Management plan		
Describe control and	Epidemiology		
prevention of Leptospirosis	Preventive measures	Lecture	1/2
I THE FILL AND A THE			
Describe control and prevention	Epidemiology		
of Cholera	Control measures :	Lecture	1/2
	Hospital – cases		
	Handling of dead bodies		
	Community -		
	Preventive measures		
Describe control and preventive	Public health importance		
measures of Measles	Goals & targets/strategies	Lecture	1/2
	Epidemiology, Clinical features		
Describe preventive measures for	Neonatal tetanus: Objectives		
Tetanus (NS)	targets and strategies	Lecture	1/2
	Enidemiology Clinical aspects	Lociule	/2
	Prevention		
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Learning Objectives	Content	Activity	Time
	Adult tetanus:		
	Public health importance		
	Epidemiology & clinical aspects		
	Prevention		
Describe control and preventive	Public health importance		
measures for Polio	Polio eradication program –	Lecture/	1
	objectives, targets and strategies	Clerkship	
	Epidemiology		
	AFP surveillance		
Describe control and prevention	Epidemiology		
of Diphtheria	Clinical features	Lecture	1/2
	Prevention		
Describe control and prevention	Epidemiology		
of Pertussis	Clinical features	Lecture	1⁄2
	Prevention		
Describe control and prevention	Epidemiology		
of STII	Control – syndromic management	Lecture	1
	Prevention		
Describe control and prevention	Public health importance		
of HIV/ AIDS and develop skills	Epidemiology	Lecture	1
in counseling	National program –objectives,		
	targets and strategies		
	Counseling – pre and post test,		
	Primary, secondary and		
	Supportive		
	Universal precautions		
	Human right issues		
	HIV/TB interactions		
Describe control and prevention	Epidemiology		
of Rabies	National program – objectives,	Lecture	1
	targets and strategies		
	Prevention of canine rabies		
	Management plan of a dog bite		
	Administration of immunoglobulin		
	Post exposure vaccination		
Describe control and prevention	Epidemiology /historical events		
of Plague	International notification	Lecture	1⁄2
	Routine control measures		
	Control measures during outbreaks		
Describe control and prevention	Epidemiology		
of Chicken pox	Control measures including	Lecture	1/2
- · · · · ·	vaccination/chemotherapy		
Describe control and prevention	Epidemiology		
of enteric fever	Control measures. Prevention	Lecture	1/2
			· -

Learning Objectives	Content	Activity	Time
Describe control and prevention	Epidemiology		
of filariasis	Diagnosis	Lecture/	1
	Anti filariasis campaign –	Clerkship	
	objectives, targets and strategies		
	Case detection and management,		
	Vector control		
	Mass chemotherapy – health		
	education		
	Management of disability		
Describe control and prevention	Epidemiology- ecological aspects		
of malaria	Anti malarial campaign objectives, targets and	Lecture	2
	strategies		
	Malaria in pregnancy, Treatment regime and		
	drug resistance		
	Prevention of malaria in travelers,		
	Roll back malaria Initiative		
	Control activities / Eradication strategy		
Describe control and prevention	Epidemiology		
of hepatitis A, E, B, C.	Public health importance	Lecture	1⁄2
	Control measures		
	Prevention { active and passive vaccination }		
Describe prevention of	Epidemiology		
Congenital Rubella Syndrome	Public health importance	Lecture	1/2
	Prevention		
Describe prevention of Mumps	Epidemiology	Lecture	1/2
	Prevention		

#### v. Health Promotion – (Lectures - 6 hours + Tutorials - 1 hours)

Learning Objectives	Content	Activity	Time
Define and describe health promotion	Definition, concepts of health promotion	Lecture	2
Define and describe health education and its scope and limitations	Definitions and concepts of Health Education, Settings and orientation of health education	Lecture	1
Describe a model of behaviour in relation to health	Health Belief Model	Lecture	1

Learning Objectives	Content	Activity	Time
Critically comment on health education materials	Preparation of posters, leaflets and audio material	Lecture	1
Describe the stages/steps in a health education program	Planning, implementation and evaluation	Lecture	1

### vi. Occupational Health – (Lectures - 6 hours + Tutorials - 1 hour)

Learning Objectives	Content	Activity	Time
Describe the relationship between health and work	Aims of occupational health Importance Role of occupational health service	Lecture	2
Describe occupational health hazards and its' control	Occupational health hazards and its' control & prevention Occupational Cancers, Lung and Skin disorders	Lecture	3
Describe existing legislature in relation to work	Legislature - Factories ordinance & others Eg: Workman's compensation Act	Lecture	1

## vii. Health Planning & Management – (Lectures - 8 hours + Tutorials - 2 hours)

Learning Objectives	Content	Activity	Time
Describe health indicator	Socio economic indicators		
	Health care indicators	Lecture	1
	Life expectancy		
	PQLI, HDI		
Describe the existing National	Hospital information System		
Health information system.	Registration of vital events	Lecture	1
	Death certificate (ML)		
Describe the planning process	Definitions		
	Types of planning and steps in	Lecture	2

Learning Objectives	Content	Activity	Time
	planning		
	Problem identification /situational Analysis		
	Problem prioritization		
	Setting objectives and targets		
	Implementation		
Describe the monitoring and	Purpose of monitoring and		
evaluation mechanism of Health	evaluation	Lecture	1
programs.	cost-effectiveness, cost-benefits		
	Difference between monitoring and evaluation		
	Eg. Monitoring and evaluation of MCH		
	programme.		
Describe Health as a "Right"	Meaning of Health rights		
C C	Relevant UN documents	Lecture	1
	Reproductive Health Rights		
	Children's Rights		
	Patient Rights		
	The use of "Health Rights" approach for		
	improvement of health care		
	improvement of neutriceare.		
Describe the factors that affected	Factors that affected the evolution		
the evolution of and future	Health systems in developed countries	Lecture	1
challenges for the health system	Future challenges for the health system	Lecture	1
chancinges for the health system	i uture chancinges for the hearth system		
Describe the Health Care	Concept of quality in health care		
Quality in Sri Lanka.	Quality assurance of patient care services	Lecture	1
	Strategies for quality improvement		

## viii. Special Topics - (Lectures - 12 hours + Tutorials - 2 hours)

Learning Objectives	Content	Activity	Time
Describe population size and	Population growth rate		
composition	Natural increase	Lecture	1
	Population projections		
	Demographic transition,		
	Dependency ratio		
Describe health related problems	Definition		
of elderly	Sri Lankan situation, Implications of ageing	Lecture	1
	Health problems among elderly		
	Role of family and community in the caring for		
	elderly		
	National policy for the welfare of the elders		

Learning Objectives	Content	Activity	Time
Describe health related problems	Definition - DALY, QALY		
of disabled	Different types	Lecture	1
	Rehabilitation – institutional &		
	community		
Describe health related problems	Definition		
of displaced	Health problems	Lecture	1
	Provision of services		
Describe control and prevention	Obesity		
of non communicable diseases	Diabetes M	Lecture	1
	Hypertension, CVA		
	Ischemic Heart Disease Cancers		
Describe prevention of accidents	Epidemiology		
	RTA - Risk factors – Pedestrians	Lecture	1
	Motorists (ML) Vehicles, Road		
	surface		
	Home Accidents		
	Prevention		
Describe control and prevention	Alcohol (Toxicology)		
of substance abuse	Smoking (CRS)	Lecture	1
	Hard Drugs		
	Epidemiology – Risk factors		
	Secondary prevention –		
	rehabilitation		
	Primary prevention		
Describe International Health	International health regulations		
Regulations	Port health services	Lecture	1
Describe prevention of suicide in	Epidemiology		
Sri Lanka	Risk factors, Prevention	Lecture	1
Describe prevention of blindness	Epidemiology		
and deafness	Causes and risk factors, Prevention	Lecture	1
Describe nutrition in special	Obesity		
disease status	CVS, Diabetes	Lecture	1
Describe disaster management	Definition, types, consequence of disaster		
	Disaster management – immediate. intermediate	Lecture	1
	and long term	• • • • • •	
	Environmental health during emergencies		
	Reproductive health during emergencies		
	Nutrition during emergencies		
	Nutrition rehabilitation programme		
	Disaster preparedness		
	L'Isustar propurounoss		1

#### **COMMUNITY MEDICINE CLERKSHIP**

Community Medicine Clerkship is a field based appointment comprising a series of visits to selected settings involved in delivery of public health services. This appointment is scheduled over four weeks during the fourth year of the course. You will visit relevant institutions/ field based settings and gain awareness on how public health related services are provided to the community. These visits will give you the opportunity to participate in community health activities. A training to improve skills on health promotion will be given early in the appointment, enabling you to develop and deliver effective health promotional messages using innovative techniques. During the appointment students are encouraged to critically evaluate the observed services and the health promotional strategies adopted.

#### How would this appointment help you in your future practice as a doctor?

This appointment helps you to develop skills and attitudes of maintaining professional standards, team work and communication skills that are essential to a doctor. It enables you to understand social dimensions of health and disease; gain knowledge on health promotion and disease prevention, population health and health systems and healthcare planning and management including information management providing a wider understanding of epidemiology and demography. It will expose you to some of the legal responsibilities of a doctor and will be helpful to develop certain clinical skills.

Places to be visited during the clerkship programme

- 1. Medical Officer of Health, Ragama
- 2. Public Health Inspector
- 3. Public Health Midwife
- 4. Office of the Regional Director of Health Services, Gampaha
- 5. Antenatal clinic
- 6. Child welfare clinic
- 7. District Hospital
- 8. Anti-filariasis Campaign, Kiribathgoda
- 9. School Medical Inspection
- 10. NPTC &CD, Welisara
- 11. Factory visit
- 12. Correctional Centre for Youthful Offenders, Pallansena, Negombo
- 13. St Joseph's School for the Deaf, Ragama
- 14. Infection Control Unit, Colombo North Teaching Hospital, Ragama
- 15. Water Treatment Plant and Sewerage Treatment Plant, Raddolugama
- **16. Community Dental Services**

#### 1. Medical Officer of Health (MOH)

#### Learning outcomes

At the end of the visit, the student will be expected to:

- Describe the organisational structure of a MOH area and the method of primary health care delivery
- Describe the role of a MOH as a public health manager, community leader and a public health service provider
- Demonstrate an understanding of the utilization of data for planning primary health care services
- Describe the supervisory role of the MOH and methods employed to evaluate field staff

#### **Content areas**

- Organizational structure of the MOH area
- Demographic characteristics of the MOH area
- Public health problems in the area
- Health facilities in the area
- Other sectors important for delivery of primary health care
- Duties of an MOH
- Maternal and child health services
- EPI programme, maintenance of cold chain for vaccines, open vial policy and adverse effects following immunization (AEFI)
- Investigation of notifiable diseases
- Growth monitoring programme
- Well Woman Clinic programme and Family Planning services
- School health services
- Registers and records maintained by the MOH and the returns prepared
- Dissemination of data generated at divisional level
- Mechanisms for supervision and evaluation of field staff
- Planning of primary health care services

#### RECOMMENDED READING MATERIAL

- > Duty list of MOH
- Ministry of Health Circular on maintenance of an MOH office, Circular no. 110.

#### 2. Public Health Inspector (PHI)

#### Learning outcomes

At the end of the visit, the student will be expected to:

- Describe the role of the PHI in the control of communicable diseases, investigation of notifiable diseases, school health, food safety, housing, environmental sanitation and safe water
- Describe the process of inspecting a food outlet and follow up action
- Demonstrate an understanding of laws related to habitable housing
- Describe methods of ensuring safe water

- Describe methods of garbage disposal, and environmental sanitation
- Describe the registers and records maintained by PHIs and returns submitted
- Discuss the usefulness of the data gathered and generated by PHIs in relation to their scope of work.

#### **Content areas**

- Duties of PHIs
- Organisation of PHI activities
- Notifiable diseases, process of investigation of a notification and activities for control of communicable diseases
- Food Act and activities on ensuring food safety including survey of food handling institutions, formal and informal sampling and legal action
- Ensuring safe water, chlorination of wells and testing water samples
- Basic sanitation facilities available in the area and activities for improving environmental sanitation
- Examining housing plans and sites for recommendations on habitable housing
- School health inspections and activities
- Provision of services for mass population gatherings
- Registers and records maintained and returns submitted

Learning activity: Observation of the office of the PHI, activities for ensuring safe water supply and inspection of a food handling institution

#### RECOMMENDED READING MATERIAL

- Herath H.M.S.S.D 1989, A manual for the Sri Lanka Public Health Inspector, Ministry of Health, Colombo.
- > Duty list of PHI, circu dated

#### 3. Public Health Midwife (PHM)

#### Learning outcomes

At the end of the visit, the student will be expected to:

- Describe the role of the PHM in the delivery of domiciliary maternal and child care services
- Describe the process of registering a pregnant mother and following her up until delivery
- Describe the process of caring for post partum mothers and educating the mother on child care
- Describe child care activities carried out by PHMs
- Describe family planning services provided by PHMs
- Describe health promotional and other health care services provided by the PHM
- Describe the registers and records maintained by PHIs and returns submitted
- Discuss the usefulness of the data gathered and generated by PHIs in relation to their scope of work.

#### **Content areas**

- Duties of the PHM
- Organisation of the PHM area
- Registration of fertile couples/ eligible families and provision of domiciliary care
- Registration of pregnant mothers and field and clinic based antenatal care
- Postnatal visits and post partum care
- Registration of infants and well baby care including immunisation
- Growth Monitoring Programme at field and clinic level
- Family Planning services
- Well Woman care
- Indicators of PHM's performance
- PHM's diary, registers and records maintained and returns submitted

Learning activity: Observation of the office of the PHM and delivery of domiciliary care

#### RECOMMENDED READING MATERIAL

- > Duty list of PHM
- Family Health Bureau, Annual Report on Family Health Sri Lanka -2007-2007, 'Clinic Activities', pp 4 -11, Ministry of Health, Colombo.

#### 4. Office of the Regional Director of Health Services (RDHS)

#### Learning outcomes

At the end of the visit, the student will be expected to:

- Describe the role of the RDHS in providing health care services in the district
- Describe the role of the MO-MCH in providing family health services in the district
- Describe the role of Regional Epidemiologist in the control of communicable diseases in the district
- List the public health staff at regional level and describe their roles and responsibilities
- Describe the process of an investigation of a maternal death
- Describe measures taken in the district regarding emergency preparedness and rapid response
- Describe and discuss district level public health reviews
- Discuss the process of prioritization of health problems at district level.

#### **Content areas**

- Responsibilities of the RDHS
- Organisation of health care services in a district
- Decentralised health institutions under the provincial health services
- Planning health care services using regional data
- Duties of the MO-MCH
- Duties of the RE
- Supportive public health staff at regional level
- Investigation of a maternal death in a district
- Managing epidemics at district levels

- District level public health reviews
- Prioritizing health problems in an area

#### RECOMMENDED READING MATERIAL

- ➢ Duty lists of MO(MCH) and RE
- Family Health Bureau, Overview of Maternal Mortality in Sri Lanka, 2009, Ministry of Health, Sri Lanka.

#### 5. Antenatal clinic

#### Learning outcomes

At the end of the visit, the student will be expected to:

- Describe and discuss the purpose of conducting ANCs
- List clinic procedures and services provided at the ANC giving reasons as to why these services are provided
- Describe and discuss the pregnancy record
- List the indications for specialist care and describe the referral process
- Assess the quality of services provided at a ANC
- Describe the usefulness of clinic records and returns
- Discuss the constraints in providing services at ANC and make suggestions to improve these services.
- Critically evaluate the services provided and make recommendations to improve the services

#### **Content areas**

- Organisation and flow of an antenatal clinic
- Antenatal investigations
- Supplementation in pregnancy
- Immunization in pregnancy
- Monitoring of the pregnancy in the ANC
- Indications for specialist care and the referral process
- Health promotion, education and antenatal counselling
- Pregnancy Record
- Clinic records and returns

Learning activities:

- Observe service delivery by following a pregnant female through the process of the ANC
- Provide health promotion and counselling to pregnant females and their family members

#### RECOMMENDED READING MATERIAL

- Conducting Antenatal Clinic, General circular no. 01-24/2004, Ministry of Health, Sri Lanka.
- Family Health Bureau, Annual Report on Family Health Sri Lanka -2007-2007, 'Clinic Activities', pp 14 -15, Ministry of Health, Colombo.

#### 6. Child Welfare Clinic (CWC)

#### Learning outcomes

At the end of the visit, the student will be expected to:

- Describe and discuss the purpose of conducting CWCs
- List clinic procedures and services provided at the CWC giving reasons as to why these services are provided
- Describe and discuss the CHDR
- Describe the referral process
- Assess the quality of services provided at a CWC
- Describe the usefulness of clinic records and returns
- Discuss the constraints in providing services at CWC and make suggestions to improve these services.
- Critically evaluate the services provided and make recommendations to improve the services

#### **Content areas**

- Organisation of a child welfare clinic
- Services provided at a CWC
- Child Health Development Record and its use for healthcare providers and parents
- Components of the Growth Monitoring Programme
- Childhood immunization and the steps in the immunization procedure
- Infant screening
- Indications for specialist care and the referral process
- Health promotion and education for parents
- Indications for supplementation in childhood

Learning activities:

- Observe service delivery by following a child through the process of the CWC
- Provide health promotion and counselling to parents of pre-schoolers

#### RECOMMENDED READING MATERIAL

- Ministry of Health 2004, 'Child Health Development Record', Colombo.
- Ministry of Health 2007, 'Child Health Development Record', Colombo.
- > Family Health Bureau, Integrated Nutrition Package, Ministry of Health, Colombo.
- Epidemiological Unit 2002, 'Immunization Handbook', Ministry of Health, Nutrition and Welfare, Colombo.
- Family Health Bureau, Annual Report on Family Health Sri Lanka -2007-2007, pp 15 -16, Ministry of Health, Colombo.

#### 7. District Hospital/Peripheral Unit

#### Learning outcomes

At the end of the visit, the student will be expected to:

- Describe the services provided at a District Hospital/PU
- Describe the organisational structure of a DH/PU
- Demonstrate an understanding of how a DH/PU provides primary health care

- Demonstrate an understanding of the flow of health information from a DH/PU to the Medical Statistics unit
- Describe the registers and returns used to collect and disseminate health information at a hospital
- Critically evaluate the validity of health information generated at a hospital
- Discuss the role of DMO as a manager

#### **Content areas**

- Organisational structure of a DH/ PU
- Services provided at a DH/PU
- Role of the medical officer in the health information system and as a manager
- Collection of morbidity and mortality data from wards, coding, tabulation and preparation for transmission to the Medical Statistics Unit
- Indoor Morbidity and Mortality Register
- Indoor Morbidity and Mortality Return
- ICD coding

Learning activity: Observe diagnoses documented by the medical officers on BHTs and critically evaluate their validity

#### RECOMMENDED READING MATERIAL

- Park, K 2007, 'Concept of Health and Disease: Disease classification', in Park's Text Book of Preventive and Social Medicine pp. 44- 45, Banarsidas Bhanot Publishers, Jabalpur, India
- Manual of Management of District Hospitals, Peripheral Units and Rural Hospital, 1994.
- Department of Health Services Sri Lanka, 2007, 'Morbidity and mortality', in Annual Health Bulletin, Medical Statistical Unit, Department of Health Services, Sri Lanka. Pp. 23 - 31.

#### 8. Anti-Filariasis Campaign

#### Learning outcomes

At the end of the visit, the student will be expected to:

- Describe the objectives of the AFC and the need for a special programme
- Describe the services provided and their implementation
- Describe the management of patients in the community
- Describe entomological surveillance in relation to integrated vector control and its relevance
- Discuss constraints and limitations of the programme
- Critically evaluate the implementation of AFC and suggest ways to improve it

#### **Content areas**

- Objectives of the AFC and the need for a special programme
- Organisational structure
- Services provided and their implementation
- Management of patients in the community
- Constraints and limitations of the programme

#### RECOMMENDED READING MATERIAL

Department of Health Services Sri Lanka, 2007, 'Specialised Public Health Programmes: Filariasis', in Annual Health Bulletin, Medical Statistical Unit, Department of Health Services, Sri Lanka. Pp. 65-67.

#### 9. School Health Programme

#### Learning outcomes

At the end of the visit, the student will be expected to:

- Describe the stakeholders in school health
- Describe the main components of the school health programme and their purpose
- Describe process and organisation of a school medical inspection
- Describe the referral process
- Demonstrate an understanding of the role of SMI and school health clubs in health promotion in the delivery of primary health care services
- Describe a "health promoting school" and a "healthy school environment"
- Conduct a health promotional activity during an SMI
- Describe records and returns used in the school health programme
- Critically evaluate school health services and suggest ways to improve such services

#### **Content areas**

- School health services
- Planning and organisation of a SMI
- Services provided at a SMI
- Process of referral and follow up
- Role of the teachers and parents in the School Health Programme
- Health promoting schools and healthy school environment
- Student participation in School Health programme and school Health Clubs
- Records and returns used in the School Health programme

Learning activities:

- Observe the service delivery by following a school child through the process of the SMI
- Provide health promotion to school children

#### RECOMMENDED READING MATERIAL

- School Health Programme, General Circular no. 01/37/2007, Ministry of health.
- Family Health Bureau, Annual Report on Family Health Sri Lanka -2007-2007, 'School Health Services', pp 24 -27, Ministry of Health, Colombo.

#### **10. NPTC and CD**

#### Learning outcomes

At the end of the visit, the student will be expected to:

- Describe the objectives of the NPTC & CD and the need for a special programme
- Describe the services provided and their implementation

- Describe the role of a DTCO in provision of primary health care services
- Describe the management of patients in the community
- Describe the DOTS programme and its relevance
- Describe the registers maintained to facilitate service provision
- Discuss constraints and limitations of the programme
- Critically evaluate the implementation of DOTS programme and suggest ways to improve it

#### **Content areas**

- Objectives of the NPTC & CD and the need for a special programme
- Organisational structure
- Services provided and their implementation
- Management of patients in the community
- DOTS programme
- Registers maintained to facilitate service provision
- Constraints and limitations of the programme

#### RECOMMENDED READING MATERIAL

National Programme for Tuberculosis Control and Chest Diseases 2005, 'General Manual for Tuberculosis Control', Ministry of Health, Sri Lanka.

#### 11. Factory visit

#### Learning outcomes

At the end of the visit, the student will be expected to:

- Conduct a walk through survey
- Identify the occupational hazards in the factory visited
- Describe health, safety and welfare measures implemented in the factory you visited and critically review these measures
- Describe the notification process for occupational accidents and registers maintained to document occupational accidents
- Describe the procedures available for compensation of workers
- Make recommendations to improve occupational health in the factory that you visited
- Conduct a health promotion programme among the workers
- Describe the role of occupational health services in the provision of primary health care

#### **Content areas**

- Organisation of the factory and the workforce
- Materials used and the articles produced
- Health hazards related to the materials, the process and the setting
- Health problems of the workforce
- Health, safety and welfare measures already in place
- Notification of occupational accidents and registers maintained
- Benefits for workers including compensation

- Recommendations for improving occupational health
- Learning activity: Provide health promotion to factory workers

#### RECOMMENDED READING MATERIAL

Herath HMSSD 1990, 'Occupational health : An Introductory Course for Healthcare Workers', pp 59-64, 85 – 95and122-130, Ministry of Health, Colombo, Sri Lanka.

#### 12. Visit to the Correctional Centre for Youthful Offenders

#### Learning outcomes

At the end of the visit, the student will be expected to:

- Describe the organisational structure of the centre
- Describe the types of inmates and their health problems
- Describe the service needs of the inmates
- Describe the services provided to the inmates
- Conduct a health promotion programme for the inmates
- Critically evaluate the services and suggest methods to improve them
- Demonstrate an understanding of the need for providing special services to target populations

#### **Content areas**

- Organisational structure of the centre
- Objectives of programmes conducted by the centre
- Legal provisions
- Past experiences on the effectiveness of the services provided
- Services provided
- Constraints and limitations of the programme

Learning activity: Provide health promotion and counseling to inmates of the centre

#### 13. St Joseph's School for the Deaf, Ragama

#### Learning outcomes

At the end of the visit, the student will be expected to:

- Describe the organisational structure of the school
- Describe the services available for children with speech and hearing impairment
- Describe the services provided to the children
- Describe the special training and equipment required to provide these services
- Describe the procedure of referring a child with speech and hearing impairment
- Critically evaluate the services provided and suggest methods to improve them
- Demonstrate an understanding of the need for providing special services to target populations

#### **Content areas**

- Organisational structure of the school
- Objectives of programmes conducted by the school
- Services provided and resource requirements
- Referral and follow up
- Constraints and limitations of the programme

#### 14. Infection Control Unit, CNTH, Ragama

#### Introduction

#### Learning outcomes

At the end of the visit, the student will be expected to:

- Describe the role of the infection control unit in the hospital in the notification process and the control of communicable diseases
- Describe the role of the infection control unit in preventing hospital acquired infections and training of staff in infectious disease control
- Describe the role of the infection control unit in health promotion and education
- Describe the role of the hospital PHI and infection control nurses in providing primary health care services
- Describe the notification process in the hospital setting
- Describe the procedures of clinical waste disposal
- Critically evaluate the services provided and suggest methods to improve them

#### **Content areas**

- Organisational structure of the Infection Control Unit in the hospital
- Duties of staff of the infection control unit
- Services provided by the infection control unit
- Notification process in the hospital
- Clinical waste disposal
- Control of hospital acquired infections and infectious diseases in the hospital
- Training of personnel in infectious disease control

#### RECOMMENDED READING MATERIAL

> Hospital Infection Control Manual, Sri Lanka College of Microbiologists, 2005.

#### 15. Water Treatment Plant and Sewage Treatment Plant, Raddolugama

#### Learning outcomes

At the end of the visit, the student will be expected to:

- Describe the importance of provision of safe water
- Describe the importance of hygienic sewage disposal
- Describe the process of water treatment
- Describe the process of sewage treatment

#### **Content areas**

- Household waste
- Safe water
- Water treatment
- Sewage treatment

#### RECOMMENDED READING MATERIAL

- Park, K 2007, 'Environment and Health: Modern Sewage Treatment', in Park's Text Book of Preventive and Social Medicine pp. 618- 620, Banarsidas Bhanot Publishers, Jabalpur, India.
- Park, K 2007, 'Environment and Health: Water Purification', in Park's Text Book of Preventive and Social Medicine pp. 572- 588, Banarsidas Bhanot Publishers, Jabalpur, India.
- Herath HMSSD 1990, 'Occupational health : An Introductory Course for Healthcare Workers', pp 96- 107, Ministry of Health, Colombo, Sri Lanka.

#### **16. Community Dental Services**

#### Learning outcomes

At the end of the visit, the student will be expected to:

- Describe the oral health services with special reference to community services provided in Sri Lanka.
- Describe the common dental problems their risk factors and preventive strategies
- Discuss constraints and limitations of the services

#### **Content areas**

- Curative dental care services
- Preventive dental care services
- Common dental diseases and risk factors
- Prevention of dental diseases
- Dental referral system
- Constraints and limitations of the services
- Duties of Regional Dental Surgeon, School Dental Therapist and Community Dental Surgeon.

#### RECOMMENDED READING MATERIAL

- Department of Health Services Sri Lanka, 2007, 'Dental Health Services', in Annual Health Bulletin, Medical Statistical Unit, Department of Health Services, Sri Lanka. Pp. 32-34.
- Park, K 2007, 'Communication for Health Education', in Park's Text Book of Preventive and Social Medicine pp. 706-720, Banarsidas Bhanot Publishers, Jabalpur, India
- > http://www.healthedu.gov.lk Official website of Health Education Bureau, Sri Lanka.

#### **Seminars**

Two seminars will be conducted in the last week of the appointment to discuss the content covered during the clerkship and to clarify issues. Each seminar will consist of student presentations on topics given during the first week of the clerkship appointment. 2-3 students are expected to present each topic. Students are expected to get advice from academic staff members on the content of their presentations.

#### Attendance

80% attendance is compulsory for the field visits of the clerkship appointment. 100% attendance is compulsory for clerkship seminars. Students who fail to meet these requirements will not be eligible to sit the continuous assessment of the clerkship

#### Continuous Assessment

This assessment will consist of ten structured essay questions covering the appointment. The total mark obtained from this continuous assessment will contribute to 10% of the total marks of Unit 6.

#### **RESEARCH PROJECT**

#### (Lectures - 8 hours + Group discussions - 7 hours)

According to the 13<sup>th</sup> Institutional Objective of our faculty, our graduates should "Be capable of continuing self-education, keeping abreast of advancing knowledge and developing an aptitude for medical research". In the Hippocratic oath that we take before commencing our career as a doctor, it is expressed as; "I will continue with diligence to keep abreast of advances in medicine".

All above highlights one important area that you as undergraduates should focus on, and that is research. Medicine is a dynamic discipline and rapid advances take place all the time. The theories accepted today will be obsolete tomorrow. Unless you keep abreast of at least the most relevant changes, you may lag behind and be considered outdated. Practicing outdated medicine can be life threatening and could even amount to negligence.

Doctors in the 21<sup>st</sup> century are expected to practice medicine based on research evidence as well as conduct research relevant to their practice. Without background knowledge on research, the information that appear in scientific papers may not make sense to you and you as a doctor may not possess the skills to read, analyse and select the best evidence relevant to your own practice.

Therefore it is important that as undergraduates, you gain knowledge and skills in conducting basic research. This opportunity is made available to you during the third and fourth years where, group of five to eight students have to plan and execute a research project and then disseminate the findings through a poster presentation and by other means as opportunity permits. This experience will certainly equip you with basic research skills that will be helpful in your future practice.

Objective	Content	Activity		Outcome	Time Allocated
		Teaching	Learning		
1. To plan and conduct					
research using					
scientific methods					
a. Plan research	Identification of a	Lecture			3 months
	research problem				
	Review of literature with	&		1.Development of	
	regard to the			proposal	
	chosen topic	Demonstration:		2. Development of	
	Development of General	Literature search	Conduct literature search	study instruments:	
	& Specific objectives			questionnaire &	
	Development of	Small Group		other study	
	methods in detail	Discussions (SGD)		instruments	
	1. Study design				
	2. Study population				
	3. Sample size				
	calculations				
	4. Sampling technique				
	5. Study instruments				
	6. Data collection				
	7. Identification of	SGD		Identification of	
	ethical issues &			ethical issues	
	measures to minimize			Prepare :	
	same			a. Information	
				sheet	
				b. Consent form	
				c. Obtaining	
				ethical clearance	
b. Conduct	1.Pre testing and	SGD + Field Work		Final data	2 weeks as
Research	refining of instruments			collection	specified in the
	Data collection			instruments	time table
				Collection of data	

2. To analyse	Applied statistics and	Lectures:	1.Data coding		2 months after
data using basic	epidemiology	Statistics	2. Data entry		completion of
statistical		Epidemiology	3. Data cleaning		data collection
techniques			3. Data analysis – use of		
-		Demonstration:	appropriate,		
		Epi Info / EpiData			
		SPSS	a. summary measures		
			b. statistical tests		
			c. tabular presenatations		
		SGD	d. graphical presentations		
3. To be able to				Conclusions and	-
interpret the data				recommendations	
in order to arrive					
at appropriate					
conclusions &					
recommendations					
4. To be able to	Preparation of poster	1. Lecture	Preparation of poster	Poster	
disseminate					
research					
findings	Preparation of research		Preparation of research	Research report	2 weeks after
	report	2. SGD	report		poster
					presentation
			a. Abstract writing	Oral presentations	
			b. Submission of	a. Faculty Young	
			abstracts	Researchers'	a. Final year
				Symposium	
				b. Other forums	b. Available
					opportunity
			c. Writing journal article	Publishing of	Available
				article	opportunity

- Jayawardena PL, Abeysena HTCS and Pathmeswaran A 2009, Hand book on Research Methodology for medical undergraduates, Faculty of Medicine, University of Kelaniya.
- Sivagnanasundram C 1999, Learning Research, ISBN : 955-96654-0-5

#### **Specific Instructions:**

The students are to obtain guidance from the supervisors throughout the project in addition to constant reference to the "Research Methodology Hand Book" in conducting research, writing the report and preparing the poster. Make use of the "Hand Book" to guide you through each step in conducting research, in writing the report and in preparing the poster.

All the group members should actively participate in every stage of the research project including the discussions held with the supervisors.

The progress is assessed at group and individual levels by the supervisors. Individual assessment will be incorporated into the final assessment marks.

#### Poster Presentation

Student groups have to prepare and display a poster on the research project conducted. The guidelines for the preparation of the poster are given in the "Research Methodology Hand Book". Poster presentation is a pre requisite that needs to be fulfilled before submission of the "Research Report". The six best, decided by a panel of independent judges will receive awards.

#### Research Report

Research Report has to be submitted two weeks following the poster presentation. A soft copy and a spiral bound hard copy should be submitted to the department on the date specified. It should not exceed 5000 words. Spacing 1.5; Font style: Times New Roman; Font size: 12. For details refer the Research Methodology Hand Book.

Research Report: Cover page to contain the following (all center aligned):

Тор:	Title of the research project
Middle:	Group Number / Batch Number
	Names of Students

#### Bottom:

This Research Report is submitted to the Department of Public Health, Faculty of Medicine, University of Kelaniya as partial fulfillment of course work. Year of Submission

#### **Delayed Submission of Research Report**

**Those submitted with in one week of specified date:** will loose 10% of the total mark allocated by the examiner.

Those submitted after one week of the specified date: will receive zero marks.

**Those not submitted at all:** will be debarred from sitting the 2<sup>nd</sup> Examination for Medical Degree

#### Plagiarism

Literature review should be a continuous process from beginning of the study to the end (writing of the report). When writing literature every effort should be made to avoid plagiarism.

Plagiarism means:

- 1. to steal and pass off (the ideas or words of another) as one's own.
- 2. to use (another's production) without crediting the source.
- 3. to commit literary theft.

4. to present as new and original an idea or product derived from an existing source.

In other words, plagiarism is an act of fraud (scientific theft). It involves both stealing someone else's work and lying about it afterward. (Merriam-Webster Online Dictionary).

#### Assessment of contribution by individual student:

Will be based on attendance and rating of the contribution as assessed by the supervisor at small group discussions held with the supervisors.

#### Marking Scheme

Component	Sections	Marks	Overall
			Mark
Abstract (Structured)		10	10
Introduction	Background	03	
	Justification	03	10
	Objectives	04	
Literature Review		10	10
	Overall*	10	
	Sample size & sampling	02	
Methods	Study Instruments	03	20
	Data analysis	03	
	Quality of data	02	
Results		20	20
	General	12	
Discussion	Limitations	02	20
Discussion	Conclusions	03	20
	Recommendations	03	
References (Harvard)		05	05
Overall		05	05
Total		100	100

\*Overall : Study design, setting and population, data collection and ethical issues

#### COMMUNITY ATTACHMENT PROGRAMME

#### Introduction

A doctor is expected to treat and cure illnesses taking into consideration the patients' roles and responsibilities in the wider community. He/She is also expected to promote health of the entire community. In response to this need, the Faculty of Medicine, University of Kelaniya has designed the Community Attachment Programme.

#### How could the Community Attachment Programme help you as a future doctor?

Doctors are expected not only to be skilled clinicians, but also to understand and work within the family, community and cultural contexts in which their patients live. Medical students cannot acquire these insights and skills only through lectures and clinical clerkships. Through the community attachment programme the students will learn how to apply prevention knowledge in real-life settings and obtain hands-on experience on the use of systematic approaches for promoting, maintaining and improving the health of individuals and populations.

The objectives of the programme, learning outcomes and teaching-learning activities, timing and logistics, attendance requirements and assessment methods are outlined below.

#### Learning Outcomes

#### At the end of the programme, the student is expected to;

- 1. Describe the health status of the community
- 2. Identify the health care needs of the community and available resources
- 3. Demonstrate an understanding of the ways in which different groups and sectors contribute to maintaining the health of the community
- 4. Demonstrate an understanding of different perspectives on health problems and community responses to these problems
- 5. Prioritise the health problems of the community
- 6. Develop multifaceted sustainable interventions to address the problems identified, implement the interventions, monitor their progress and evaluate their effectiveness
- 7. Demonstrate favourable attitudes towards public health
- 8. Demonstrate skills to work as a team member
- 9. Communicate effectively with individuals, families and communities
- 10. Develop leadership skills that are necessary to function as a medical officer in community settings
- 11. Develop favorable attitudes towards learning from the community

#### Course contents

- Health care services in the community
- Social services in the community
- Population surveys/Needs assessment
- Prioritisation of health problems
- Effective communication methods
- Monitoring and evaluation

#### Teaching-learning methods

- Classroom lectures
- Field visits
- Group activities
- Seminars

#### Implementation

Before the start of the attachment students should have covered most of the topics in epidemiology, statistics, survey methodology, health promotion and education, communication methods, health care systems and health management.

Prior to starting the attachment the students will be given an overview of the community attachment programme.

Approximately 40 students (2 clinical groups) will be assigned to a community of about 100 households. The students will be responsible for ensuring that all households within the community are linked to a pair of students (approximately 5-6 families for each pair). For group activities, students are expected to work in small groups of about 8 students per group.

#### Portfolio

Every student is expected to assemble and keep a portfolio for the community attachment. This is a collection of work done by each student and would be evidence of the student's progress towards obtaining the objectives of the community attachment program. The department will provide students with the required format (given in annex 1) and the cover for the portfolio. Students should present their portfolios to the staff supervisors at regular intervals and obtain feedback.

A detailed description of teaching learning methods expected to be carried out are given below;

#### 1. Describe the health status of the community

#### Activities

**Field:** Undertake a field survey to collect data on population demographics, housing details and illness patterns in the community. A detailed map of the area should be prepared by the students. The map should indicate the houses that are allocated for the community attachment, roads and other important landmarks in the area.

**Classroom:** Data should be summarised and presented at the allocated time during monthly seminars. Issues related to measuring health, health indicators and uses and limitations of data collected should be discussed in detail at a seminar.

**Time frame:** 1<sup>st</sup> to 3<sup>rd</sup> month

#### 2. Identify the health care needs of the community and available resources

#### Activities

**Field:** Based on the information collected and using information gathered from in-depth interviews with key informants, students are expected to identify the health care needs of the community/arrive at a community diagnosis. Students are expected to conduct a detailed assessment of available health care services in the area. Students are also expected to visit these health facilities and get a better understanding of the facilities

provided at each of these institutions. For example, students in small groups may visit the institutions such as the main government health care facility providing curative health care services in the area, MOH office and the offices of relevant field staff, a traditional medicine practitioner in the area etc. In addition, students are expected to discuss services provided by these institutions or individuals.

**Classroom:** Students are expected to compare of health care needs and service availability in the area with national/regional figures. Students are expected to discuss critically the factors affecting the distribution and access to health care in the community and of the demand, needs and unmet needs of health care at a seminar.

**Time frame:** 1<sup>st</sup> to 3<sup>rd</sup> month

## **3.** Demonstrate an understanding of the ways in which different groups and sectors contribute to maintaining the health in the community

#### Activities

**Field:** With the assistance of the community and community leaders, students are expected to identify all relevant stakeholders responsible in provision and maintaining of health care services in the community. The students are expected to understand the role of 'non-health sector' personnel/organizations that are involved in maintaining the health of the population. Students in small groups may visit the local government office/ *pradeshiya sabha, g*rama niladhari office, schools/youth clubs etc. in the area.

**Classroom:** At a seminar, students are expected to critically evaluate the role of each person/organisation that is involved in maintaining the health of the population. **Time frame:** 1<sup>st</sup> to 3<sup>rd</sup> month

## 4. Demonstrate an understanding of different perspectives on health problems and community responses to these problems

#### Activities

**Field:** Conduct in-depth interviews with the community and community leaders to understand how health is perceived at different stages of life and community/individual responses to illness. Students are expected to identify enabling factors towards, and barriers to, accessing health care services in the community.

**Classroom:** Students are expected to summarise the information gathered from in-depth interviews at a seminar. Students are expected to discuss individual/community responses for identified illness categories (eg. non-communicable diseases) and challenges faced by the community and the health professionals in dealing with such illnesses. **Time frame:** 1<sup>st</sup> to 3<sup>rd</sup> month

#### 5. Prioritise the health problems of the community

#### Activities

**Field:** Students are expected to organise meetings to facilitate the process of priority setting of identified health problems with the community and other stakeholders responsible for promoting health in the area. At this meeting, students may make a presentation based on their findings.

**Classroom:** Students are expected to make a presentation based on prioritisation of health problems and critically discuss issues in priority setting.

**Time frame:**  $4^{th}$  to  $5^{th}$  month

## 6. Develop multifaceted sustainable interventions to address the problems identified, implement the interventions, monitor and evaluate their effectiveness.

#### Activities

**Field:** Students are expected to design, implement, monitor and evaluate activities that promote population health as relevant to the community based on the information gathered and the analysis performed. The sustainability of interventions to be implemented should be considered in designing and choosing the best intervention. Students should understand the need for community empowerment to attain sustainable health gains. Students are expected to develop a plan for monitoring and evaluating the effectiveness of the intervention taking the field situation into consideration.

**Classroom:** Students are expected to demonstrate, where possible, a designed intervention (eg. a health promotion or education session/counseling session by a role play) at a seminar. All health education and promotion material to be used should first be discussed at seminars and approved by the academic supervisor. Students are expected to present the plan for monitoring and evaluation of the intervention at a seminar.

**Time frame:** 6<sup>th</sup> to 12<sup>th</sup> month

#### Seminars

There will be monthly seminars of 2-3 hours duration for each group. Students are expected to organise and summarise what they have done, and to develop/agree on a plan for the coming month(s). During these seminars, students will be exposed to new information and issues by students and staff members depending on the relevant problems identified in the communities and methods to address them. The seminars will include student presentations based on case histories, survey findings, intervention plans and results of monitoring and evaluation activities. The seminars will be facilitated by academic staff members of the department of Public Health, other departments in the faculty, health care workers and personnel from other sectors when necessary.

#### Timing and logistics

During the second year of Phase II, approximately 40 students (2 clinical groups) will be assigned to a community of about 100 households. During a period of about 12 months, students are expected to make visits to this community. A particular day of the week will be designated as the community visit day and each clinical group will visit the assigned community at least once a

month during their clinical or clerkship appointments. Academic staff members of the faculty will also visit the community on these designated days and provide necessary advice and guidance to students. Transport facilities for the students will be arranged by the faculty whenever possible. In addition, students are encouraged and expected to visit the families and the community on other days as well in order to achieve the objectives of the programme. For example, students may need to visit families on a weekend to interview the male head of household who may not be available on a week day when regular visits are made to the field. Students are expected to be the family doctor of the families and the community and may be called upon by the family/community at any time in case of an emergency. Students are expected to answer all these calls.

#### Attendance requirements

Eighty percent (80%) attendance is required at both the field visits and seminars.

#### Assessment

The community attachment programme will be assessed throughout the attachment by the supervisor. Students will be assessed as follows:

$\succ$	Attendance & class participation		10%
$\succ$	Group report		25%
$\succ$	Portfolio maintained by individual students		50%
$\triangleright$	Viva-voce examination	15%	

The marks allocated for the Community Attachment Programme will comprise 10% of marks of the Unit 6 examination of the  $2^{nd}$  Examination for Medical Degrees.

The group report of community attachment should be submitted on or before the specified date. It is mandatory to submit this report to write for the  $2^{nd}$  Examination for Medical Degrees.

#### Guidelines for Preparation of Community Attachment Group Report

Format:Letter quality print. The title page should have the Group and the Batch.Length:Should not exceed 6000 words, double spaced (excluding appendices). Attach<br/>samples of products completed during the field attachment as appendices<br/>(brochures, leaflets etc.).

Content:

Summary/Abstract: 350 words. Include the *who, what, when, where, why and how* of the Community Attachment Programme. This will be added to the notebook of abstracts kept in the department library and the group project with the highest aggregate mark will be posted in department's field studies website.

Context/organization:

Introduction:

An introduction to the field area, population characteristics, availability and accessibility of health care services and other services etc. should be included.

*Problem/s identified:* Students are expected to identify problems in the particular community following a needs assessment. Students are expected to prioritise the problems and give the rationale.

Interventions designed:

Students are expected to describe the interventions designed to solve the identified problems in detail and provide reasons for selecting the particular intervention.

Results achieved:

Students are expected to describe the results achieved during the course of the field studies and to explain any difference between the proposed scope of work and results achieved, if any. *Self appraisal:* 

Students are expected to describe in detail how the programme has contributed to their own professional and personal development.

*Due date:* 2 weeks after completing field studies. A soft copy of the document should be provided along with a hard copy.

#### RECOMMENDED READING MATERIAL

Abramson JH and Abramson ZH (1999) 'Community Oriented Primary Care', In *Survey Methods in Community Medicine*, Churchill Livingstone, Edinburgh, pp 387 – 405.

#### Annex 1 Format of the Portfolio

#### 1<sup>st</sup> page

- 1. Name:
- 2. ME No:
- 3. Batch:
- 4. Group:
- 5. Area allocated:
- 6. Time period of the attachment:
- 7. Name of the supervisor/s:

#### Section 1 – Diary

List of activities carried out at each visit (Day 1 onwards)

Date	List of activities	Signature of the
		supervisor

#### Section 2 – Information and communication

#### 1. Information on surveys conducted and data collection techniques

Date	Survey topic/area	Data collection tools	Signature of the supervisor

2. Visits to relevant health facilities, schools, religious places, meetings with community members or groups/health professionals/other stakeholders responsible for service provision in the area

<b>1</b>				
Date	Place	Outcomes	Signature of a	Signature of the
	Visited/person met		participant /	supervisor
	_		official	_

#### Section 3 – Individual level interventions

Interventions carried out at individual level e.g.:-Health Education/Counseling/Health Promotion

Date	Problem identified	Intervention	Signature of the
			supervisor

#### Section 4 – Family level interventions

Interventions carried out at family level e.g.:-Health Education/Counseling/Health Promotion

Date	Problem identified	Intervention	Signature of the
			supervisor

#### **Section 5 – Population interventions**

Date	Problem identified	Intervention	Signature of the
			supervisor

#### **Section 6 - Seminar presentations**

Date Presentation topic at th		Names of other group members	Signature of the
	seminar	who contributed to the	supervisor
		preparation	

Any other information, eg. brochures/leaflets or other health promotion material prepared by you during the attachment, letters used to communicate with relevant authorities in service provision, proof of interventions carried out at various levels etc. should also be included in the portfolio.

#### EVALUATION OF COMMUNITY HEALTH STRAND

#### PHASE I

#### CONTINUOUS ASSESSMENT

#### Community Health strand (CH CA1)

There will be one continuous assessment, conducted together with CA3 at the end of the 4<sup>th</sup> term of study. These marks will be incorporated into Unit 6 of the Phase II bar exam (Second Examination for Medical Degrees), as part of the CA marks.

#### CH CA1

	Component	Duration	Marks
1.	MCQ paper	30 min	100

#### PHASE II

#### CONTINUOUS ASSESSMENTS (CH CA2 - CH CA6)

There will be 5 continuous assessments in this strand during Phase II (CH CA2 – CH CA6). CH CA2 will be conducted at the end of the  $3^{rd}$  term of the  $3^{rd}$  year, together with CA7. CH CA3 will be conducted at the end of  $2^{nd}$  term of the  $4^{th}$  year, together with CA9. The other will be conducted during the course of the  $3^{rd}$  and  $4^{th}$  year.

The structure of each will be as follows

#### CH CA2

	Component	Duration	Marks
1.	MCQ paper	1.0 h	50
2.	SEQ paper	1.0 h	50
	Total		100

#### CH CA3

	Component	Duration	Marks
1.	MCQ paper	1.0 h	100

#### CH CA4

	Component	Duration	Marks
1.	Assessment of the Community Medicine clerkship	1.0 h	100

#### CH CA5

	Component	Duration	Marks
1.	Assessment of the research project (group mark)		100

#### CH CA6

	Assessment of the Community Attachment	Duration	Marks
1.	Attendance and class participation		10
2.	Group report		25
3.	Portfolio maintained by individual students		50
4.	Oral examination		15
	Total		100

#### SECOND EXAMINATION FOR MEDICAL DEGREES

#### **UNIT 6: COMMUNITY HEALTH STRAND**

#### **EXAMINATION** (First attempt)

#### The structure of the Unit 6 exam will be as follows

	Component	Duration	Marks
1	MCQ paper	1.5 h	20
2.	SEQs (one paper)	3.0 h	30
3	CH CA1 (in 2 <sup>nd</sup> year)	30 m	3
4.	CH CA2 (in 3 <sup>rd</sup> year)	2.0 h	11
5.	CH CA3 (in 4 <sup>th</sup> year)	1.0 h	6
6.	CH CA4 (end of Community Medicine clerkship)		10
7.	CH CA5 (research project)		10
8.	CH CA6 (community attachment)		10
	Total		100

#### AWARD OF DISTINCTIONS

There will be no separate paper for award of Distinctions in Community Health; instead, a candidate who obtains an overall mark of 70% or more in the Unit 6 examination (Community Health Strand) shall be awarded a Distinction in Public Health.

#### AWARD OF CLASSES

The overall mark for the second examination for medical degrees exam will be calculated as follows for awarding classes.

Unit	Percentage marks
2	
3	35
4	35
5	10
6	20
Total	100

#### EXAMINATION (second and subsequent attempts)

	Component	Duration	Marks
1.	MCQ paper	1.5 h	40
2.	SEQ paper	3.0 h	60
	Total		100

#### **RECOMMENDED READINGS**

- Park's Textbook of Preventive & Social Medicine (19<sup>th</sup> edition), K. Park
- Epidemiology in Medical Practice (4<sup>th</sup> edition), D. J. P. Baker, G. Rose
- Statistics in Small Doses (3<sup>rd</sup> edition), Win M. Castle, Philip M. North.
- Statistics in Square Once (9<sup>th</sup> edition) T. D. V Swins Cow
- Integrated Nutrition Package: Key interventions to improve Maternal & Child nutrition in Sri Lanka, for Primary Health Care Staff by Family Health Bureau
- Assessment of Nutritional Status of School Children, Reference Growth Charts, Published by Family Health Bureau In collaboration with Medical Research Institute
- Immunization hand book- National Expanded Programme on Immunization, Sri Lanka-2002, Epidemiological Unit, Ministry of Health, Nutrition & Welfare
- Annual Health Bulletin
- Annual Health Statistics
- Sri Lanka Demographic & Health Survey
- Eradication of Poliomyelitis: A comprehensive guide for Medical Officer, Epidemiology Unit, Ministry of Health, Sri Lanka
- General Manual for Tuberculosis Control, NPTC & CD, Sri Lanka
- Occupational Health: An Introductory Course for Health Care Workers, Edited by H.M.S.S.D. Herath, Ministry of Health, Colombo, Sri Lanka
- Ageing population in Sri Lanka: Issues & future prospects, Colombo, United Nations Population Fund, 2004
- A population projection of Sri Lanka for the Millennium, 2001-2101 : trends & implications, W. Indralal De Silva, Colombo: Institute of Health Policy, 2007
- A manual of Family Health in Sri Lanka
- A manual for the Sri Lankan Public Health Inspectors
- Circulars relevant to the Ministry of Health (available in the Department of Public Health)
- 'How is climate change affecting our health?' A manual for students and their families, 2008 WHO.