Subject No. 2 COMMUNITY HEALTH NURSING- I

Total hours: 240

Theory: 105

Practical: 135

AIM:

• This course is designed to help the student to develop an understanding of principles of promotion and maintenance of health.

OBJECTIVES:

At the end of course students will be able to develop:

- Understanding of concepts of community health, community health nursing and factors influencing health in the community.
- Understanding of concept, scope, uses, methods of epidemiology and epidemiology and nursing management of common communicable diseases.
- Understanding of concept, scope of demography and the impact of population explosion and population control.

COURSE CONTENTS:

Unit I – Introduction:

• Community health nursing: Definition, concept and dimensions of health. Determinants of health. Promotion of health, indicators of health. Maintenance of health. Ethics in community health nursing practice.

Unit II - Determinants of health:

- Eugenics. Physical: Air, light. Environmental factors contributing Health: Ventilation, water, Housing, Sanitation; disposal of waste, disposal of dead bodies, Forestation, Noise, Climate. Bacterial & Viral: Agents, host carriers and immunity Arthropods and Rodents. Communication; Infrastructure facilities and Linkage. Insect, Rodent & Parasite Control Noise Control. Disposal of refuge/Sewage Disposal of human excreta. Disposal of the dead.
- Involvement of governmental and non-govern-mental organizations in environmental health. Act Regulation the environment: National Pollution Control board, Public health Laws related to environment & health History collection in MLC cases,
- Food hygiene: Production, Preservation, Purchase, Preparation, consumption
- Acts Regulating Food, Hygiene-Prevention of food adulteration acts, Drugs and cosmetic act Socio cultural aspects of nutrition in food hygiene, Functions of urban & rural health centre including health
- Human right ;- Equity, nutrition & health
- Socio-Cultural: Customs, taboos, Marriage System, Family Structure, Status of special Group: Females, Children, Elderly, Challenged, Groups and Sick persons, Life Style, Hygiene, Physical Activity, Recreation and Sleep, Sexual life, Spiritual life philosophy, Self Reliance, Dietary pattern,

Education, Occupation, Financial Management, Income, Budget, Purchasing power, security. poverty

Unit III – Epidemiology:

• Definition, concept, Aims, scope uses and terminology used in epidemiology used in epidemiology. Dynamics of Disease transmission, : epidemiological triad. Morbidity and mortality: Measurements. Levels of Prevention. Methods of epidemiology of Descriptive, Analytical: Epidemic investigation, Experimental.

Unit IV - Epidemiology and nursing management of common communicable diseases,

- Home visit: concepts, steps, principles, advantages. , Respiratory infections:
- Small Pox, Chicken Pox, Measles, Influenza, Rubella, ARIs & Pneumonia, Mumps, Diphtheria, Whooping cough, Meningococcal, meningitis, Tuberculosis, SARS.
- Intestinal Infections: Poliomyelitis, Viral Hepatitis, Cholera, Diarrhoeal diseases, Typhoid Fever, Food poisoning, Amoebiasis, Dracunculiasis.
- Arthropod infections: Dengue, Malaria, Filariasis, Zoonoses.
- Viral: Rabies, Yellow fever, Japanese encephalitis, Kyasnur Forest Diseases. Bacterial: Brucellosis, Plague, Human Salmonellosis, Anthrax, Leptospirosis. Rickettsial diseases: Rickettsial Zoonoses, Scrub typhus, Murine typhus, Tick typhus, Q fever. Parasitic zoonoses: Taeniasis, Hydatid disease, Leishmaniasis, Surface infection, Trachoma, Tetanus Leprosy, STD & RTI, Yaws HIV. Any other.

Unit V - Epidemiology and nursing management of non - communicable diseases:

• Malnutrition: under nutrition, over nutrition nutritional deficiencies, Anemia, Hypertension, Stroke, Rheumatic Heart Diseases, Coronary Heart Diseases, Cancer, Diabetes mellitus, Blindness, Accidents, Mental illness Obesity, Iodine Deficiency Fluorosis, Epilepsy, Asthma, Arthritis.

Unit VI – Demography:

• Definition, concept and scope. Demography cycle. Methods of data collection, analysis and interpretation of demographic data. Demographic rates and ratios. population explosion Health and health services

Unit VII- Population and its control

- Population explosion and its impact on social, economic development of individual, society and country
- Population control: overall development ,human empowerment, social economic and educational development
- Limiting family size: promotion of small family norms,
- Methods : Spacing, (natural, biological, chemical, mechanical, methods etc)
- Terminal : surgical methods
- Emergency contraception

COMMUNITY HEALTH NURSING PBBSC FINAL YEAR

Unit No.	Objectives	Contents							
& Hrs.				Must Kno ⁻	w	Desirable	e to Know	Nice to Know	
l (2 Hrs)	At the end of unit students are able to: Knowledge: Define, understand and discuss the dimensions and determinants of health. Skill: Contribute as a health team member in improving health indicators. Attitude: Incorporate this knowledge in nursing practice.	Introdu Con Def of h Mai con prac Pro hea (2H	 Introduction: Community health nursing, Definition, concept and dimensions of health. Determinants of health. Maintenance of health. Ethics in community health nursing practice. Promotion of health indicators of health (2Hrs) 						
Unit:1 In	troduction								
Course o	utcome		Progran	n outcome					
			Clinici an/Nu rse educa tor	Professi onal	Commun icator	Leader and member of the health care team and system	Lifelong learner	Critical thinker	Researcher
			PO1	PO2	PO3	PO4	PO5	PO6	PO7

CO-1. Know the history of community health nursing services in India.	I	2	3	2	2	2	2	2
CO-2. Define and describe community health nursing its concept, goal and principles.	ו	3	3	3	3	2	2	2
CO-3. Define and describe health, its concept determinants of health, dimensions, its prorand maintenance	t, notion	3	3	3	3	3	3	3
CO-4. Enlist health indicators and describe it characteristics.	S	3	3	2	3	3 3		3
CO-5. Describe ethics in community health r	ursing	3	3	3	3	3	2	3
IIAt the end of unit students are able to:(35able to:Hrs)Knowledge: Enumerate health determinants and discuss the relationship with health. 	 Determ Eug En Hea San disj No Ag ho Art Roo Co: Dis Dis ma cor ind pol Foo Pre cor of 1 cha Hu hea Soo Ma Sta , Ch 	inants of genics. Ph vironment alth: Vent itation; d posal of d ise, Clima ents, st carriers hropods a dent & Pa ntrol. Disp posal of t posal of t posal of t posal of t nagement trol meas ustrial wa lution (7 l od hygien servation nutrition in in and foo man right lth. (2 Hr cio-Cultu rriage Sy tus of spe uildren, El	health: nysical: Air, ial factors c ilation, wat isposal of w ead bodies, ite. Bacteria and immur and Rodents rasite Contri- cosal of refi- numan excre- he dead. So :-causes, ei- ures of urba ste, Enviro Hrs), e: Producti , Purchase, , Socio cult n food hygi od pyramid ;- Equity, r s). ral: Custon stem, Fami cial Group; derly, Chal	, light. ontributing er, Housing, /aste, Forestation, at & Viral: hty for Noise lge/Sewage eta. lid waste ffect & an & onmental on, Preparation, ural aspects ene, Food hutrition & hs, taboos, ly Structure, Females lenged,	 Involvem governme governme governme organizat environm Hr). Commun Infrastruc and Linka Acts Reg Hygiene, food adul Drugs and act.(2 Hr) collectio cases, Functions rural health including I Urban an equity is need for equity, c change, warming 	ient of ental and non- nental ions in eental heath. (2 ication; ture facilities age. (1Hr) ulating Food Prevention of teration acts, d cosmetic History n in MLC of urban & n centre health nd rural sues, the gender limate global g (1 hr.)	 Act Regula environmen Pollution C health Law environmen Financial M Income, Bu power, sect Environme acid rain, c depletion , (1Hr) 	tion the nt: National control board, Public s related to nt & health. (1 Hr). Management, udget, Purchasing urity. ntal protection act ozone layer nuclear accident

Groups and Sick persons, Life Style, Hygiene, Physical Activity, Recreation and Sleep, Sexual life, Spiritual life philosophy, Self Reliance, Dietary pattern, Education, Occupation., poverty, Social issues & the environment , water conservation ,rain water harvesting(3 Hrs) Unit II :Determinants of health								
Course o	utcome	Program	outcome					
		Clinicia n/Nurs e educat or	Professiona I	Com mu nicat	Leader and member of the health care team and system	Lifelong learner	Critical thinker	Researcher
		PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO-1. De	fine and describe eugenics	3	3	2	2	3	2	3
CO-2. De ventilatio disposal o	scribe the physical determinants of air, light, on, water, housing, sanitation, disposal of waste, of dead bodies, Forestation, Noise, Climate.							
CO-3. Cla required specific a passive ir	ssify the disease agents and describe the factors for bacterial growth. Describe host defenses and and non specific defenses. Differentiate active and mmunity and identify various immunizing agents	3	3	3	3	3	3	3
CO-4. Cla transmitt transmiss	ssify arthropods list down the diseases ted by arthropods and describe its mode of sion and control measures.	3	3	3	3	3	3	3
CO-5. De cooking, food . Cla food pois and vario	escribe the methods of food preservation, methods of pasteurization and adulteration of assify food borne illness and list out the causes of soning. Recognize the guidelines for food handlers bus regulations related to food safety	3	3	3	3	3	3	3

CO-6. Describe Customs, taboos, Marriage System, Family Structure, Status of special Group; Females ,Children, Elderly, Challenged, Groups and Sick persons, Life Style, Hygiene, Physical Activity, Recreation and Sleep, Sexual life, Spiritual life philosophy, Self Reliance, Dietary pattern, Education and Occupation.	3	3	3	3	2	3	3
CO-7. Describe water preservation and the methods of	3	3	3	3	2	3	3
rain water harvesting			-	-			_
CO-8. Define communication infrastructure, recognize the importance of transport and identify the different departments accountable for road communication	3	3	2	2	2	2	3
CO-9. Define communication and its types, personal means of communication and modes of communication	3	3	2	3	2	2	3
CO-10. Explain history collection in MLC cases.	3	3	2	3	2	2	2
CO-11. Explain urban and rural equity issues, the need for gender equity, climate change and global warming	3	3	2	3	2	3	3
CO-12. Describe Function of RPHC & UPHC	3	3	3	3	2	2	2
CO-13. Describe the salient features of water act 197452 , environment protection act,1986, national environment tribunals act of 1995, the public liability insurance act 1993	3	3	3	3	2	2	2
CO-14. Describe the features of hazardous waste		3	3	3	2	2	2
management and handling rules july 1989.	3						
CO-15. Explain financial management, income, budget, purchasing power and security	3	3	3	2	2	2	2
Unit III: Epidemiology							
III (10 able to: Hrs)At the end of unit students are able to: Knowledge: Define epidemiology; enumerate uses and state aims and terminologies used in epidemiology. Understand and explain epidemiological triad. Discuss the levels of prevention. Epidemiolog • Definiti uses and epidemi submiss (2 Hr) • Morbid Measure • Levels of • Levels of 	cy: on, concept, l terminolog ology. (2 Hr cs of Diseast ion: epidem ity and morta ements. (2 H of Prevention	Aims, scope, y used in b) se team iological triad. ality: r) n. (1 Hr)	• Met epid Dese Ana Exp (3 H	hods of emiology: criptive, lytical and erimental. [rs]	• Epic (1 H	demic inves Hrs)	tigation.

	epidemiological investigations. Attitude: Incorporate and use this knowledge in nursing practice.								
Unit- Epi	demiology			I					
Course c	outcome		Progra	am outcome					
			Clinic ian/ Nurs e educ ator	Professio nal	Comm unicat or	Leader and member of the health care team and system	Lifelon g learner	Critical thinke r	Research er
			PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO-1. Define and identify the meaning of the terms related to the Epidemiology.			3	3	3	3	2	2	1
CO-2. Sta scope.	ate the goals and specific aims and u	ises of epidemiology, its	3	3	3	3	3	2	2
CO-3 De infectior	scribe the dynamics of disease & the	e chain of causation of	3	3	3	3	2	2	3
CO-4. Ex preventi	plain the epidemiological triad & Ide on.	entify the levels of	3	3	3	3	2	2	2
CO-5 lo	dentify morbidity and mortality mea	surements	3	3	3	3	3	2	3
CO-6. De	scribe the methods of epidemiology	1	3	3	3	2	2	2	3
CO-7. Ex	plain epidemic investigation		3	3	3	3	2	2	3
Unit IV :	Epidemiology and nursing manager	ment of common commun	icable di	seases, Resp	iratory ir	nfections			
IV (25 Hrs)	At the end of unit students are able to: Knowledge: Understand and describe the epidemiology of communicable diseases. Skill : Contribute in research work. Attitude: Incorporate knowledge	 Epidemiology and nursin management of common communicable diseases, infections: Home visit: concept principles, advantag Pox, Chicken Pox, Me Influenza, Rubella, All 	n Respirat s, steps, es. , Sma easles, RIs &	ory ill • Pa zo T H L (1 C en • F	arasitic conoses: aeniasis, (ydatid dis eishmania Hr) ancer and nvironme Respirator	Bacter Salmo (Kyas asis. I nt y	rial: Bruce onellosis, A nur Forest	llosis, Plag Anthrax, Le Diseases. (ue, Human ptospirosis. (2 Hrs)

	of epidemiology in nursing practice.	 Pneumonia, Mumps, Dip Whooping cough, Menim meningitis, Tuberculosis. Intestinal Infections: Poli Cholera, Diarrhoeal disea Typhoid Fever, Food poi Amoebiasis. (2 Hrs) Arthropod infections: De Malaria, Filariasis, Zoone Rabies, Yellow fever, Jap encephalitis. (2 Hrs) Rickettsial diseases: Rick Zoonoses, Scrub typhus, typhus, Tick typhus fever Surface infection, Tracho Tetanus, Leprosy, STD & HIV. Any other. (4 Hrs) 	htheria, gococcal, (4 Hrs) omyelitis, ases, soning, ngue, oses Viral: oanese cettsial Murine r, ma, RTI, Yaws,	in SA In He Di (3	fections: ARS. Intesti fections: Vi epatitis, racunculiasi B Hrs)	nal ral s.			
Course ou	utcome		Program o	outcome	9				
			Clinician/ Nurse educator	Prof essi onal	Commu nicator	Leader and member of the health care team and system	Lifelong learner	Critica l thinke r	Research er
			PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO-1.Des preventio influenza pneumor meningit (SARS).	cribe epidemiological factors, cl on and control of smallpox, Chic a, german measles, acute respira nia, Mumps, diphtheria, whoopi tis, tuberculosis and severe acute	inical manifestation and kenpox, measles, atory infections (ARI) and ng cough, meningococcal e respiratory syndrome	3	3	3	3	2	3	3
CO-2. Do preventic acute dia and dracu	escribe epidemiological factors, on and control of poliomyelitis, v urrhoeal diseases, typhoid fever, f unculiasis	clinical manifestation and viral hepatitis, cholera, food poisoning, amoebiasis	3	3	3	3	2	3	3
CO-3.Des preventio	scribe epidemiological factors, cl on and control of dengue, malar	linical manifestation and ia and falaria	3	3	3	3	2	2	3

CO-4. D	escribe epidemiological factors,	clinical manifestation and	3		3	3		3		2	2		3
encepha	alitis, kyasnur forest diseases and	Ebola virus.											
CO-5.De	escribe epidemiological factors,	clinical manifestation and	3		3	3	3		2	2	2		3
prevent	ion and control of brucellosi	s, plague, salmonellosis,											
anthrax	and leptospirosis.												
CO-6.De	escribe epidemiological factors,	clinical manifestation and	3		3 .	3	3		2	2	2		3
prevent	ion and control of scrub typhus	s, murine typhus, Q fever											
and tick	typhus.					_							
CO-7.De	escribe epidemiological factors,	clinical manifestation and	3	-	3	3	3		2	2	2		3
prevent													
leishma	niasis.												
CO-8.De	escribe epidemiological factors,	clinical manifestation and	3	-	3	3	3		2	2	2		3
prevent	ion and control of trachoma,	tetanus, leprosy, sexually											
transmi	and yaws.												
CO-9 De	escribe cancer and the environme	nt	3		3	3	3		3	3	3		3
00 5.00			U U			-	U			, 	U		
Unit	t V: Epidemiology and nursing ma	nagement of non – commun	icable disea	ises									
V	At the end of unit students are	Epidemiology and nursing r	managemen	nt of	Survei	llance	of drin	king	Ac	cidents	s, Ment	al illn	ess
(10	able to	non – communicable diseas	ses:	on	water	any Ll	oort Dic	22606	Ob	esity, l	lodine L		ency
1115)	describe the epidemiology of	nutritional deficiencies, Ane	mia,	IOII	Cance	r, Diab	etes me	ellitus,	Art	hritis.	, cpilep:	sy, As	stiina,
	non communicable diseases.	Hypertension, Stroke, Rheur	natic Heart		Blindn	, ess, (0	4 hours)	<i>,</i> (C)1 hou	ırs)		
	Skill: Contribute in research	Diseases, , (0/ hours)											
	Attitude: Incorporate knowledge												
	Of epidemiology in nursing												
	practice.												
Course o	utcome		Program ou	itcome									
			Clinician/	pro		Con	nmuni	Leader		Lifelo	ng C	riti	Resea
			Nurse	fessio	onal	cato	or	and	or	learne	er c	al hin	rcher
			Cuucator					of the	- 1		k	er	
								health					

				care team and system			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO-1. Define and describe malnutrition, under nutrition, over nutrition, anemia its types, etiology, clinical manifestation, diagnostic evaluation, treatment and preventive measures.	3	3	3	3	3	2	3
CO-2. Define and describe hypertension, its type, causes, clinical manifestation, diagnostic evaluation, treatment, preventive measures an complications.	3	3	3	3	3	2	3
CO-3 Define and describe stroke, its type, causes, clinical manifestation, diagnostic evaluation, treatment and complications.	3	3	3	3	3	2	3
CO-4. Define and describe rheumatic heart disease its causes, pathophysiology, clinical manifestation, diagnostic evaluation, management and complications.	3	3	3	3	3	2	3
CO-5. Define and describe cancer, its causes, clinical manifestation, diagnostic evaluation, stages, management, preventive measures and complications	3	3	3	3	3	2	3
CO-6. Define and describe diabetes mellitus, its type, causes, clinical manifestation, pathophysiology, diagnostic evaluation, management and complications	3	3	3	3	3	2	3
CO-7. Define and describe diabetes mellitus, its type, causes, clinical manifestation, pathophysiology, diagnostic evaluation, management and complications	3	3	3	3	3	2	3
CO-8. Define and describe blindness, its causes, clinical manifestation, pathophysiology, diagnostic evaluation, treatment and complications.	3	3	3	3	3	2	3
CO-9 Define and describe accidents, its causes, clinical manifestation and treatment.	3	3	3	3	3	2	3

CO-10. Describe mental illness, its t	pe, causes, clinical	3	3	3	3		3	2	3
manifestation, treatment and preve	ntive measures		L						
CO-11. Define and describe iodine of	eficiency, its causes, clinical	3	3	3	3		3	2	3
manifestation, pathophysiology, dia	gnostic evaluation,								
treatment and complications.									
CO-12. Define and describe epileps	y, its causes, clinical	3	3	3	3		3	2	3
manifestation, pathophysiology, dia	gnostic evaluation,								
treatment and complications.									
CO-13. Define and describe asthma	its causes, clinical	3	3	3	3		3	2	3
manifestation, pathophysiology, dia	gnostic evaluation,								
treatment, and complications.									
CO-14. Define and describe arthritis	its type, causes, clinical	3	3	3	3		3	2	3
manifestation, pathophysiology, dia	gnostic evaluation,								
treatment, and complications									
Unit VI: Demography									
VIAt the end of unit students a able to(06able toHrs)Knowledge: Define and understand the concept and scope of demography.Skill: Maintain vital statistics calculate various rates and ratios.Attitude: Incorporate this knowledge in improving qua of health services.	e Demography: Definition ,concept a Demography cycle. Demographic rates an hours) 	nd scope nd ratios (04	Method analysis demogr (01 hour	ls of data collect s and interpreta aphic data. rs)	ction, tion of	Effects explosi	of urba on and I	nization, health se nours)	population rvices (01
Course outcome		Program out	come		·				
		Clinician/N urse educator	Professio nal	Communic ator	Leader an member of the health care team system	nd of h n and	Lifelo ng learn er	Critical thinker	Researc her
		PO1	DUJ	DU3				DOG	

CO-1. De	CO-1. Define and describe demography, its cycle and its scope.		3	3	3	3		3	3	3
CO-2. De	scribe demographic rates and ratios.		3	3	3	3		3	3	3
CO-3. De of demog	scribe methods of data collection, ana graphic data.	lysis and interpretation	3	3	3	3		2	2	3
CO-4 Exp population	lain the effects of urbanization and Id on explosion in India.	entify the impact of	3	3	3	3		2	2	3
Unit VII:	Population and its control									
VII (17 Hrs) Population and its control • Population explo- impact on social development or ,society and count • Methods : Space biological, mechanical, meth • Emergency cont hrs)			osion and it al , economi of individua try cing, (natural chemical ods etc) traception (10	Termina s method c Limiting 1 promoti family n , (5 hr;	l : su s family on of orms , s)	rgical Popu ,hum size: and o small	Ilation co lan empo education	ntrol: o wermo nal dev	overall devel ent, social ec elopment (2	opment onomic hrs)
Course o	utcome		Program out	come						
			Clinician/Nu rse educator	Professic nal	Comm unicat or	Leader and member of the health care team and system	Lifelon learne	r r	Critical thinker	Rese arche r
			PO1	PO2	PO3	PO4	PO5		PO6	PO7
CO-1.Ide	ntify the impact of population		3	3	3	3	2		2	3
CO-2. Des	scribe methods of population control.		3	3	3	3	2		2	3

TEACHING STRATEGY:

Total Teaching Hours: 225 Lectures: 90

Clinical Hours: 135

ASSIGNMENTS: Theory/Practical:

Sr. No.	Assignments	No./Quantity	Marks Per	Total
			Assignment	Marks
1	Clinical Performance Evaluation (One in UPH &	Turo	FO	100
	One in RPH)	TWO	50	100
2	Community Survey and Family Diagnosis	0001 000	10 + 10	20
	(Minimum Five Families – Either in UPH or RPH)	Une+ Une	10 + 10	20
3	Family Nursing Care Plan(One in UPH & One in	Two	20	40
	RPH)	100	20	40
4	Visit Report (All Visits)	One	20	20
5	Home assignment	One	20	20
			Total Marks	200

Note: There is no practical examination. Hence these marks shall be considered for internal assessment of theory assignments.

TEACHING METHODS:

• Lectures, Laboratory Demonstration, Group Discussion, Clinical Observation, Workshop, Simulation, Practice Teaching., Modified tutorial

A.V. AIDS:

• Over head projector, L.C.D. Computer Assisted Instruction, Flip Chart, Posters. Black Board.

Lab Hours: 10:

• Bag technique – teaching and practice

Distribution of Practical Hours:

Sr. No.	Area of Experience	No. of Hours
1	UPH	60
2	RPH	60
3	Visits	20

List of Educational Visits

• Pasteurization plant. Water Purification Plant. Sewage Treatment Plant. Slaughter house. Community kitchen / hospital kitchen. Waste disposal unit. Rehabilitation centre / artificial limb centre.

LIST OF RECOMMENDED BOOKS:

- 'Park's Text Book of Preventive and Social Medicine' Banarasidas Bhanot Publishers, Jabalpur, India.
- 'Text Book of Preventive and Social Medicine' Dr. Gupta and others, Jaypee Brothers.
- 'Essentials of Community Health Nursing' S. Kamalam, Jaypee Brothers.
- 'Community Health Nursing Principles and practice', K. K. Gulhani, Kumar Publishing House, New Delhi.
- 'Community and Public Health Nursing' Maria Stanhope & Jeanette Lancaster, Mosby Publication.
- 'Community health Nursing' B.T. Basavanthappa, Jaypee Brothers.
- 'Hand book of Preventive and Social Medicine', Vidya Ratan, Jaypee Brothers.
- 'Pocket Manuel of Community Health Nursing', Maheshwari Jaikumar, Jaypee Brothers.
- 'Evaluating Community Nursing', Karl Atkin & Others, Bailliere Tindall, London.
- 'Comprehensive Community Health Nursing' Clement Stone & Others, Mosby, Elsevier.
- 'Community Health Nursing Mannuel', Najoo Kotwal, TNAI.
- 'An Introduction to Community Health Nursing' Kasturi Sunder Rao.
- 'Community Health Nursing' Swarnkar