

Lesson Plan: Nutrition and Health

Learning Objectives (CBME / Competency-based)

By the end of the lecture, students will be able to:

1. Define key concepts: Nutrition, Balanced diet, Proximate principles, RDA, and nutritional requirements (ICMR/NIN).
2. Classify major nutrients with focus on sources, functions, requirements, deficiency, and excess (high-yield vitamins & minerals).
3. Describe methods of nutritional assessment and common nutritional problems in India (PEM, micronutrient deficiencies, obesity/NCDs).
4. Outline key National Nutrition Programs and community prevention strategies.

Materials / AV Aids Required

1. PowerPoint presentation (diagrams, tables, clinical images of deficiencies)
2. Short video clips or images (e.g., PEM signs, growth charts)
3. Skeleton handouts / key summary tables
4. Pointer / microphone for large group
5. Optional: Mentimeter/Quiz for quick polls

Teaching-Learning Methods

1. Didactic lecture with PPT
2. Interactive questioning and quick polls
3. Clinical image-based discussion
4. Summary tables and flowcharts

Lesson Structure & Time Allocation (60 minutes)

1. Introduction (5–7 minutes)

1. Greet and quick ice-breaker/poll: “How many of you can name your approximate daily calorie need or one common vitamin deficiency in India?”
2. Highlight importance of nutrition in preventive medicine, public health, and clinical practice.
3. Link to prior knowledge (Biochemistry, Pediatrics).
4. Clearly state learning objectives.

2. Core Content (35–38 minutes)

Section A: Basic Concepts & Macronutrients (10 minutes)

1. Definitions: Nutrition, Health, Balanced diet.
2. Proximate principles (Carbohydrates, Proteins, Fats) – energy values, sources, requirements, supplementary action of proteins.
3. ICMR/NIN RDA overview for different age/physiological groups (focus on energy & protein).

Section B: Micronutrients & Assessment (12–13 minutes)

1. Vitamins (Fat-soluble & key Water-soluble): Sources, functions, deficiency disorders (e.g., Xerophthalmia, Rickets, Beriberi, Scurvy), prevention.
2. Important minerals (Iron, Iodine, Calcium, Zinc).
3. Nutritional assessment methods: Anthropometric (BMI, MUAC, growth charts), clinical, biochemical, dietary.
4. Use clinical images and quick mnemonics.

Section C: Nutritional Problems & National Programs (10–12 minutes)

1. Common problems in India: Protein-Energy Malnutrition (Kwashiorkor vs Marasmus – key differences), micronutrient deficiencies, obesity & diet-related NCDs.
2. Vulnerable groups (children, pregnant/lactating women).
3. Brief on major programs: ICDS, POSHAN Abhiyaan, Anemia Mukht Bharat, Vitamin A prophylaxis, Mid-Day Meal, Iodine program.
4. Community strategies: Food fortification, supplementation, health promotion.

3. Summary & Key Takeaways (5 minutes)

1. Recap with a mind map or single summary slide (high-yield points + tables).
2. Exam-oriented pointers (common PYQs).
3. Clinical & community integration.

4. Interactive Session / Q&A (5–8 minutes)

1. 2–3 quick MCQs or clinical scenarios via poll.
2. Open floor for doubts.
3. Formative assessment: e.g., “Name one deficiency sign for Vitamin A” or “Classify one intervention as primary prevention.”

Assessment & Evaluation

1. In-session: Polls / MCQs (formative).
2. Post-session: Exit ticket or short quiz.
3. Future: Viva, module exams, OSCE on nutritional assessment.

Homework / Follow-up

1. Read relevant sections from Park's 27th Edition.
2. Prepare summary tables on vitamins/minerals and PEM differences.
3. Observe nutritional status during community postings or OPD.

References

1. Park K. Park's Textbook of Preventive and Social Medicine, 27th Edition. Banarsidas Bhanot Publishers.
2. ICMR-NIN Nutrient Requirements for Indians (latest).
3. MoHFW National Nutrition Program guidelines.

By,

Dr. S. M. Khusbul Jannat

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Behavioural Science

Time Duration: 60 minutes

Learning Objectives

By the end of the lecture, students will be able to:

- 1. Define key concepts: Health behaviour, Illness behaviour, Sick role, Behavioural Sciences in medicine.*
- 2. Describe important models of health behaviour (Health Belief Model, Theory of Planned Behaviour, Transtheoretical Model).*
- 3. Explain factors influencing human behaviour and barriers to behaviour change.*
- 4. Outline principles of Behaviour Change Communication (BCC) and its application in community health.*

Materials / AV Aids Required

- 1. PowerPoint presentation (diagrams of health behaviour models, flowcharts).*
- 2. Clinical images or case scenarios showing different health behaviours.*
- 3. Skeleton handouts / summary tables of models and barriers.*
- 4. Pointer / microphone for large group.*
- 5. Optional: Mentimeter/Quiz for quick polls and case-based discussion.*

Teaching-Learning Methods

- 1. Didactic lecture with PPT.*
- 2. Interactive questioning and quick polls.*
- 3. Case scenario-based discussion.*
- 4. Summary tables and concept mapping.*

Lesson Structure & Time Allocation (60 minutes)

- 1. Introduction (5–7 minutes)*

1. Greet and quick ice-breaker/poll: “Why do people continue smoking even after knowing its harms?”
2. Highlight importance of behavioural science in preventive medicine and patient compliance.
3. Link to prior knowledge (Psychology, Community Medicine basics).
4. Clearly state learning objectives.

2. Core Content (35–38 minutes)

Section A: Basic Concepts (10–12 minutes)

1. Definitions: Behaviour, Health behaviour, Illness behaviour, Sick role (Parsons).
2. Relevance of Behavioural Sciences in medicine.

Section B: Models of Health Behaviour (12 minutes)

Health Belief Model (HBM).

1. Theory of Planned Behaviour / Reasoned Action.
2. Transtheoretical Model (Stages of Change).
3. Brief overview of other models with simple diagrams.

Section C: Factors, Barriers & Behaviour Change Strategies (12 minutes)

1. Factors influencing behaviour (personal, social, environmental, cultural).
2. Barriers to behaviour change.
3. Principles of Behaviour Change Communication (BCC) vs IEC.
4. Practical application in National Health Programmes (e.g., tobacco cessation, nutrition, hygiene).

3. Summary & Key Takeaways (5 minutes)

1. Recap with a mind map or single summary slide (comparison of models + key barriers).
2. Exam-oriented pointers (common PYQs).
3. Clinical & community integration.

4. Interactive Session / Q&A (5–8 minutes)

1. 2–3 quick MCQs or case scenarios via poll (e.g., apply HBM to a patient).
2. Open floor for doubts.
3. Formative assessment: e.g., “Name one stage of Transtheoretical Model” or “Give an example of behaviour change technique.”

Assessment & Evaluation

1. In-session: Polls / MCQs (formative).
2. Post-session: Exit ticket or short quiz.
3. Future: Viva, module exams.

Homework / Follow-up

1. Read relevant sections from Park’s 27th Edition.
2. Prepare summary table comparing major health behaviour models.
3. Observe health behaviours during community postings or OPD and note influencing factors.

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Concept of Public Health, Community Medicine, Health and Disease

Lesson Plan: Concept of Public Health, Community Medicine, Health and Disease

Time Duration: 60 minutes

Learning Objectives

By the end of the lecture, students will be able to:

1. Define key concepts: Health, Disease, Public Health, Community Medicine, Preventive Medicine, Social Medicine.
2. Describe evolution and scope of Community Medicine.
3. Explain dimensions and determinants of health (WHO definition, biomedical vs socio-environmental model).
4. Outline levels of prevention and changing concepts of health & disease.

Materials / AV Aids Required

1. PowerPoint (diagrams of health triangle, levels of prevention, historical timeline).
2. Images of disease spectrum.
3. Skeleton handouts / summary tables.
4. Pointer / microphone.
5. Optional: Mentimeter for polls.

Teaching-Learning Methods

1. Didactic lecture with PPT.
2. Interactive questioning.
3. Concept mapping.

Lesson Structure & Time Allocation (60 minutes)

1. Introduction (5–7 minutes)

1. Ice-breaker: “What does ‘health’ mean to you?”
2. Importance in medical career.
3. Link to prior knowledge.
4. State objectives.

2. Core Content (35–38 minutes)

Section A: Basic Concepts (12 minutes)

1. Definitions: Health (WHO), Disease, Illness, Sickness.
2. Changing concepts of health & disease (biomedical → ecological → holistic).

Section B: Public Health & Community Medicine (12 minutes)

1. Evolution of Public Health.
2. Scope & differences: Public Health vs Community Medicine vs Preventive Medicine.
3. Functions of Community Medicine.

Section C: Determinants & Levels of Prevention (12 minutes)

1. Determinants of health (biological, behavioural, environmental, social).
2. Levels of prevention (primordial, primary, secondary, tertiary, quaternary).
3. Natural history of disease.

3. Summary & Key Takeaways (5 minutes)

1. Mind map + high-yield table (levels of prevention).
2. Exam pointers.

4. Interactive Session / Q&A (5–8 minutes)

1. Polls & MCQs.
2. Formative assessment.

Assessment & Evaluation.

1. In-session polls.
2. Post-session quiz.
3. Future: Viva/exams.

Homework / Follow-up

1. Read relevant sections from Park's 27th Edition.
2. Prepare table on levels of prevention with examples.
3. Observe health concepts in community.

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Environment and Health

Time Duration: 60 minutes

Learning Objectives

By the end of the lecture, students will be able to:

- 1. Define environment and describe its components affecting human health.*
- 2. Explain water pollution, air pollution, noise pollution and their health effects.*
- 3. Describe sanitation, food hygiene, and solid waste management.*
- 4. Outline climate change, greenhouse effect and their public health implications with control measures.*

Materials / AV Aids Required

- 1. PowerPoint presentation (diagrams of water purification, air pollution sources, waste management cycle, climate change graphs).*
- 2. Clinical images of diseases related to environmental hazards (e.g., fluorosis, arsenicosis, heat stroke).*
- 3. Skeleton handouts / key summary tables (pollutants vs health effects, waste categories).*
- 4. Pointer / microphone for large group.*
- 5. Optional: Mentimeter/Quiz for quick polls.*

Teaching-Learning Methods

- 1. Didactic lecture with PPT.*
- 2. Interactive questioning and quick polls.*
- 3. Clinical image-based discussion.*
- 4. Summary tables and flowcharts.*

Lesson Structure & Time Allocation (60 minutes)

- 1. Introduction (5–7 minutes)*

1. Greet and quick ice-breaker/poll: “What environmental problem affects your hometown the most?”
2. Highlight importance of environment in preventive and social medicine.
3. Link to prior knowledge (Physiology, Community Medicine basics).
4. Clearly state learning objectives.

2. Core Content (35–38 minutes)

Section A: Basic Concepts & Environmental Hazards (10 minutes)

1. Definition of environment and its components (physical, biological, social).
2. Man-environment relationship and ecological balance.
3. Environmental hazards – physical, chemical, biological and psychosocial.

Section B: Pollution and Health (15 minutes)

1. Water pollution – sources, contaminants, water-borne diseases, purification methods (slow sand filter, chlorination).
2. Air pollution – sources, common pollutants, health effects, national ambient air quality standards.
3. Noise pollution, radiation and their health impacts.
4. Use of clinical images for diseases like fluorosis, arsenicosis.

Section C: Sanitation, Waste Management & Climate Change (10–12 minutes)

1. Sanitation and excreta disposal methods.
2. Solid waste management – principles, methods and biomedical waste.
3. Food hygiene and adulteration.
4. Climate change, greenhouse effect, global warming and public health consequences with adaptation/mitigation strategies.

3. Summary & Key Takeaways (5 minutes)

1. Recap with a mind map or single summary slide (major pollutions + health effects + control).
2. Exam-oriented pointers (common PYQs on water purification and waste management).

3. Clinical & community integration.

4. Interactive Session / Q&A (5–8 minutes)

1. 2–3 quick MCQs or clinical scenarios via poll.
2. Open floor for doubts.
3. Formative assessment: e.g., “Name two methods of water purification” or “What are the colour codes for biomedical waste?”

Assessment & Evaluation

1. In-session: Polls / MCQs (formative).
2. Post-session: Exit ticket or short quiz.
3. Future: Viva, module exams, field visits on environmental sanitation.

Homework / Follow-up

1. Read relevant sections from Park’s 27th Edition.
2. Prepare summary tables on environmental pollutions with health effects and control measures.
3. Observe environmental health problems (water sources, waste disposal) during community postings.

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HFA, Primary Health Care, Universal Health Coverage and National Health Programmes, MDGs, SDG

Time Duration: 60 minutes

Learning Objectives

By the end of the lecture, students will be able to:

- 1. Define key concepts: Health for All (HFA), Primary Health Care (PHC), Universal Health Coverage (UHC).*
- 2. Describe Alma-Ata Declaration, principles, components and evolution of Primary Health Care.*
- 3. Explain MDGs, SDGs and their relevance to health.*
- 4. Outline major existing National Health Programmes in India and their objectives.*

Materials / AV Aids Required

- 1. PowerPoint presentation (timelines, Alma-Ata Declaration, SDG icons, health system pyramid).*
- 2. Flowcharts of Primary Health Care components and National Health Mission structure.*
- 3. Short video clips or images of PHC implementation / Ayushman Bharat.*
- 4. Skeleton handouts / key summary tables of major programmes.*
- 5. Pointer / microphone for large group.*
- 6. Optional: Mentimeter/Quiz for quick polls.*

Teaching-Learning Methods

- 1. Didactic lecture with PPT.*
- 2. Interactive questioning and quick polls.*
- 3. Discussion on Indian health system.*
- 4. Summary tables and flowcharts.*

Lesson Structure & Time Allocation (60 minutes)

1. Introduction (5–7 minutes)

1. Greet and quick ice-breaker/poll: “Have you heard of Ayushman Bharat or Health for All?”
2. Highlight importance of health systems and programmes in preventive medicine and public health.
3. Link to prior knowledge (Concept of Public Health).
4. Clearly state learning objectives.

2. Core Content (35–38 minutes)

Section A: Health for All & Primary Health Care (12 minutes)

1. Health for All (HFA) goal and Alma-Ata Declaration (1978).
2. Definition, principles and components of Primary Health Care (PHC).
3. Selective vs Comprehensive PHC.

Section B: Universal Health Coverage (UHC) (10–12 minutes)

1. Concept and dimensions of UHC.
2. Evolution from PHC to UHC.
3. Health system in India – 3-tier structure and National Health Mission (NHM).

Section C: MDGs, SDGs & National Health Programmes (12 minutes)

1. Millennium Development Goals (MDGs) to Sustainable Development Goals (SDGs) – focus on health-related goals.
2. Major National Health Programmes (RCH, NHM, NPCDCS, NVBDCP, RNTCP/NTEP, PM-JAY, etc.) – brief objectives and components.
3. Community strategies and challenges in implementation.

3. Summary & Key Takeaways (5 minutes)

1. Recap with a mind map or single summary slide (PHC principles + SDG 3 + major programmes).
2. Exam-oriented pointers (common PYQs).
3. Clinical & community integration.

4. Interactive Session / Q&A (5–8 minutes)

1. 2–3 quick MCQs or clinical scenarios via poll (e.g., components of PHC).
2. Open floor for doubts.
3. Formative assessment: e.g., “Name any two principles of PHC” or “Give one example of SDG 3 target.”

Assessment & Evaluation

1. In-session: Polls / MCQs (formative).
2. Post-session: Exit ticket or short quiz.
3. Future: Viva, module exams, OSCE on health systems.

Homework / Follow-up

1. Read relevant sections from Park’s 27th Edition.
2. Prepare summary table on major National Health Programmes (name, year, target group, key components).
3. Observe health programmes during community postings or OPD.

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Immunity, Immunization and Disinfection

Time Duration: 60 minutes

Learning Objectives

By the end of the lecture, students will be able to:

- 1. Define immunity and classify its types (active/passive, natural/artificial).*
- 2. Describe the national immunization schedule, cold chain maintenance, vaccine types and their uses.*
- 3. Explain adverse events following immunization (AEFI), contraindications and management.*
- 4. Outline principles of disinfection, sterilization, antisepsis and biomedical waste management.*

Materials / AV Aids Required

- 1. PowerPoint presentation (immunization schedule chart, cold chain diagram, vaccine types, colour-coded waste bins).*
- 2. Images of vaccine preventable diseases and AEFI examples.*
- 3. Skeleton handouts / key summary tables (types of immunity, schedule highlights, disinfection levels).*
- 4. Pointer / microphone for large group.*
- 5. Optional: Mentimeter/Quiz for quick polls.*

Teaching-Learning Methods

- 1. Didactic lecture with PPT.*
- 2. Interactive questioning and quick polls.*
- 3. Clinical image-based discussion.*
- 4. Summary tables and flowcharts.*

Lesson Structure & Time Allocation (60 minutes)

1. Introduction (5–7 minutes)

1. Greet and quick ice-breaker/poll: “How many vaccines have you received till now?”
2. Highlight importance of immunization in preventive medicine and disease eradication.
3. Link to prior knowledge (Microbiology, Paediatrics).
4. Clearly state learning objectives.

2. Core Content (35–38 minutes)

Section A: Immunity (10 minutes)

1. Definition and types of immunity (innate vs acquired).
2. Active immunity (natural and artificial) and Passive immunity (natural and artificial).
3. Herd immunity and its public health importance.

Section B: Immunization (15 minutes)

1. National Immunization Schedule (UIP) for different age groups.
2. Cold chain maintenance, vaccine storage and handling.
3. Types of vaccines (live attenuated, killed, toxoid, conjugate etc.) with examples.
4. Adverse events following immunization (AEFI), contraindications and National AEFI guidelines.

1. Section C: Disinfection and Biomedical Waste Management (10–12 minutes)
2. Principles of disinfection, sterilization and antisepsis.
3. Levels of disinfection (high, intermediate, low) and agents used.
4. Biomedical waste management rules – colour coding and disposal methods.
5. Role in hospital and community settings.

3. Summary & Key Takeaways (5 minutes)

1. Recap with a mind map or single summary slide (immunity types + UIP schedule highlights + waste colour coding).
2. Exam-oriented pointers (common PYQs on schedule and cold chain).

3. Clinical & community integration.

4. Interactive Session / Q&A (5–8 minutes)

1. 2–3 quick MCQs or clinical scenarios via poll.
2. Open floor for doubts.
3. Formative assessment: e.g., “Name two live vaccines” or “What colour bin for sharps?”

Assessment & Evaluation

1. In-session: Polls / MCQs (formative).
2. Post-session: Exit ticket or short quiz.
3. Future: Viva, module exams, OSCE on cold chain/waste management.

Homework / Follow-up

1. Read relevant sections from Park’s 27th Edition.
2. Prepare summary tables on types of immunity, vaccines and biomedical waste categories.
3. Observe immunization session and waste management practices during community postings or OPD.

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Comilla Medical College
Dept. of Community Medicine
Lesson Plan for Lecture Class

Topic: Biostatistics

This lesson plan is designed for a 60-minute lecture for fourth-year MBBS (medical) students, focusing on the family planning Methods.

Field	Detail
Subject	Community Medicine and Public Health
Year	MBBS Fourth Year (Cum-32)
Topic	Biostatistics
Duration	60 minutes
Format	Lecture Class
Venue	Lecture Gallery 2
Date and Time	12 May, 2026, 11.30 AM-12-30 PM
Teacher	Dr. Zubaida Ahmed, Associate Professor and Head Department of Community Medicine and Public Health.

Learning Objectives:

At the end of the session students will be able to:-

1. -define biostatistics, source of vital statistics and vital events of life.
2. -define and classify data with example.
3. -state the different methods of data collection and data presentation.
4. -define and classify variable with example .
5. -define sample and population, sampling frame, sampling unit, calculation of sample size.

Content Outline and Time Allocation

Time (min)	Activity	Content/Key Points	Teaching Method
0-5	Gaining Attention	Briefly review the whole class and State the lecture objectives.	Open lecture

5–10	Introduction of Biostatistics	Definition of statistics, source of vital statistics, vital events of life, Role of biostatistics in medicine.	PPT Slides, Interactive Questioning
10–15	Data	Source of data, definition, classification of data with examples.	PPT Slides
Time (min)	Activity	Content/Key Points	Teaching Method
15–35	Data collection and presentation	Showing some picture, graph on different type of data presentation and different methods of data collection.	Diagram, flow chart, PPT slides.
35–50	Variable and sample size calculation	Deferent types of variables with example of each, definition of variable, sample, population, sampling frame,unit, Calculation of sample size.	PPT slides.
50-60	Summary	Recap the whole session briefly.	Review of Key Terms, 2-3 Multiple Choice Questions for (MCQs) assessment.

Resources and Evaluation

Instructional Material

- Power Point Presentation with high-quality pictures, flow chart
- Whiteboard for drawing the timeline and key structures.

Assessment / Evaluation

- **Formative:** Observation of student engagement and responses to interactive questions throughout the lecture (e.g., "What are the methods of quantitative data presentation ?)
- **Summative (Mini-Quiz):** Two to three quick MCQs at the end of the lecture focusing on:
 - Which one is continuous variable?
 - Vital events of life?

Assignment

- Students should know the different methods of data collection and data presentation very well.
- Read central tendency for the next class.

Comilla Medical College
Dept. of Community Medicine
Lesson Plan for Lecture Class

Topic: Demography

This lesson plan is designed for a 60-minute lecture for fourth-year MBBS (medical) students, focusing on the family planning Methods.

Field	Detail
Subject	Community Medicine and Public Health
Year	MBBS Fourth Year (Cum-32)
Topic	Demography
Duration	60 minutes
Format	Lecture Class
Venue	Lecture Gallery 2
Date and Time	13 July 2026, 11.30 AM-12-30 PM
Teacher	Dr. Zubaida Ahmed, Associate Professor and Head Department of Community Medicine and Public Health.

Learning Objectives:

At the end of the session students will be able to:-

1. -define demography.
2. -enlist the demographic process and cycle
3. -state the population pyramid of developed and developing country.
4. -define census, with its type and current situation of Bangladesh .
5. -state the different demographic indices and fertility with its influencing factors.

Content Outline and Time Allocation

Time (min)	Activity	Content/Key Points	Teaching Method
0-5	Gaining Attention	Made a real-life story on Demography.	Open lecture

5–10	Introduction & Review	Briefly review the whole class and State the lecture objectives.	PPT Slides, Interactive Questioning
10–15	Demography	Definition of demography and Showing some picture for better understanding	PPT Slides
Time (min)	Activity	Content/Key Points	Teaching Method
15–35	Demographic process and cycle	Discussion on demographic process and cycle. With example of each.	Diagram, flow chart, PPT slides.
35–50	Population pyramid	Different types of population pyramid. Census and Bangladesh situation analysis. Details on demographic indices. Also factors influencing fertility	PPT slides.
50-60	Summary	Recap the whole session briefly.	Review of Key Terms, 2-3 Multiple Choice Questions for (MCQs) assessment.

Resources and Evaluation

Instructional Material

- Power Point Presentation with high-quality pictures, flow chart
- Whiteboard for drawing the timeline and key structures.

Assessment / Evaluation

- **Formative:** Observation of student engagement and responses to interactive questions throughout the lecture (e.g., "What are the demographic process?")
- **Summative (Mini-Quiz):** Two to three quick MCQs at the end of the lecture focusing on:
 - Position of Bangladesh in demographic cycle
 - In which demographic phase population remains stationary?

Assignment

- Students should know the demographic cycle very well.
- Read the next chapter on family planning.

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Dept. of Community Medicine
Lesson Plan for Lecture Class

Topic: Family Planning

This lesson plan is designed for a 60-minute lecture for fourth-year MBBS (medical) students, focusing on the family planning Methods.

Field	Detail
Subject	Community Medicine and Public Health
Year	MBBS Fourth Year (Cum 32)
Topic	Family planning
Duration	60 minutes
Format	Lecture Class
Prerequisites	Basic knowledge of time of ovulation, site of fertilization and implantation.
Venue	Lecture Gallery 2
Date and Time	3 July 2026, 11.30 AM-12-30 PM
Teacher	Dr. Suchisree Saha, Lecturer Department of Community Medicine and Public Health.

Learning Objectives:

At the end of the session students will be able to:-

1. -define family planning.
2. -classify family planning methods.
3. -state the aims and objectives of family planning, scopes and health aspects of family planning.
4. -state the M/A of OCP, its indication, side effects, absolute contraindication.
5. -state the different types of IUCD, M/A of IUCD, ideal time of insertion, ideal candidate of IUCD, contraindications and side effects of IUCD.

Content Outline and Time Allocation

Time (min)	Activity	Content/Key Points	Teaching Method
0-5	Gaining Attention	Made a real-life story on family planning method.	Open lecture

5–10	Introduction & Review	Briefly review the family planning methods and State the lecture objectives.	PPT Slides, Interactive Questioning
10–15	Family planning methods	Showing the flow chart of family planning method for better understanding	PPT Slides
Time (min)	Activity	Content/Key Points	
		As well as classification of family planning methods from Park text book of preventive and social medicine.	
15–35	OCP	Classification of hormonal contraceptive methods then composition of OCP, POP, Emergency contraceptive pill, M/A of OCP, indications, contraindications, side effects of OCP.	Diagram, flow chart, PPT slides.
35–50	IUCD	Deferent types of IUCD with their M/A, ideal time of insertion of IUCD with ideal candidates for IUCD, contra indications and side effects of IUCD	PPT slides.
50-60	Summary	Recap the whole session briefly.	Review of Key Terms, 2-3 Multiple Choice Questions for (MCQs) assessment.

Resources and Evaluation

Instructional Material

- Power Point Presentation with high-quality pictures, flow chart
- Whiteboard for drawing the timeline and key structures.

Assessment / Evaluation

- **Formative:** Observation of student engagement and responses to interactive questions throughout the lecture (e.g., "What are the hormonal contraceptive methods ?").
- **Summative (Mini-Quiz):** Two to three quick MCQs at the end of the lecture focusing on:
 - The hormonal contraceptive
 - The post conceptional method
 - The absolute contraindication of OCP.

Assignment

- Students should classify the family planning methods .
- Read the next chapter on natural family planning methods.

Lesson Plan (Community Medicine and Public Health)

Topic: Principles of Epidemiology and Epidemiologic Methods

This lesson plan is designed for a 60-minute lecture for fourth-year MBBS (medical) students, focusing on the Epidemiologic Methods.

Field	Detail
Subject	Community Medicine and Public Health
Year	MBBS Fourth Year (Cum 32)
Topic	Epidemiologic Methods
Duration	60 minutes
Format	Lecture Class
Prerequisites	Basic knowledge of Principles of Epidemiology (definition, tools of Epidemiology, incidence, prevalence)
Venue	Lecture Gallery 2
Date and Time	29 January 2026, 11.30 AM-12-30 PM
Teacher	Dr. Zubaida Ahmed, Associate Professor and Head. Department of Community Medicine and Public Health.

Learning Objectives:

At the end of the session students will be able to:-

1. -define Epidemiology.
2. -classify epidemiological study.
3. -describe the steps and use of descriptive study.
4. -state the difference between descriptive and analytical study.
5. -state the difference between observational study and experimental study.

Content Outline and Time Allocation

Time (min)	Activity	Content/Key Points	Teaching Method
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0-5	Gaining Attention	Made a real-life story on field site survey. epidemiological	Open lecture
5-10	Introduction & Review	Briefly review the principles of Epidemiology. State the lecture objectives.	PPT Slides, Interactive Questioning
10-15	Epidemiological Research Methods	Showing the flow chart of epidemiological research method for better understanding	PPT Slides
Time (min)	Activity	Content/Key Points	Teaching Method
		As well as classification of epidemiological studies from Park text book of preventive and social medicine.	
15-40	Descriptive Epidemiology	Definition of descriptive epidemiology, steps of descriptive epidemiology in details. Also uses of descriptive epidemiology.	Diagram, flow chart, PPT slides.
40-50	Difference	Difference between descriptive and analytical studies. Difference between observational study and environmental study.	PPT slides.

50-55	Summary	Recap the whole session briefly.	Review of Key Terms, 2-3 Multiple Choice Questions for (MCQs) assessment.
55-60	Correlation with Epidemiological survey.	Correlation of epidemiological studies with epidemiological survey for better understanding.	Showing survey report.

Resources and Evaluation

Instructional Material

- Power Point Presentation with high-quality pictures, flow chart
- Whiteboard for drawing the timeline and key structures.

Assessment / Evaluation

- **Formative:** Observation of student engagement and responses to interactive questions throughout the lecture (e.g., "What are the tools of epidemiology?").
- **Summative (Mini-Quiz):** Two to three quick MCQs at the end of the lecture focusing on:
 - The observational studies
 - The classification of experimental study
 - The steps of descriptive epidemiology

Assignment

- Students should classify the epidemiologic study.
- Read the next chapter on analytical study (cross sectional study)

Medical Entomology

Time Duration: 60 minutes

Learning Objectives

By the end of the lecture, students will be able to:

- 1. Define medical entomology and classify arthropods of medical importance.*
- 2. Describe morphology, life cycle, breeding places and public health importance of major vectors.*
- 3. Explain methods of vector identification and control measures.*
- 4. Outline integrated vector management and its application in national vector-borne disease control programmes.*

Materials / AV Aids Required

- 1. PowerPoint presentation (diagrams of life cycles, images of vectors and diseases).*
- 2. Clinical images of vector-borne diseases (e.g., malaria, dengue rash, filarial leg).*
- 3. Skeleton handouts / key summary tables of vectors vs diseases transmitted.*
- 4. Pointer / microphone for large group.*
- 5. Optional: Mentimeter/Quiz for quick polls.*

Teaching-Learning Methods

- 1. Didactic lecture with PPT.*
- 2. Interactive questioning and quick polls.*
- 3. Clinical image-based discussion.*
- 4. Summary tables and flowcharts.*

Lesson Structure & Time Allocation (60 minutes)

- 1. Introduction (5–7 minutes)*

1. Greet and quick ice-breaker/poll: “Which vector-borne disease is most common in India?”
2. Highlight importance of medical entomology in preventive medicine and disease control.
3. Link to prior knowledge (Microbiology, Epidemiology).
4. Clearly state learning objectives.

2. Core Content (35–38 minutes)

Section A: Basic Concepts & Classification (10 minutes)

1. Definition of medical entomology and arthropods.
2. Classification of arthropods of public health importance (insects, arachnids).
3. Modes of disease transmission – mechanical and biological.
4. Concepts of vector, reservoir and host.

Section B: Important Vectors – Morphology, Life Cycle & Diseases (15 minutes)

1. Mosquitoes (Anopheles, Culex, Aedes) – morphology, breeding places, life cycle, diseases transmitted (malaria, filariasis, dengue, chikungunya, Japanese encephalitis).
2. Sandfly, Housefly, Flea, Louse, Ticks and Mites – key features, diseases (kala-azar, plague, typhus, etc.).
3. Use of clinical images and mnemonics for identification.

Section C: Vector Control Measures (10–12 minutes)

1. Environmental control (source reduction, sanitation).
2. Biological control (larvivorous fish, *Bacillus thuringiensis*).
3. Chemical control (insecticides, larvicides, IRS).
4. Personal protection and Integrated Vector Management (IVM).
5. Role in National Vector Borne Disease Control Programme (NVBDCP).

3. Summary & Key Takeaways (5 minutes)

1. Recap with a mind map or single summary slide (major vectors + diseases + control).
2. Exam-oriented pointers (common PYQs on mosquitoes and control measures).
3. Clinical & community integration.

4. Interactive Session / Q&A (5–8 minutes)

1. 2–3 quick MCQs or clinical scenarios via poll.
2. Open floor for doubts.
3. Formative assessment: e.g., “Name the vector for dengue” or “Give one example of biological control.”

Assessment & Evaluation

1. In-session: Polls / MCQs (formative).
2. Post-session: Exit ticket or short quiz.
3. Future: Viva, module exams, OSCE on vector identification/control.

Homework / Follow-up

1. Read relevant sections from Park’s 27th Edition.
2. Prepare summary tables on important vectors, diseases transmitted and control measures.
3. Observe breeding places and vectors during community postings or field visits.

Occupational Health

Time Duration: 60 minutes

Learning Objectives

By the end of the lecture, students will be able to:

- 1. Define occupational health and describe its scope and objectives.*
- 2. Classify occupational hazards and explain their health effects.*
- 3. Describe common occupational diseases and their prevention.*
- 4. Outline occupational health services, legislation and the role of medical officers.*

Materials / AV Aids Required

- 1. PowerPoint presentation (classification of hazards, images of occupational diseases, prevention flowcharts).*
- 2. Clinical images (e.g., pneumoconiosis, lead poisoning, noise-induced hearing loss, dermatitis).*
- 3. Skeleton handouts / key summary tables (hazards vs diseases, prevention measures).*
- 4. Pointer / microphone for large group.*
- 5. Optional: Mentimeter/Quiz for quick polls.*

Teaching-Learning Methods

- 1. Didactic lecture with PPT.*
- 2. Interactive questioning and quick polls.*
- 3. Clinical image-based discussion.*
- 4. Summary tables and flowcharts.*

Lesson Structure & Time Allocation (60 minutes)

1. Introduction (5–7 minutes)

- 1. Greet and quick ice-breaker/poll: “What health risks do factory workers or miners face?”**

2. Highlight importance of occupational health in preventive medicine and worker productivity.
3. Link to prior knowledge (Environment and Health, Clinical Medicine).
4. Clearly state learning objectives.

2. Core Content (35–38 minutes)

Section A: Basic Concepts & Objectives (10 minutes)

1. Definition of occupational health (WHO).
2. Objectives and scope of occupational health.
3. Occupational environment and its influence on health.

Section B: Occupational Hazards and Diseases (15 minutes)

1. Classification of occupational hazards: Physical (heat, noise, vibration, radiation), Chemical (gases, dust, metals), Biological, Mechanical, Psychosocial.
2. Common occupational diseases: Pneumoconiosis (silicosis, asbestosis), Lead poisoning, Noise-induced hearing loss, Occupational dermatitis, Musculoskeletal disorders.
3. Use of clinical images and high-yield points for identification.

Section C: Prevention, Services & Legislation (10–12 minutes)

1. Prevention strategies (engineering controls, administrative measures, personal protective equipment).
2. Occupational health services at workplace.
3. Important legislation (Factories Act, ESI Act).
4. Role of medical officer in occupational health.

3. Summary & Key Takeaways (5 minutes)

1. Recap with a mind map or single summary slide (hazard classification + major diseases + prevention).
2. Exam-oriented pointers (common PYQs on hazards and pneumoconiosis).
3. Clinical & community integration.

4. Interactive Session / Q&A (5–8 minutes)

1. 2–3 quick MCQs or clinical scenarios via poll.
2. Open floor for doubts.
3. Formative assessment: e.g., “Name two physical hazards” or “Give one example of occupational lung disease.”

Assessment & Evaluation

1. In-session: Polls / MCQs (formative).
2. Post-session: Exit ticket or short quiz.
3. Future: Viva, module exams, field visits to industries.

Homework / Follow-up

1. Read relevant sections from Park’s 27th Edition.
2. Prepare summary tables on occupational hazards, associated diseases and preventive measures.
3. Observe occupational health practices or hazards during community postings or industrial visits (if possible).

By,

Dr. S. M. Khusbul Jannat

Assistant Professor

Department of Community Medicine

COMC

Public Health Administration and Management

Time Duration: 60 minutes

Learning Objectives

By the end of the lecture, students will be able to:

- 1. Define public health administration, management and planning.*
- 2. Describe the health system in India (3-tier structure) and National Health Mission.*
- 3. Explain the management cycle (planning, organizing, staffing, directing, controlling, evaluation).*
- 4. Outline health economics, budgeting, leadership and motivation in public health settings.*

Materials / AV Aids Required

- 1. PowerPoint presentation (organogram of health system, management cycle flowchart, NHM structure).*
- 2. Diagrams of primary health centre setup and health planning process.*
- 3. Skeleton handouts / key summary tables (management functions, health administration levels).*
- 4. Pointer / microphone for large group.*
- 5. Optional: Mentimeter/Quiz for quick polls.*

Teaching-Learning Methods

- 1. Didactic lecture with PPT.*
- 2. Interactive questioning and quick polls.*
- 3. Flowchart-based discussion.*
- 4. Summary tables.*

Lesson Structure & Time Allocation (60 minutes)

- 1. Introduction (5–7 minutes)*

1. Greet and quick ice-breaker/poll: “What do you understand by health administration?”
2. Highlight importance of management in effective delivery of health services.
3. Link to prior knowledge (Concept of Public Health, PHC).
4. Clearly state learning objectives.

2. Core Content (35–38 minutes)

Section A: Basic Concepts (10 minutes)

1. Definitions: Administration, Management, Public Health Administration.
2. Difference between administration and management.
3. Principles of management (POSDCORB – Planning, Organizing, Staffing, Directing, Coordinating, Reporting, Budgeting).

Section B: Health System in India (12 minutes)

1. Historical development (Bhore Committee to present).
2. 3-tier health care delivery system (sub-centre, PHC, CHC, district hospital).
3. National Health Mission (NHM) – structure, components and current status.
4. Universal Health Coverage and Ayushman Bharat.

Section C: Health Planning, Management Cycle & Health Economics (13 minutes)

1. Health planning – types, steps and management cycle.
2. Health economics – concepts of cost, demand, supply, budgeting.
3. Leadership, motivation and evaluation in public health.
4. Challenges in public health administration.

3. Summary & Key Takeaways (5 minutes)

1. Recap with a mind map or single summary slide (health system pyramid + POSDCORB).
2. Exam-oriented pointers (common PYQs on committees and 3-tier system).
3. Clinical & community integration.

4. Interactive Session / Q&A (5–8 minutes)

1. 2–3 quick MCQs or scenarios via poll (e.g., functions of PHC).

2. Open floor for doubts.
3. Formative assessment: e.g., “Name the three levels of health care delivery” or “What does POSDCORB stand for?”

Assessment & Evaluation

1. In-session: Polls / MCQs (formative).
2. Post-session: Exit ticket or short quiz.
3. Future: Viva, module exams on health systems.

Homework / Follow-up

1. Read relevant sections from Park’s 27th Edition.
2. Prepare summary table on 3-tier health system and functions at each level.
3. Observe functioning of health facilities during community postings.

By,

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Department of Community Medicine

COMC

School Health Service

Time Duration: 60 minutes

Learning Objectives

By the end of the lecture, students will be able to:

- 1. Define school health services and describe its objectives and components.*
- 2. Explain common health problems among school children (physical, nutritional, infectious, behavioural).*
- 3. Describe the School Health Programme in India and its implementation.*
- 4. Outline the role of teachers, medical officers and screening/referral mechanisms in school health.*

Materials / AV Aids Required

- 1. PowerPoint presentation (diagrams of school health components, growth charts, common problems).*
- 2. Clinical images of nutritional deficiencies, dental caries, skin infections, postural defects.*
- 3. Skeleton handouts / key summary tables (components of school health, common problems).*
- 4. Pointer / microphone for large group.*
- 5. Optional: Mentimeter/Quiz for quick polls.*

Teaching-Learning Methods

- 1. Didactic lecture with PPT.*
- 2. Interactive questioning and quick polls.*
- 3. Clinical image-based discussion.*
- 4. Summary tables and flowcharts.*

Lesson Structure & Time Allocation (60 minutes)

1. Introduction (5–7 minutes)

1. Greet and quick ice-breaker/poll: “How many of you had regular health check-ups in school?”
2. Highlight importance of school health in preventive medicine and child development.
3. Link to prior knowledge (Paediatrics, Nutrition, Community Medicine).
4. Clearly state learning objectives.

2. Core Content (35–38 minutes)

Section A: Basic Concepts & Objectives (10 minutes)

1. Definition and scope of school health services.
2. Objectives – promotion of health, prevention of diseases, early detection and treatment.
3. Components of comprehensive school health programme (WHO/India guidelines).

Section B: Common Health Problems in School Children (12–13 minutes)

1. Nutritional problems (PEM, anemia, vitamin deficiencies, obesity).
2. Infectious diseases (skin, eye, dental caries, worm infestation).
3. Behavioural and psychosocial problems (learning disabilities, addiction, bullying).
4. Physical problems (postural defects, refractive errors, hearing impairment).
5. Use of clinical images for identification.

1. Section C: School Health Programme & Implementation (12 minutes)

2. National School Health Programme – structure and activities.
3. Role of school teachers, health personnel and medical officers.
4. Screening methods, record keeping, health education and referral system.
5. Monitoring, evaluation and challenges in implementation.

3. Summary & Key Takeaways (5 minutes)

1. Recap with a mind map or single summary slide (components + common problems + roles).
2. Exam-oriented pointers (common PYQs on objectives and components).
3. Clinical & community integration.

4. Interactive Session / Q&A (5–8 minutes)

1. 2–3 quick MCQs or clinical scenarios via poll.
2. Open floor for doubts.
3. Formative assessment: e.g., “Name any two components of school health services” or “Give one common nutritional problem in school children.”

Assessment & Evaluation

1. In-session: Polls / MCQs (formative).
2. Post-session: Exit ticket or short quiz.
3. Future: Viva, module exams, field visits to schools.

Homework / Follow-up

1. Read relevant sections from Park’s 27th Edition.
2. Prepare summary tables on common health problems in school children and components of school health programme.
3. Observe school health activities or common problems during community postings or school visits.

By,

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Assistant Professor

Department of Community Medicine

COMC

Lesson Plan (Community Medicine and Public Health)

Topic: CD & NCD

This lesson plan is designed for a 60-minute lecture for fourth-year MBBS (medical) students, focusing on the CD and NCD.

Field	Detail
Subject	Community Medicine and Public Health
Year	MBBS Fourth Year (Cum 32)
Topic	Epidemiology and prevention of EPI diseases
Duration	60 minutes
Format	Lecture Class
Venue	Lecture Gallery 2
Date and Time	16 February 2026, 11.30 AM-12-30 PM
Teacher	Dr. Zubaida Ahmed, Associate Professor and Head. Department of Community Medicine and Public Health.

Learning Objectives:

At the end of the session students will be able to:-

1. -mention some CD & NCDs
2. -state the difference between CD & NCD.
3. -state the reason why NCD are increasing in Bangladesh.
4. -state the Epidemiology of EPI diseases.
5. -describe the prevention of EPI diseases.

Content Outline and Time Allocation

Time (min)	Activity	Content/Key Points	Teaching Method
0-5	Gaining Attention	Made a real-life story on CD & NCD	Open lecture

5–10	Introduction & Review	Briefly review the CD of EPI diseases and State the lecture objectives.	PPT Slides, Interactive Questioning
10–15	Definition of CD and NCD with example.	Showing the PPT slide for better understanding	PPT Slides
Time (min)	Activity	Content/Key Points	Teaching Method
		As well as classification of communication from Park's text book of preventive and social medicine.	
15–40	CD Vs NCD	Discussion in details on difference between CD and NCD. Discussion in details why NCDs are increasing in BD.	PPT slides.
40–50	Epidemiology of EPI diseases	Discuss briefly on Epidemiology of EPI diseases	PPT slides.
50-55	Prevention of EPI diseases	Discuss briefly on the prevention of EPI diseases.	PPT slides.

55–60	Summary	Recap the whole session briefly.	Review of Key Terms, 2-3 Multiple Choice Questions for (MCQs) assessment.
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Resources and Evaluation

Instructional Material

- Power Point Presentation with high-quality pictures, flow chart
- Whiteboard for drawing the timeline and key structures.

Assessment / Evaluation

- **Formative:** Observation of student engagement and responses to interactive questions throughout the lecture (e.g., "What is the difference between infectious diseases and Communicable diseases ?").
- **Summative (Mini-Quiz):** Two to three quick MCQs at the end of the lecture focusing on:
 - Name some CD
 - NAME SOME NCD.
 - Which type of paralysis occurs in poliomyelitis?

Assignment

- Students should know the difference between CD & NCD
- Read the next chapter on diarrhoeal diseases.

Lesson Plan (Community Medicine and Public Health)

Topic: Health Communication & Health Education

This lesson plan is designed for a 60-minute lecture for fourth-year MBBS (medical) students, focusing on the Health Communication.

Field	Detail
Subject	Community Medicine and Public Health
Year	MBBS Fourth Year (Cum 32)
Topic	Health Communication & health education
Duration	60 minutes
Format	Lecture Class
Venue	Lecture Gallery 2
Date and Time	15 Febuary 2026, 11.30 AM-12-30 PM
Teacher	Dr. Zubaida Ahmed, Associate Professor and Head. Department of Community Medicine and Public Health.

Learning Objectives:

At the end of the session students will be able to:-

1. -define communication.
2. -classify communication process.
3. -state the function of communication.
4. -state the barrier of communication.
5. -describe the media and methods of communication.

Content Outline and Time Allocation

Time (min)	Activity	Content/Key Points	Teaching Method
0-5	Gaining Attention	Made a real-life story on health communication.	Open lecture

5–10	Introduction & Review	Briefly review the health communication & State the lecture objectives.	PPT Slides, Interactive Questioning
10–15	Definition & classification of health communication.	Showing the flow chart of communication process for better understanding	PPT Slides
Time (min)	Activity	Content/Key Points	Teaching Method
		As well as classification of communication from Park's text book of preventive and social medicine.	
15–40	Elements & barrier of communication	Discussion in details on elements and barrier of communication.	flow chart, PPT slides.
40–50	Difference	Difference between seminar and symposium. Group discussion vs panel discussion. Details on FGD	PPT slides.
50-55	Summary	Recap the whole session briefly.	Review of Key Terms, 2-3 Multiple Choice Questions for (MCQs) assessment.

55–60	Problem solving and asking questions	Briefly discuss on the problems raised by students.	PPT and open discussion
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Resources and Evaluation

Instructional Material

- Power Point Presentation with high-quality pictures, flow chart
- Whiteboard for drawing the timeline and key structures.

Assessment / Evaluation

- **Formative:** Observation of student engagement and responses to interactive questions throughout the lecture (e.g., "What are the barriers of communication ?").
- **Summative (Mini-Quiz):** Two to three quick MCQs at the end of the lecture focusing on:
 - FGD
 - The classification communication process.
 - The media used in health communication.

Assignment

- Students should classify the communication process
- Read the next chapter on health education.

Department of Community Medicine

Comilla Medical College, Cumilla

Small Group Lesson Plan Community Medicine and Public Health

Topic: Health for All (HFA), Primary Health Care (PHC), Universal Health Coverage (UHC), MDG & SDG

This lesson plan is designed for a **120-minute tutorial class** for **fourth-year MBBS students**, focusing on **Health for All (HFA), Primary Health Care (PHC), Universal Health Coverage (UHC), Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs)**.

Field	Detail
Subject	Community Medicine and Public Health
Year	MBBS Fourth Year (Cum)
Topic	Health for All (HFA), PHC, UHC, MDG & SDG
Duration	120 minutes
Format	Tutorial Class
Resources	Whiteboard, PowerPoint slides, WHO charts, handouts, marker
Teaching Method	Interactive lecture + group discussion + problem-solving
Venue	Tutorial Classroom
Date and Time	5 March 2026, 12:30 PM – 2:30 PM
Teacher	Dr., Lecturer, Department of Community Medicine and Public Health

Learning Objectives

At the end of the session students will be able to:

1. Define **Health for All (HFA), Primary Health Care (PHC) and Universal Health Coverage (UHC)**.
2. Explain the **principles and components of Primary Health Care**.
3. Describe the **goal and indicators of Health for All by the year 2000 AD**.
4. Differentiate between **MDGs and SDGs** and identify health-related goals.
5. Describe the **Essential Service Package (ESP)** and important national health programmes.
6. Explain the **organizational structure and levels of health care service delivery**, IHR-2005, and the roles of major national and international health organizations.

Content Outline and Time Allocation

Time (min)	Activity	Content / Key Points
0–5	Gaining Attention	Begin with a real-life case showing unequal access to healthcare and ask: "Should everyone have access to healthcare regardless of income?"
5–25	Introduction to HFA, PHC & UHC	Definitions: Health for All (HFA), PHC, UHC. Alma-Ata Declaration (1978). Importance of equitable healthcare. Difference between HFA and UHC.
25–45	Principles & Components of PHC	Principles: Equity, Community participation, Intersectoral coordination, Appropriate technology. Eight Essential

		Components: Health education, Nutrition, Safe water & sanitation, MCH including family planning, Immunization, Endemic disease control, Treatment of common diseases, Essential drugs.
45–65	HFA Goals & Health Service Delivery	Goal and indicators of HFA by 2000 AD. Organizational structure for PHC. Levels of healthcare delivery: Primary, Secondary, Tertiary. Essential Service Package (ESP).
65–90	MDGs & SDGs	Introduction to MDGs (2000–2015). Eight MDGs with emphasis on health-related goals (MDG 4, 5 & 6). Introduction to SDGs (2016–2030). SDG 3 and its targets. Comparison between MDGs and SDGs.
90–110	National & International Health Organizations	Important National Health Programmes (EPI, TB, Malaria, Leprosy, NCD Control, Maternal & Child Health). IHR-2005 (purpose, scope and diseases). International organizations: WHO, UNICEF, Red Crescent, ICDDR,B, CARE and their functions.

Resources and Evaluation

Instructional Materials

- High-quality PowerPoint slides
- Flow charts and diagrams
- Whiteboard and markers
- WHO/UNICEF health programme charts

Teaching Methods

- Interactive questioning
- Small group discussion
- Brainstorming
- Case-based learning

Assessment / Evaluation

- MCQs during the session
 - Example: **Which is NOT a principle of PHC?**
 - **Which SDG focuses on health?**
- Short-answer questions
 - Mention four principles of PHC.
 - List the eight components of PHC.
 - Differentiate between MDG and SDG.
- Interpretation of a healthcare delivery scenario.

Assignment

1. Draw a flowchart showing the **levels of healthcare service delivery in Bangladesh.**
2. Write short notes on:
 - Health for All (HFA)
 - Primary Health Care (PHC)
 - Universal Health Coverage (UHC)
3. Compare **MDGs and SDGs** in a table.
4. Describe the roles of **WHO, UNICEF, ICDDR,B and CARE** in improving public health.

Department of Community Medicine

Comilla Medical College, Cumilla

Small Group Lesson Plan – Community Medicine and Public Health

Topic: Occupational Health

This lesson plan is designed for a **120-minute tutorial class** for **Fourth-Year MBBS students**, focusing on **Occupational Health**.

Field	Detail
Subject	Community Medicine and Public Health
Year	MBBS Fourth Year (Cum)
Topic	Occupational Health
Duration	120 minutes
Format	Tutorial Class
Resources	Whiteboard, PowerPoint slides, charts, occupational hazard posters, PPE (Personal Protective Equipment) samples, handouts
Teaching Method	Interactive lecture + discussion + demonstration
Venue	Tutorial Class Room
Date and Time	120 minutes
Teacher	Dr.....Lecturer, Department of Community Medicine and Public Health

Learning Objectives

At the end of the session students will be able to:

1. Define **Occupational Health** and explain its objectives.
2. Describe the **occupational environment** and its components.
3. Identify the **occupational health hazards** and their effects on workers.
4. Explain the **principles of prevention of occupational diseases**.
5. Describe the **employees' benefits** under occupational health services.

Content Outline and Time Allocation

Time (min)	Activity	Content/Key Points
0–5	Gaining Attention	Ask students: " Why are some occupations associated with a higher risk of disease and injury? " Discuss a real-life example of an occupational disease.
5–25	Introduction to Occupational Health	Definition of Occupational Health. Objectives: • Promotion and maintenance of workers' physical, mental and social well-being • Prevention of occupational diseases and injuries • Protection from workplace hazards • Adaptation of work to workers • Improvement of productivity and quality of life.
25–45	Occupational Environment	Components of occupational environment: • Physical environment (heat, cold, noise, vibration, radiation, lighting) • Chemical environment (dust, fumes, gases, vapors, solvents) • Biological

		environment (bacteria, viruses, fungi, parasites) • Psychosocial environment (stress, workload, shift work, violence) • Ergonomic environment (posture, repetitive movements, workstation design).
45–70	Occupational Health Hazards	Types of hazards: • Physical hazards • Chemical hazards • Biological hazards • Mechanical hazards • Ergonomic hazards • Psychosocial hazards. Discuss common occupational diseases and injuries associated with each hazard.
70–95	Principles of Prevention of Occupational Diseases	• Health education • Pre-placement examination • Periodic medical examination • Engineering controls • Environmental monitoring • Personal protective equipment (PPE) • Safe work practices • Immunization where applicable • Legislation and enforcement • Health surveillance and rehabilitation.
95–115	Employees' Benefits	Employees' benefits include: • Safe working environment • Medical care • Compensation for occupational injuries and diseases • Sick leave • Maternity benefits • Disability benefits • Health insurance • Pension and retirement benefits • Rehabilitation services • Welfare facilities.
115–120	Review	Brief recap of all topics discussed and clarification of students' questions.

Resources and Evaluation

Instructional Materials

- PowerPoint slides
- Flow chart of Occupational Health Services
- Charts showing occupational hazards
- Samples of Personal Protective Equipment (PPE)
- Whiteboard and marker

Teaching Methods

- Interactive lecture
- Group discussion
- Demonstration
- Question–answer session
- Case-based discussion

Assessment / Evaluation

- Oral questioning during the session.
- Short Answer Questions (SAQ).
- Identification of occupational hazards from pictures or case scenarios.
- Discussion on the principles of prevention of occupational diseases.
- Case-based assessment on occupational health problems.

Assignment

- Draw a flow chart showing the **components of the occupational environment**.
- Classify **occupational health hazards** with suitable examples.
- Write the **principles of prevention of occupational diseases**.
- Describe the **employees' benefits** under occupational health services.
- Read the relevant chapter from **Park's Textbook of Preventive and Social Medicine** and prepare short notes on **Occupational Health**.

Department of Community Medicine

Comilla Medical College, Cumilla

Small Group Lesson Plan – Community Medicine and Public Health

Topic: Demography

This lesson plan is designed for a **120-minute tutorial class** for **Fourth-Year MBBS students**, focusing on **Demography**.

Field	Detail
Subject	Community Medicine and Public Health
Year	MBBS Fourth Year (Cum)
Topic	Demography
Duration	120 minutes
Format	Tutorial Class
Resources	Whiteboard, PowerPoint slides, charts, population pyramid diagrams, census reports, handouts
Teaching Method	Interactive lecture + discussion + problem-solving
Venue	Tutorial Class Room
Date and Time	120 minutes
Teacher	Dr..... Lecturer, Department of Community Medicine and Public Health

Learning Objectives

At the end of the session students will be able to:

1. Define **Demography** and explain its importance in public health.
2. Describe the **demographic processes** affecting population change.
3. Explain the **demographic transition** and its stages.
4. Interpret important **demographic indices**.
5. Describe the **population pyramid** and its different types.
6. Explain the **census**, its characteristics, uses, and limitations.
7. Define **fertility** and discuss the factors influencing fertility.

Content Outline and Time Allocation

Time (min)	Activity	Content/Key Points
0–5	Gaining Attention	Ask students: " Why is population data important for planning health services? " Discuss a recent population-related issue.
5–20	Introduction to Demography	Definition of demography. Importance in public health. Uses in planning, disease control, maternal and child health, and resource allocation.
20–40	Demographic Processes	Population change through: • Fertility • Mortality • Migration. Explain their effects on population growth and distribution with examples.
40–60	Demographic Transition and	Stages of Demographic Transition: High stationary, Early expanding, Late expanding, Low stationary, Declining stage.

	Demographic Indices	Demographic Indices: • Crude Birth Rate (CBR) • Crude Death Rate (CDR) • Infant Mortality Rate (IMR) • Maternal Mortality Ratio (MMR) • Growth Rate • Sex Ratio • Dependency Ratio • Life Expectancy.
60–80	Population Pyramid	Definition and importance. Types of population pyramids: • Expansive • Stationary • Constrictive. Interpretation and public health significance.
80–100	Census	Definition , characteristics, methods of census, uses in health planning, advantages and limitations. Importance of census in public health programs.
100–115	Fertility and Influencing Factors	Definition of Fertility. Fertility indicators: • General Fertility Rate (GFR) • Total Fertility Rate (TFR). Influencing factors: • Age at marriage • Education • Socioeconomic status • Religion and culture • Family planning • Nutrition • Urbanization • Women's employment • Health services.
115–120	Review	Brief recap of all topics discussed and clarification of students' questions.

Resources and Evaluation

Instructional Materials

- PowerPoint slides
- Population pyramid charts
- Census report samples
- Flow chart of demographic transition
- Whiteboard and marker

Teaching Methods

- Interactive lecture
- Group discussion
- Question–answer session
- Diagram interpretation
- Problem-solving exercises

Assessment / Evaluation

- Oral questioning during the session.
- Short Answer Questions (SAQ).
- Interpretation of population pyramid diagrams.
- Calculation and interpretation of demographic indices.
- Discussion on the stages of demographic transition.

Assignment

- Draw and explain the **stages of the Demographic Transition**.
- Draw the **three types of Population Pyramid** and mention their significance.
- Write short notes on **Census** and its importance in public health.
- Explain the **factors influencing fertility**.

Read the relevant chapter from **Park's Textbook of Preventive and Social Medicine** and prepare short notes on **Demography**.

Department of Community Medicine

Comilla Medical College, Cumilla

Small Group Lesson Plan – Community Medicine and Public Health

Topic: Family Planning

This lesson plan is designed for a **120-minute tutorial class** for **Fourth-Year MBBS students**, focusing on **Family Planning**.

Field	Detail
Subject	Community Medicine and Public Health
Year	MBBS Fourth Year (Cum)
Topic	Family Planning
Duration	120 minutes
Format	Tutorial Class
Resources	Whiteboard, PowerPoint slides, contraceptive models (OCP, IUCD, condoms), family planning charts, handouts
Teaching Method	Interactive lecture + discussion + demonstration
Venue	Tutorial Class Room
Date and Time	120 minutes
Teacher	Dr.....Lecturer, Department of Community Medicine and Public Health

Learning Objectives

At the end of the session students will be able to:

1. Define the **concept of Family Planning** and explain its aims and objectives.
2. Describe the **different contraceptive methods**, including OCP, IUCD, and permanent methods.
3. Explain **Menstrual Regulation (MR)**, **Medication Menstrual Regulation (MRM)**, and differentiate them from **Emergency Contraceptive Pills (ECPs)**.
4. Discuss **Postpartum Family Planning (PPFP)**, **Post-abortion/MR/MRM Family Planning**, and the **Lactational Amenorrhea Method (LAM)**.
5. Define **eligible and target couples**, **safe period**, **Contraceptive Prevalence Rate (CPR)**, **Total Fertility Rate (TFR)**, **unmet need**, and **discontinuation rate**.
6. Explain the concept of **Maternal and Child Health (MCH)-based Family Planning**.

Content Outline and Time Allocation

Time (min)	Activity	Content/Key Points
0–5	Gaining Attention	Ask students: " Why is family planning considered one of the most effective public health interventions? " Discuss the impact of family planning on maternal and child health.
5–20	Introduction to Family Planning	Definition/Concept of Family Planning. Aims and Objectives: • Planned parenthood • Healthy timing and spacing of pregnancies • Prevention of unintended pregnancies • Reduction of maternal and infant mortality • Improvement of family welfare and quality of life.
20–45	Contraceptive Methods	Classification of contraceptive methods: • Temporary methods – OCP, condoms, injectables, implants, IUCD • Permanent

		methods – Vasectomy, Tubectomy. Mechanism of action, advantages, disadvantages, indications, contraindications, effectiveness, and side effects.
45–65	MR, MRM and Emergency Contraception	Menstrual Regulation (MR), Medication Menstrual Regulation (MRM) , indications and eligibility. Difference between MR/MRM and Emergency Contraceptive Pills (ECPs) . Counseling and follow-up care.
65–85	PPFP, Post-abortion Family Planning and LAM	Postpartum Family Planning (PPFP), Post-abortion/MR/MRM Family Planning, Lactational Amenorrhea Method (LAM) —criteria, effectiveness, advantages, limitations, and appropriate counseling.
85–110	Family Planning Indicators and Concepts	Eligible couple, Target couple, Safe period, Contraceptive Prevalence Rate (CPR), Total Fertility Rate (TFR), Unmet need, Discontinuation rate, MCH-based Family Planning and their importance in public health.
110–120	Review	Brief recap of all topics discussed and clarification of students' questions.

Resources and Evaluation

Instructional Materials

- PowerPoint slides
- Flow chart of Family Planning methods
- Contraceptive models (OCP, IUCD, condoms)
- Family Planning counseling chart
- Whiteboard and marker

Teaching Methods

- Interactive lecture
- Group discussion
- Demonstration of contraceptive devices
- Question–answer session
- Case-based discussion

Assessment / Evaluation

- Oral questioning during the session.
- Short Answer Questions (SAQ).
- Identification of contraceptive methods using models or pictures.
- Case scenario on family planning counseling.
- Discussion on family planning indicators and appropriate contraceptive selection.

Assignment

- Draw a **classification chart of contraceptive methods**.
- Differentiate **MR, MRM, and Emergency Contraceptive Pills (ECPs)**.
- Write short notes on **Postpartum Family Planning (PPFP)** and **Lactational Amenorrhea Method (LAM)**.
- Explain the importance of **CPR, TFR, unmet need, and discontinuation rate** in evaluating family planning programs.
- Read the relevant chapter from **Park's Textbook of Preventive and Social Medicine** and prepare short notes on **Family Planning**.

Department of Community Medicine

Comilla Medical College, Cumilla

Small Group Lesson Plan Community Medicine and Public Health

Topic: Biostatistics

This lesson plan is designed for a 120 minutes tutorial class for fourth-year MBBS students, focusing on Biostatistics.

Field	Detail
Subject	Community Medicine and Public Health
Year	MBBS Fourth Year (Cum)
Topic	Biostatistics
Duration	120 minutes
Format	Tutorial Class
Resources	Whiteboard, slides, Calculator, handouts
Teaching Method	Interactive lecture + problem-solving
Venue	Tutorial Class Room
Date and Time	5 March 2026, 12.30PM - 2.30 PM
Teacher	Dr.....Lecturer, Department of Community Medicine and Public Health

Learning Objectives:

At the end of the session students will be able to:-

1. -define biostatistics, source of vital statistics and its importance.
2. -define and classify data and state the method of data collection and data presentation.
3. -define sample and population, sampling, state the different type of sampling method, Calculate the sample size.
4. -calculate and interpret measures of central tendency and dispersion.
5. -interpret p-values and confidence intervals, Interpret the normal distribution curve
6. -define and classify variable with example with scale of measurement.

Content Outline and Time Allocation

Time (Min)	Activity	Content/Key Points
0-5	Gaining Attention	Made a real-life story on field site epidemiological survey.
5-20	Introduction of Biostatistics	Definition and importance of biostatistics in medicine Role in: • Epidemiology • Clinical trials • Evidence-based medicine Source of vital statistics and its importance.
20-40	Data collection and data presentation	Drawing picture on white board for better understanding and asking students to identify appropriate graphs for different datasets Tables and frequency distributions Graphical methods: • Bar chart • Histogram • Pie chart • Line diagram

40-65	Sample size calculation some definition	Definition of sample, population, sampling, sampling frame and unit. Calculation of sample size using the formula. Details of probability and non probability sampling.
65-90	Measures of central tendency and dispersion.	• Mean, Median, Mode • When to use each • Effect of extreme values Example problem: Calculate mean and median from a small dataset Measures of Dispersion • Range • Variance • Standard deviation (SD) • Coefficient of variation
90-100	Normal Distribution Curve	Normal distribution curve: • Characteristics • Bell-shaped curve • 68-95-99.7 rule Hypothesis Testing • Null and alternative hypothesis • p-value (interpretation, not just definition) • Confidence interval
100-115	Variable and scale of measurement	Definition of variable. Classification of variable asking questions to identify variable correctly. Giving example for better understanding of dependent, independent and confounding variable. Scale of measurement with example
115-120	Review	Recap the whole session briefly.

Resources and Evaluation

Instructional Material

- High-quality pictures, flow chart
- Whiteboard for drawing the timeline and key structures.

Teaching Methods

- Interactive questioning
- Short problem-solving exercises

Assessment/Evaluation

Assessment

- MCQs during session (which one is not the measures of central tendency)
- Short calculation exercises (sample size, mean)
- Interpretation of results

Assignment

Solve numerical problems from Park textbook.

- Interpret a simple research paper abstract.

Department of Community Medicine

Comilla Medical College, Cumilla

Small Group Lesson Plan Community Medicine and Public Health

Topic: Concept of Public Health, Community Medicine, Health and Disease

This lesson plan is designed for a 120-minute tutorial class for Fourth-year MBBS students, focusing on the Concept of Public Health, Community Medicine, Health and Disease.

Field	Detail
Subject	Community Medicine and Public Health
Year	MBBS Fourth Year
Topic	Concept of Public Health, Community Medicine, Health and Disease
Duration	120 minutes
Format	Tutorial Class
Resources	Whiteboard, multimedia slides, charts, handouts, markers
Teaching Method	Interactive lecture + group discussion + problem-solving
Venue	Tutorial Classroom
Date and Time	(As Scheduled)
Teacher	Dr Department of Community Medicine and Public Health

Learning Objectives

At the end of the session students will be able to:

1. Define Public Health and Community Medicine.
2. Explain the concepts of Health and Disease.
3. Differentiate Public Health from Community Medicine and Clinical Medicine.
4. Describe the dimensions and determinants of health.
5. Explain the natural history of disease.
6. Discuss common health and social problems and the concept of the health team.

Content Outline and Time Allocation

Time(min)	Activity	Content/Key Points
0–5	Gaining Attention	Start with a real-life community health scenario (e.g., dengue outbreak) and ask students how it can be prevented.
5–25	Introduction to Public Health & Community Medicine	Definition of Public Health (Winslow's definition), Community Medicine, objectives, scope, importance, difference between Public Health, Community Medicine and Clinical Medicine.
25–45	Concept of Health and Disease	WHO definition of health, dimensions of health (physical, mental, social, spiritual), concepts of disease, illness and sickness, spectrum of health and disease.
45–65	Determinants of Health	Biological, environmental, socioeconomic, behavioral and health service factors. Examples from Bangladesh.

65–85	Natural History of Disease	Stages: Pre-pathogenesis and Pathogenesis. Levels of prevention: Primordial, Primary, Secondary and Tertiary with examples.
85–105	Common Health & Social Problems and Health Team	Malnutrition, communicable diseases, NCDs, maternal and child health problems, substance abuse, pollution. Members of the health team and their roles.
105–115	Group Discussion/Case Study	Small group discussion on prevention of a community disease (e.g., cholera or dengue). Students identify determinants, prevention and health team involvement.
115–120	Review	Summarize key concepts, clarify doubts and ask rapid MCQs.

Resources and Evaluation

Instructional Materials

- PowerPoint slides
- Whiteboard and markers
- Charts/flow diagrams
- WHO definition chart
- Handouts

Teaching Methods

- Interactive lecture
- Question–answer session
- Group discussion
- Case-based learning

Assessment/Evaluation

- MCQs during the session
- Short-answer questions
- Case scenario discussion
- Oral questioning on:
 - Definition of Public Health
 - WHO definition of Health
 - Determinants of Health
 - Levels of Prevention
 - Health Team Concept

Assignment

1. Draw the **Natural History of Disease** with the **Levels of Prevention**.
2. Compare **Public Health, Community Medicine and Clinical Medicine** in a table.
3. Write short notes on:
 - WHO Definition of Health
 - Determinants of Health
 - Health Team Concept

Department of Community Medicine

Comilla Medical College, Cumilla

Small Group Lesson Plan Community Medicine and Public Health

Topic: Health Communication & Health Education

This lesson plan is designed for a **120-minute tutorial class** for **Fourth-year MBBS students**, focusing on **Health Communication and Health Education**.

Field	Detail
Subject	Community Medicine and Public Health
Year	MBBS Fourth Year (Cum)
Topic	Health Communication & Health Education
Duration	120 minutes
Format	Tutorial Class
Resources	Whiteboard, PowerPoint slides, charts, flipcharts, posters, handouts
Teaching Method	Interactive lecture + group discussion + role play
Venue	Tutorial Classroom
Date and Time	(As Scheduled)
Teacher	Dr..... Department of Community Medicine and Public Health

Learning Objectives

At the end of the session students will be able to:

1. Define **communication** and **health education**.
2. Classify different types of communication.
3. Describe the functions, elements, barriers, media and methods of communication.
4. Explain the objectives, contents and principles of health education.
5. Discuss different approaches to health education.
6. Explain the stages in the adoption of a new idea and apply them to community health promotion.

Content Outline and Time Allocation

Time(min)	Activity	Content/Key Points
0-5	Gaining Attention	Present a short real-life scenario (e.g., a vaccination campaign) and ask students why some people accept while others refuse health advice.
5-25	Introduction to Health Communication	Definition of communication, importance in public health, classification (one-way, two-way, verbal, non-verbal, formal, informal), functions of communication.
25-45	Elements, Barriers, Media & Methods of Communication	Elements: Sender, Message, Channel, Receiver, Feedback, Noise. Barriers: Physical, Psychological, Cultural, Semantic, Organizational. Communication media and methods: Individual, Group and Mass communication with examples.
45-65	Introduction to Health Education	Definition of health education, objectives, contents, importance and scope in disease prevention and health promotion.
65-90	Principles and Approaches of Health	Principles of health education (interest, participation, motivation, reinforcement, comprehension, learning by doing, good

	Education	communication, credibility). Approaches: Regulatory, Service, Educational and Primary Health Care approach.
90-110	Stages of Adoption of a New Idea	Stages: Awareness → Interest → Evaluation → Trial → Adoption. Discuss practical examples such as ORS use, vaccination, hand washing and family planning. Conduct a short role-play or case discussion.
110–120	Review	Recap the entire session, clarify doubts and conduct rapid MCQs and oral questioning.

Resources and Evaluation

Instructional Materials

- PowerPoint slides
- Whiteboard and markers
- Flip charts
- Posters and flashcards
- Handouts
- Health education leaflets

Teaching Methods

- Interactive lecture
- Question–answer session
- Group discussion
- Role play
- Demonstration

Assessment / Evaluation

Assessment

- MCQs during the session (e.g., identify barriers of communication)
- Short-answer questions
- Oral questioning
- Group discussion participation
- Interpretation of a communication scenario

Students should be able to:

- Define communication and health education.
- Identify elements and barriers of communication.
- Differentiate communication methods.
- Explain principles and approaches of health education.
- Describe the five stages of adoption of a new idea.

Assignment

1. Draw the **Communication Process** showing all its elements.
2. Compare **Individual, Group and Mass Communication** in a table.
3. Write short notes on:
 - Principles of Health Education
 - Barriers of Communication
 - Stages of Adoption of a New Idea
4. Prepare a **5-minute health education talk** on any one topic (e.g., hand hygiene, dengue prevention, ORS use, or immunization)

Department of Community Medicine

Comilla Medical College, Cumilla

Small Group Lesson Plan Community Medicine and Public Health

Topic: Immunity, Immunization & Disinfection

This lesson plan is designed for a **120-minute tutorial class** for **Fourth-year MBBS students**, focusing on **Immunity, Immunization and Disinfection**.

Lesson Information

Field	Detail
Subject	Community Medicine and Public Health
Year	MBBS Fourth Year (Cum)
Topic	Immunity, Immunization & Disinfection
Duration	120 minutes
Format	Tutorial Class
Resources	Whiteboard, PowerPoint slides, EPI schedule chart, vaccine vial monitor (VVM), cold chain equipment chart, handouts
Teaching Method	Interactive lecture + group discussion + demonstration
Venue	Tutorial Classroom
Date and Time	(As Scheduled)
Teacher	Dr Department of Community Medicine and Public Health

Learning Objectives

At the end of the session students will be able to:

1. Define **immunity** and classify the different types of immunity.
2. Describe **immunization** and different immunizing agents.
3. Explain the **Bangladesh EPI schedule**, herd immunity, EPI, NID and cold chain.
4. Discuss **Adverse Events Following Immunization (AEFI)**, left-out and dropout cases.
5. Define **disinfection** and explain different methods and disinfectants used in public health.
6. Apply immunization and disinfection principles in community disease prevention.

Content Outline and Time Allocation

Time (min)	Activity	Content / Key Points
0–5	Gaining Attention	Present a real-life case of a child who developed measles after missing vaccination. Ask students why immunization is essential.
5–25	Introduction to Immunity	Definition of immunity. Classification: Innate and Acquired immunity; Active and Passive immunity; Natural and Artificial immunity. Importance of immunity in disease prevention.
25–45	Immunization & Immunizing Agents	Definition of immunization. Types of immunizing agents: Live attenuated vaccines, killed vaccines, toxoids, immunoglobulins. Indications, routes and examples of each.
45–70	EPI Schedule, Herd Immunity & Cold Chain	Bangladesh EPI schedule, vaccine storage, Vaccine Vial Monitor (VVM), cold chain equipment, herd immunity, Expanded Programme on Immunization (EPI), National Immunization Day (NID), left-out and dropout cases.
70–90	Adverse Events Following	Definition, classification, common adverse events, serious AEFI, reporting system, management and prevention of AEFI.

	Immunization (AEFI)	
90–110	Disinfection	Definition of disinfection, sterilization vs disinfection, levels of disinfection (high, intermediate and low), physical and chemical disinfectants, common disinfectants and their public health uses.
110–120	Review	Recap key concepts, clarify doubts, conduct rapid MCQs and discuss one short case scenario related to immunization or disinfection.

Resources and Evaluation

Instructional Materials

- PowerPoint slides
- Whiteboard and markers
- Bangladesh EPI schedule chart
- Cold chain equipment chart
- Vaccine vial monitor (VVM) images
- Handouts

Teaching Methods

- Interactive lecture
- Question–answer session
- Group discussion
- Demonstration
- Case-based learning

Assessment / Evaluation

Assessment

- MCQs during the session
- Short-answer questions
- Oral questioning
- Interpretation of immunization case scenarios
- Identification of cold chain equipment

Students should be able to:

- Classify immunity.
- Explain immunizing agents and the EPI schedule.
- Describe herd immunity and the cold chain.
- Identify AEFI and its management.
- Differentiate sterilization and disinfection.
- Explain the uses of common disinfectants.

Assignment

1. Draw a flowchart showing the **classification of immunity**.
2. Write the **Bangladesh EPI schedule** in tabular form.
3. Compare **Active vs Passive Immunity** and **Sterilization vs Disinfection**.
4. Write short notes on:
 - Herd Immunity
 - Cold Chain
 - Adverse Events Following Immunization (AEFI)
 - Left-out and Dropout Cases
5. Solve two case scenarios related to immunization and infection control from **Park's Textbook of Preventive and Social Medicine**.

Department of Community Medicine

Comilla Medical College, Cumilla

Small Group Lesson Plan Community Medicine and Public Health

Topic: Medical Entomology

This lesson plan is designed for a **120-minute tutorial class** for **Fourth-year MBBS students**, focusing on **Medical Entomology**.

Lesson Information

Field	Detail
Subject	Community Medicine and Public Health
Year	MBBS Fourth Year (Cum)
Topic	Medical Entomology
Duration	120 minutes
Format	Tutorial Class
Resources	Whiteboard, PowerPoint slides, charts of vectors, insect specimens/models, microscope, handouts
Teaching Method	Interactive lecture + group discussion + demonstration
Venue	Tutorial Classroom
Date and Time	(As Scheduled)
Teacher	Dr.....Department of Community Medicine and Public Health

Learning Objectives

At the end of the session students will be able to:

1. Define **Medical Entomology** and classify arthropods of medical importance.
2. Describe the **life cycle of mosquitoes and sand flies**.
3. Identify common **arthropod-borne diseases** and their vectors.
4. Explain the **principles of vector/arthropod control**.
5. Classify different **insecticides** and describe their public health applications.
6. Apply vector control strategies for the prevention of vector-borne diseases.

Content Outline and Time Allocation

Time (min)	Activity	Content / Key Points
0–5	Gaining Attention	Show pictures of Anopheles, Aedes and Culex mosquitoes and ask students to identify diseases transmitted by each.
5–25	Introduction to Medical Entomology	Definition and importance of Medical Entomology. Classification of arthropods of medical importance: insects and arachnids. Characteristics and examples (mosquito, sand fly, housefly, flea, louse, tick, mite).
25–45	Life Cycle of Mosquito and Sand Fly	Stages of mosquito life cycle (egg, larva, pupa, adult). Life cycle of sand fly. Differences between mosquito species. Importance of breeding sites in disease control.
45–70	Arthropod-borne Diseases	Common vectors and diseases: Malaria (Anopheles), Dengue/Chikungunya (Aedes), Filariasis (Culex), Kala-azar (Sand fly), Plague (Flea), Typhus (Louse). Modes of

		transmission and preventive measures.
70–95	Principles of Vector/Arthropod Control	Environmental control, biological control, chemical control, personal protection, Integrated Vector Management (IVM), community participation, source reduction.
95–115	Insecticides	Definition and classification: Organochlorines, Organophosphates, Carbamates, Pyrethroids, Larvicides. Uses, advantages, limitations and insecticide resistance.
115–120	Review	Summarize key concepts, clarify doubts and conduct rapid MCQs and oral questioning.

Resources and Evaluation

Instructional Materials

- PowerPoint slides
- Whiteboard and markers
- Mosquito and arthropod charts
- Preserved insect specimens/models
- Microscope (if available)
- Handouts

Teaching Methods

- Interactive lecture
- Question–answer session
- Group discussion
- Demonstration using vector charts/specimens
- Case-based learning

Assessment / Evaluation

Assessment

- MCQs during the session
- Short-answer questions
- Identification of arthropods using charts/specimens
- Oral questioning
- Interpretation of vector-borne disease case scenarios

Students should be able to:

- Classify arthropods of medical importance.
- Explain the life cycle of mosquito and sand fly.
- Identify vectors responsible for common diseases.
- Describe principles of vector control.
- Classify insecticides and mention their public health uses.

Assignment

1. Draw and label the **life cycle of a mosquito**.
2. Prepare a table showing **vectors and the diseases they transmit**.
3. Write short notes on:
 - Integrated Vector Management (IVM)
 - Sand Fly
 - Insecticides used in Public Health
 - Principles of Vector Control
4. Draw a flowchart showing the **classification of arthropods of medical importance**.
5. Solve one case scenario on the prevention and control of a vector-borne disease from **Park's Textbook of Preventive and Social Medicine**.

Department of Community Medicine

Comilla Medical College, Cumilla

Small Group Lesson Plan – Community Medicine and Public Health

Topic: Public Health Nutrition

This lesson plan is designed for a **120-minute tutorial class** for **Fourth-Year MBBS students**, focusing on **Public Health Nutrition**.

General Information

Detail	Detail
Subject	Community Medicine and Public Health
Year	MBBS Fourth Year (Cum)
Topic	Public Health Nutrition
Duration	120 minutes
Format	Tutorial Class
Resources	Whiteboard, multimedia slides, food models/charts, nutrition guidelines, handouts
Teaching Method	Interactive lecture + group discussion + case-based learning
Venue	Tutorial Classroom
Date & Time	120-minute scheduled session
Teacher	Dr.....Lecturer, Department of Community Medicine and Public Health

Learning Objectives

At the end of the session students will be able to:

1. Define nutrition, balanced diet and classify different food groups with their sources.
2. Describe Protein Energy Malnutrition (PEM), important vitamin and mineral deficiency disorders.
3. Assess nutritional status using standard anthropometric methods.
4. Explain calorie requirements of different age and physiological groups.
5. Describe food-borne and milk-borne diseases, food toxins and pasteurization.
6. Explain food adulteration, food additives, food fortification and humanization of cow's milk.

Content Outline and Time Allocation

Time (min)	Activity	Content / Key Points
0–5	Gaining attention	Show pictures of malnourished and healthy children. Ask students why nutrition is considered a public health priority.
5–25	Introduction to Nutrition	Definition of nutrition. Types of foods and their sources. Food groups (carbohydrates, proteins, fats, vitamins, minerals, water). Balanced diet and characteristics.
25–50	Nutritional Deficiency Disorders	Protein Energy Malnutrition (Marasmus, Kwashiorkor). Important vitamins (A, B-complex, C, D, K) and deficiency diseases. Important minerals and trace elements (Iron, Iodine, Calcium, Zinc, Fluoride) and deficiency disorders.
50–75	Nutritional	Assessment of nutritional status. Anthropometric measurements

	Assessment	(Height, Weight, BMI, MUAC). Clinical, biochemical and dietary assessment. Calorie requirements for infants, children, adolescents, adults, pregnant and lactating women.
75–100	Food Safety	Food-borne diseases. Milk-borne diseases. Food toxins. Pasteurization—definition, methods and importance.
100–115	Food Quality & Prevention	Food adulteration. Food additives. Food fortification. Humanization of cow's milk. National nutrition programmes and preventive strategies.
115–120	Review	Recap of all topics. Clarification of doubts and key messages.

Resources and Evaluation

Instructional Materials

- PowerPoint slides
- Whiteboard and markers
- Food pyramid/MyPlate chart
- Food samples/models
- BMI chart
- Nutrition assessment charts
- WHO/ICDDR,B nutrition guidelines

Teaching Methods

- Interactive lecture
- Question–answer session
- Group discussion
- Case-based learning
- Demonstration using food models
- Short problem-solving exercises

Assessment / Evaluation

Assessment

- MCQs during the session
- Identification of vitamin/mineral deficiency diseases
- Interpretation of BMI and nutritional assessment charts
- Short case discussion on PEM
- Oral questions on food adulteration and pasteurization

Assignment

- Read the **Nutrition** chapter from **Park's Textbook of Preventive and Social Medicine**.
- Prepare a balanced diet chart for:
 - Preschool child
 - Pregnant woman
 - Adult male
- Write short notes on:
 - Protein Energy Malnutrition (PEM)
 - Food fortification
 - Pasteurization
 - Food adulteration

Department of Community Medicine

Comilla Medical College, Cumilla

Small Group Lesson Plan Community Medicine and Public Health

Topic: Principles of Epidemiology

This lesson plan is designed for a **120-minute tutorial class** for **fourth-year MBBS students**, focusing on **Principles of Epidemiology**.

Field	Detail
Subject	Community Medicine and Public Health
Year	MBBS Fourth Year (Cum)
Topic	Principles of Epidemiology
Duration	120 minutes
Format	Tutorial Class
Resources	Whiteboard, PowerPoint slides, flowcharts, outbreak investigation forms, handouts
Teaching Method	Interactive lecture + group discussion + case-based learning
Venue	Tutorial Classroom
Date and Time	5 March 2026, 12:30 PM–2:30 PM
Teacher	Dr., Lecturer, Department of Community Medicine and Public Health

Learning Objectives

At the end of the session students will be able to:

1. Classify different **epidemiological study designs** and describe their characteristics.
2. Differentiate between **descriptive, analytical and experimental studies**, including cross-sectional, longitudinal, cohort and case-control studies.
3. Describe the **steps of epidemic outbreak investigation**.
4. Define **screening** and explain its types, uses, sensitivity, specificity, validity and reliability.
5. Explain the concepts of **source, reservoir, modes of transmission** and methods of interrupting disease transmission.
6. Define **susceptible host, community diagnosis and community treatment**, and explain their importance in disease prevention and control.

Content Outline and Time Allocation

Time (min)	Activity	Content / Key Points
0–5	Gaining Attention	Present a recent outbreak scenario (e.g., dengue or cholera) and ask students how epidemiologists identify the source of disease.
5–25	Epidemiological Study Designs	Definition of epidemiology. Classification of epidemiological studies. Descriptive, analytical and experimental studies. Characteristics and applications of each study design.
25–45	Comparative Study Designs	Difference between cross-sectional and longitudinal studies. Comparison of cohort and case-control studies. Advantages, disadvantages and examples of each study design.
45–65	Epidemic Investigation	Definition of epidemic and outbreak. Steps of outbreak investigation: confirm diagnosis, verify epidemic, define cases, collect data, analyze data by person-place-time, identify source, implement control measures, prepare report.
65–90	Screening Tests	Definition, objectives, types and uses of screening. Characteristics of an ideal screening test. Sensitivity, specificity, validity, reliability, predictive values with simple examples.

90–110	Disease Transmission & Community Diagnosis	Source and reservoir of infection. Modes of transmission (direct and indirect). Methods of interrupting disease transmission. Susceptible host and host factors. Definition and importance of community diagnosis and community treatment.
110–120	Review	Recap the session, discuss important examination points and answer students' questions.

Resources and Evaluation

Instructional Materials

- PowerPoint slides
- Flowcharts of epidemiological study designs
- Whiteboard and markers
- Epidemic investigation checklist
- Screening test tables and diagrams

Teaching Methods

- Interactive questioning
- Small group discussion
- Case-based learning
- Problem-solving exercises

Assessment / Evaluation

MCQs during the session

- Which study design measures prevalence?
- Which epidemiological study is best for investigating rare diseases?
- Which screening test characteristic measures the ability to identify diseased individuals?

Short-answer questions

- Classify epidemiological studies.
- Differentiate between cohort and case-control studies.
- Mention the steps of epidemic investigation.
- Define sensitivity and specificity.
- Differentiate between source and reservoir.

Case-based Exercise

Students will analyze a small outbreak scenario, identify the **possible source and reservoir**, determine the **mode of transmission**, suggest **control measures**, and recommend an **appropriate epidemiological study design**.

Assignment

1. Draw a flowchart showing the **classification of epidemiological studies**.
2. Compare **cross-sectional, cohort and case-control studies** in a table.
3. Write the **steps of epidemic outbreak investigation** in sequence.
4. Explain **sensitivity, specificity, validity and reliability** with suitable examples.
5. Describe the **modes of disease transmission** and methods to interrupt transmission.
6. Write short notes on:
 - Community diagnosis
 - Community treatment
 - Source and reservoir of infection
 - Susceptible host

Department of Community Medicine

Comilla Medical College, Cumilla

Small Group Lesson Plan Community Medicine and Public Health

Topic: Research Methodology

This lesson plan is designed for a **120-minute tutorial class** for **fourth-year MBBS students**, focusing on **Research Methodology**.

Field	Detail
Subject	Community Medicine and Public Health
Year	MBBS Fourth Year (Cum)
Topic	Research Methodology
Duration	120 minutes
Format	Tutorial Class
Resources	Whiteboard, PowerPoint slides, calculator, sample questionnaire, research protocol format, handouts
Teaching Method	Interactive lecture + group discussion + problem-solving
Venue	Tutorial Classroom
Date and Time	5 March 2026, 12:30 PM–2:30 PM
Teacher	Dr., Lecturer, Department of Community Medicine and Public Health

Learning Objectives

At the end of the session students will be able to:

1. Define **research** and explain its importance in medicine and public health.
2. Describe the **types of research design** and the **steps of developing a research protocol**.
3. Formulate **general and specific research objectives**.
4. Explain the **preparation of a research questionnaire** and different methods of **data collection**.
5. Differentiate between **population and sample**, explain **sampling methods**, and calculate **sample size**.
6. Describe the **format of research report writing**.

Content Outline and Time Allocation

Time (min)	Activity	Content / Key Points
0–5	Gaining Attention	Present a simple research problem (e.g., prevalence of hypertension among adults) and ask students how they would investigate it.
5–20	Introduction to Research	Definition of research. Importance of research in medicine and public health. Characteristics of good research. Types of research (basic, applied, qualitative, quantitative, observational, experimental).
20–40	Research Design & Protocol	Types of research design. Development of research protocol: Title, background, justification, objectives, methodology, ethical considerations, work plan and budget.
40–60	Research Objectives & Questionnaire	Formulation of general and specific objectives. Characteristics of good objectives (SMART). Preparation of a research questionnaire. Types of questions (open-ended and close-ended). Pretesting and validation of questionnaires.
60–85	Data Collection &	Methods of data collection: interview, observation,

	Sampling	questionnaire, record review. Definition of population and sample. Difference between population and sample. Types of probability and non-probability sampling with examples.
85–105	Sample Size Calculation	Importance of sample size. Factors affecting sample size. Basic formula for sample size calculation with a simple numerical example.
105–115	Research Report Writing	Format of research report: Title, Abstract, Introduction, Objectives, Methodology, Results, Discussion, Conclusion, Recommendations and References.
115–120	Review	Recap the whole session briefly. Clarify students' questions and summarize key examination points.

Resources and Evaluation

Instructional Materials

- PowerPoint slides
- Sample research protocol
- Sample questionnaire
- Whiteboard and markers
- Sample published research article

Teaching Methods

- Interactive questioning
- Group discussion
- Short problem-solving exercises
- Case-based learning

Assessment / Evaluation

MCQs during the session

- Which sampling method is a probability sampling technique?
- Which section of a research protocol contains the study objectives?
- Which method is most suitable for collecting qualitative data?

Short Calculation/Exercise

- Identify the **population and sample** from a research scenario.
- Formulate one **general objective** and two **specific objectives**.
- Select the most appropriate sampling method for a given study.
- Solve a simple **sample size calculation** problem.

Interpretation

- Review a short research abstract and identify:
 - Research design
 - Population
 - Sampling method
 - Objectives

Assignment

1. Prepare a **simple research protocol** on a public health topic.
2. Develop a **10-question research questionnaire** for a community survey.
3. Compare **probability and non-probability sampling** in a table.
4. Solve one **sample size calculation** using the standard formula.
5. Write the **format of a research report** in sequence.
6. Read one published research article and identify:
 - Research design
 - Population
 - Sample
 - Data collection method

Department of Community Medicine

Comilla Medical College, Cumilla

Small Group Lesson Plan Community Medicine and Public Health

Topic: Behavioural Science

This lesson plan is designed for a **120-minute tutorial class** for **fourth-year MBBS students**, focusing on **Behavioural Science**.

Field	Detail
Subject	Community Medicine and Public Health
Year	MBBS Fourth Year (Cum)
Topic	Behavioural Science
Duration	120 minutes
Format	Tutorial Class
Resources	Whiteboard, PowerPoint slides, charts, handouts
Teaching Method	Interactive lecture + group discussion + case-based learning
Venue	Tutorial Classroom
Date and Time	5 March 2026, 12:30 PM–2:30 PM
Teacher	Dr., Lecturer, Department of Community Medicine and Public Health

Learning Objectives

At the end of the session students will be able to:

1. Define **behaviour, behavioural science, psychology, sociology, society, family and culture**.
2. Explain the influence of **family, society and culture** on human behaviour and health.
3. Define **motive and motivation** and explain theories of motivation.
4. Describe **leadership, personality and intelligence (IQ)** and their importance in health care.
5. Explain the concepts of **perception, cognition, learning, emotion and attitude** with suitable examples.
6. Apply behavioural science principles to **doctor–patient communication and health promotion**.

Content Outline and Time Allocation

Time (min)	Activity	Content / Key Points
0–5	Gaining Attention	Start with a real-life doctor–patient communication scenario. Ask students how behaviour influences health outcomes.
5–25	Introduction to Behavioural Science	Definition of behaviour, behavioural science, psychology, sociology, society, family and culture. Importance of behavioural science in medicine and public health. Relationship between behaviour and disease prevention.
25–45	Society, Family and Culture	Role of family in health. Influence of society and culture on health beliefs and practices. Social determinants of health. Examples from Bangladesh.
45–65	Motive, Motivation and	Definition of motive and motivation. Types of

	Leadership	motivation (intrinsic & extrinsic). Motivation theories (Maslow's hierarchy of needs). Leadership: definition, qualities and styles. Importance in health programmes and community health.
65–90	Personality and Intelligence (IQ)	Definition of personality and intelligence. Types of personality. Factors influencing personality development. IQ: definition, classification and importance. Application in patient care.
90–110	Perception, Cognition, Learning, Emotion and Attitude	Definition and process of perception. Cognition and cognitive functions. Types of learning. Emotion and its influence on behaviour. Attitude: components, formation and change. Examples in health education and behaviour change communication.
110–120	Review	Summary of the session, discussion of key concepts and clarification of students' questions.

Resources and Evaluation

Instructional Materials

- PowerPoint slides
- Behavioural science flowcharts
- Whiteboard and markers
- Case scenarios for discussion

Teaching Methods

- Interactive questioning
- Group discussion
- Case-based learning
- Brainstorming

Assessment / Evaluation

- **MCQs during the session**
 - Which discipline studies human behaviour scientifically?
 - Which is an example of intrinsic motivation?
- **Short-answer questions**
 - Define behavioural science.
 - Mention the components of attitude.
 - Differentiate psychology and sociology.
 - List factors affecting personality.
- **Case-based discussion**
 - Identify behavioural factors affecting treatment compliance in a patient.

Assignment

1. Write short notes on:
 - Behavioural Science
 - Psychology
 - Sociology
 - Culture
2. Compare **psychology and sociology** in a table.
3. Draw **Maslow's Hierarchy of Needs** and explain its application in public health.
4. Explain the role of **attitude, motivation and leadership** in promoting healthy behaviour.
5. Describe how **family and culture** influence health-related behaviour with suitable examples.

Department of Community Medicine

Comilla Medical College, Cumilla

Small Group Lesson Plan Community Medicine and Public Health

Topic: Public Health Administration & Management

This lesson plan is designed for a **120-minute tutorial class** for **fourth-year MBBS students**, focusing on **Public Health Administration & Management**.

Field	Detail
Subject	Community Medicine and Public Health
Year	MBBS Fourth Year (Cum)
Topic	Public Health Administration & Management
Duration	120 minutes
Format	Tutorial Class
Resources	Whiteboard, PowerPoint slides, organizational charts, health service delivery flowcharts, handouts
Teaching Method	Interactive lecture + group discussion + case-based learning
Venue	Tutorial Classroom
Date and Time	5 March 2026, 12:30 PM–2:30 PM
Teacher	Dr., Lecturer, Department of Community Medicine and Public Health

Learning Objectives

At the end of the session students will be able to:

1. Define **public health administration and management** and explain their functions and principles.
2. Describe the **planning process, planning cycle and health planning** in public health.
3. Explain the **health care delivery system of Bangladesh** and its organizational structure.
4. Describe the **reporting, supervision and monitoring systems** in Bangladesh.
5. Explain the **health care referral system** and levels of referral in Bangladesh.
6. Describe the **charter of duties of different health personnel** working in the health care system.

Content Outline and Time Allocation

Time (min)	Activity	Content / Key Points
0–5	Gaining Attention	Present a case scenario on managing a district immunization programme. Ask students how health services are organized and managed.
5–25	Introduction to Public Health Administration & Management	Definition of administration and management. Differences between administration and management. Functions of management (Planning, Organizing, Staffing, Directing, Coordinating, Reporting, Budgeting—POSDCORB). Principles of management and administration.
25–45	Health Planning	Definition and importance of planning. Indications for planning. Steps in the planning process. Planning cycle: situation analysis, priority setting, objective setting, implementation, monitoring and evaluation.
45–70	Health Care Delivery System of Bangladesh	Structure of health care delivery system. Levels of care: Primary, Secondary and Tertiary. Public and private sectors. Roles of Community Clinic, Union Health & Family Welfare Centre (UH&FWC), Upazila Health Complex (UHC), District Hospital and

		Medical College Hospital.
70–95	Organizational Structure, Reporting & Monitoring	Organizational structure of health care delivery in Bangladesh. Reporting system from community to national level. Supervision, monitoring and evaluation. Importance of health information systems.
95–115	Referral System & Duties of Health Personnel	Referral system in Bangladesh. Types and levels of referral. Charter of duties of different health personnel: Community Health Care Provider (CHCP), Health Assistant (HA), Family Welfare Assistant (FWA), Medical Officer (MO), Upazila Health & Family Planning Officer (UHFPO), Civil Surgeon.
115–120	Review	Summarize the session, highlight key examination points and answer students' questions.

Resources and Evaluation

Instructional Materials

- PowerPoint slides
- Organizational charts of Bangladesh health system
- Planning cycle flowchart
- Whiteboard and markers
- Referral system diagrams

Teaching Methods

- Interactive questioning
- Group discussion
- Case-based learning
- Problem-solving exercises

Assessment / Evaluation

MCQs during the session

- Which function is represented by "S" in POSDCORB?
- Which health facility provides primary-level care in Bangladesh?
- What is the first step of the planning cycle?

Short-answer Questions

- Define administration and management.
- Mention the principles of management.
- Describe the planning cycle.
- Draw the organizational structure of the health care delivery system in Bangladesh.
- Explain the referral system in Bangladesh.

Case-based Exercise

Students will analyze a **maternal referral case**, identify the appropriate **level of referral**, explain the **reporting pathway**, and identify the **responsibilities of the health personnel** involved.

Assignment

1. Draw the **organizational structure of the Bangladesh health care delivery system**.
2. Write the **functions and principles of public health management**.
3. Draw and explain the **planning cycle**.
4. Describe the **health care referral system** in Bangladesh.
5. Write short notes on:
 - POSDCORB
 - Supervision
 - Monitoring
 - Reporting
6. Prepare a table showing the **duties of different health personnel** (CHCP, HA, FWA, MO, UHFPO and Civil Surgeon).

Department of Community Medicine

Comilla Medical College, Cumilla

Small Group Lesson Plan Community Medicine and Public Health

Topic: Environment & Health

This lesson plan is designed for a **120-minute tutorial class** for **fourth-year MBBS students**, focusing on **Environment & Health**.

Field	Detail
Subject	Community Medicine and Public Health
Year	MBBS Fourth Year (Cum)
Topic	Environment & Health
Duration	120 minutes
Format	Tutorial Class
Resources	Whiteboard, PowerPoint slides, flowcharts, water purification models, charts, handouts
Teaching Method	Interactive lecture + group discussion + problem-solving
Venue	Tutorial Classroom
Date and Time	5 March 2026, 12:30 PM–2:30 PM
Teacher	Dr., Lecturer, Department of Community Medicine and Public Health

Learning Objectives

At the end of the session students will be able to:

1. Define **environment** and describe its components, climate change and global warming.
2. Explain **safe and wholesome water**, water sources, impurities, purification methods, water quality standards and water-borne diseases.
3. Describe **solid waste management**, excreta disposal and sanitation barriers.
4. Explain **air pollution, ventilation, housing standards**, and their effects on health.
5. Describe the **criteria of good lighting**, effects of improper lighting, and health hazards of noise and radiation.
6. Discuss preventive and control measures for major environmental health hazards.

Content Outline and Time Allocation

Time (min)	Activity	Content / Key Points
0–5	Gaining Attention	Present a community scenario involving contaminated drinking water and poor sanitation. Ask students how environmental factors affect health.
5–20	Environment and Climate Change	Definition of environment. Components of environment (physical, biological and social). Climate change, global warming, greenhouse effect and their impact on public health.
20–40	Water and Water Supply	Safe and wholesome water. Sources, uses and daily requirements of water. Water impurities. Principles and methods of water purification (storage, filtration, chlorination). Drinking water quality standards. Water-borne diseases.
40–60	Solid Waste & Excreta Disposal	Definition and sources of solid waste. Methods of solid waste disposal (landfill, composting, incineration, recycling, biomedical waste management). Health hazards of solid waste. Methods of excreta disposal. Sanitation barrier. Diseases transmitted by human excreta.
60–85	Air, Ventilation & Housing	Composition of air. Air pollutants and their sources. Indicators and health effects of air pollution. Prevention and control of air pollution. Natural and artificial ventilation. Criteria of healthful housing. Housing standards. Effects of poor housing on health.
85–105	Light, Noise & Radiation	Criteria of good lighting. Measurement of light. Effects of improper lighting. Sources and properties of noise. Acceptable noise levels. Health effects and control of noise. Sources and types of radiation. Health effects of radiation. Radiation protection measures.
105–120	Review	Recap the session. Summarize important examination points and clarify students' questions.

Resources and Evaluation

Instructional Materials

- PowerPoint slides
- Water purification flowcharts
- Charts of air pollutants and environmental hazards
- Whiteboard and markers
- Models of sanitary latrines and ventilation systems

Teaching Methods

- Interactive questioning
- Small group discussion
- Case-based learning
- Demonstration of water purification methods
- Problem-solving exercises

Assessment / Evaluation

MCQs during the session

- Which method is most commonly used for community water disinfection?
- Which disease is water-borne?
- Which gas contributes most to the greenhouse effect?
- What is the acceptable noise level in residential areas?

Short-answer Questions

- Define safe and wholesome water.
- Mention the principles of water purification.
- List methods of solid waste disposal.
- Explain the sanitation barrier.
- Describe the criteria of healthful housing.
- Mention the effects of air pollution on health.
- State the measures of radiation protection.

Case-based Exercise

Students will analyze a **community outbreak of diarrhoeal disease**, identify the environmental risk factors, recommend **water purification and sanitation measures**, and suggest methods to improve **housing, ventilation, waste disposal and pollution control**.

Assignment

1. Draw a flowchart showing the **methods of water purification**.
2. Compare **safe and wholesome water** with contaminated water.
3. Prepare a table showing the **methods of solid waste disposal** with their advantages and disadvantages.
4. Draw the **sanitation barrier** and explain its importance.
5. Write short notes on:
 - Climate change and global warming
 - Air pollution
 - Healthful housing
 - Ventilation
 - Noise pollution
 - Radiation protection
6. List the **water-borne diseases** and preventive measures.

Department of Community Medicine

Comilla Medical College, Cumilla

Small Group Lesson Plan Community Medicine and Public Health

Topic: Epidemiology of Communicable & Non-Communicable Diseases (NCDs)

This lesson plan is designed for a **120-minute tutorial class** for **fourth-year MBBS students**, focusing on **Epidemiology of Communicable and Non-Communicable Diseases (NCDs)**.

Field	Detail
Subject	Community Medicine and Public Health
Year	MBBS Fourth Year (Cum)
Topic	Epidemiology of Communicable & Non-Communicable Diseases (NCDs)
Duration	120 minutes
Format	Tutorial Class
Resources	Whiteboard, PowerPoint slides, disease surveillance charts, EPI schedule, WHO guidelines, handouts
Teaching Method	Interactive lecture + group discussion + case-based learning
Venue	Tutorial Classroom
Date and Time	5 March 2026, 12:30 PM–2:30 PM
Teacher	Dr., Lecturer, Department of Community Medicine and Public Health

Learning Objectives

At the end of the session students will be able to:

1. Define **communicable diseases (CDs)** and **non-communicable diseases (NCDs)** and differentiate between them.
2. Describe the **epidemiology and prevention of EPI diseases** and other major communicable diseases.
3. Explain the epidemiology, transmission, prevention and control of common communicable diseases including diarrhoeal diseases, TB, malaria, dengue and viral hepatitis.
4. Discuss **emerging and re-emerging infectious diseases** and their public health importance.
5. Describe the epidemiology, risk factors and prevention of major **NCDs** including hypertension, stroke, diabetes, cancer and obesity.
6. Apply preventive strategies for the control of communicable and non-communicable diseases at the community level.

Content Outline and Time Allocation

Time (min)	Activity	Content / Key Points
0–5	Gaining Attention	Present two patients: one with dengue fever and another with hypertension. Ask students how these diseases differ and how they can be prevented.
5–20	Introduction to CDs & NCDs	Definition of communicable and non-communicable diseases. Differences between CDs and NCDs. Disease burden in Bangladesh. Epidemiology and prevention of EPI diseases. National immunization programme.
20–45	Major Communicable Diseases (Part I)	Epidemiology, transmission, clinical features and prevention of diarrhoeal diseases, enteric fever, malaria, kala-azar, filariasis, helminthiasis, tuberculosis and leprosy.
45–70	Major Communicable Diseases (Part II)	Viral hepatitis, dengue, acute respiratory infections (ARI), SARS (COVID-19), bird flu, rabies, yellow fever, STDs, emerging and re-emerging diseases. Prevention, surveillance and outbreak control.
70–95	Epidemiology of NCDs	Epidemiology, risk factors, prevention and control of hypertension, ischemic heart disease (IHD), cerebrovascular disease (stroke), rheumatic fever and rheumatic heart disease (RHD).

95–115	Major NCDs	Epidemiology, risk factors and prevention of cancer, diabetes mellitus, obesity and arsenicosis. Lifestyle modification, screening and early diagnosis.
115–120	Review	Recap the session, summarize key examination points and answer students' questions.

Resources and Evaluation

Instructional Materials

- PowerPoint slides
- EPI immunization schedule
- Disease surveillance charts
- Whiteboard and markers
- WHO and DGHS disease prevention guidelines
- Case scenarios

Teaching Methods

- Interactive questioning
- Small group discussion
- Case-based learning
- Problem-solving exercises

Assessment / Evaluation

MCQs during the session

- Which disease is included in the Expanded Programme on Immunization (EPI)?
- Which disease is transmitted by **Aedes** mosquitoes?
- Which is the most important modifiable risk factor for hypertension?
- Which disease is an example of an emerging infectious disease?

Short-answer Questions

- Differentiate between communicable and non-communicable diseases.
- Mention the preventive measures for dengue.
- List the EPI diseases.
- Explain the epidemiology of tuberculosis.
- Mention the major risk factors for diabetes and hypertension.
- Write the preventive measures for cancer and obesity.

Case-based Exercise

Students will analyze:

- A **dengue outbreak** and recommend surveillance and preventive measures.
- A patient with **hypertension and diabetes**, identify risk factors, and suggest primary, secondary and tertiary prevention strategies.

Assignment

1. Prepare a comparison table between **communicable diseases and non-communicable diseases**.
2. Draw the **EPI immunization schedule** and explain the diseases prevented.
3. Write short notes on:
 - Dengue
 - Tuberculosis
 - COVID-19
 - Viral hepatitis
4. Describe the epidemiology and prevention of:
 - Hypertension
 - Stroke
 - Diabetes mellitus
 - Cancer
 - Obesity
5. Explain the concepts of **emerging and re-emerging diseases** with suitable examples.
6. Prepare a health education plan for the prevention of **communicable diseases and NCDs** in a community.

Department of Community Medicine

Comilla Medical College, Cumilla

Small Group Lesson Plan Community Medicine and Public Health

Topic: Maternal and Child Health (MCH)

This lesson plan is designed for a **120-minute tutorial class** for **Fourth-year MBBS students**, focusing on **Maternal and Child Health (MCH)**.

Field	Detail
Subject	Community Medicine and Public Health
Year	MBBS Fourth Year (Cum)
Topic	Maternal and Child Health (MCH)
Duration	120 minutes
Format	Tutorial Class
Resources	Whiteboard, PowerPoint slides, ANC card, Growth chart, IYCF chart, Flip charts, Handouts
Teaching Method	Interactive lecture + Group discussion + Demonstration
Venue	Tutorial Class Room
Date and Time	5 March 2026, 12:30 PM–2:30 PM
Teacher	Dr., Lecturer, Department of Community Medicine and Public Health

Learning Objectives

At the end of the session students will be able to:

1. Define IMR, MMR, high-risk mother and at-risk child.
2. Explain care of under-5 children and management of low birth weight (LBW).
3. Describe antenatal, intranatal and postnatal care with routine advice and investigations.
4. Explain Infant and Young Child Feeding (IYCF) recommendations.
5. Describe the advantages, contraindications and importance of breastfeeding and colostrum.
6. Explain complementary feeding, institutional delivery and Emergency Obstetric and Neonatal Care (EmONC).

Content Outline and Time Allocation

Time (min)	Activity	Content / Key Points
0–5	Gaining Attention	Ask students about the leading causes of maternal and child deaths in Bangladesh and discuss a real-life maternal health scenario.
5–25	Introduction to MCH	Definition and objectives of MCH, IMR, MMR, High-risk mother, At-risk child, National importance of MCH.
25–45	Child Health	Care of under-5 children, Growth monitoring, Low Birth Weight (LBW), Prevention of childhood illnesses.
45–65	Maternal Care	Antenatal care (ANC), Routine investigations, Counselling, Intranatal care, Postnatal care (PNC).
65–90	Infant Feeding	IYCF recommendations, Exclusive breastfeeding, Advantages

		and contraindications of breastfeeding, Disadvantages of formula feeding, Importance of colostrum.
90–110	Complementary Feeding & EmONC	Complementary feeding (definition, timing, importance), Domiciliary vs Institutional delivery, Emergency Obstetric and Neonatal Care (Basic & Comprehensive EmONC).
110–120	Review	Summary of key concepts, Question–Answer session, Clarification of difficult topics.

Resources and Evaluation

Instructional Materials

- PowerPoint slides
- Whiteboard and marker
- ANC card
- Growth monitoring chart
- IYCF counselling chart
- Flip charts and handouts

Teaching Methods

- Interactive lecture
- Demonstration
- Group discussion
- Question–Answer session

Assessment / Evaluation

- MCQs during the session
- Oral questioning
- Case-based discussion (high-risk pregnancy)
- Identification of ANC investigations
- Breastfeeding counselling exercise
- Short questions on IMR, MMR, LBW and EmONC

Assignment

- Draw the **continuum of maternal and child health care** (ANC → Delivery → PNC → Under-5 care).
- List the **recommended IYCF practices**.
- Differentiate **domiciliary and institutional delivery**.
- Write short notes on:
 - IMR and MMR
 - Low Birth Weight (LBW)
 - Colostrum
 - EmONC
 - High-risk mother

Department of Community Medicine

Comilla Medical College, Cumilla

Small Group Lesson Plan – Community Medicine and Public Health

Topic: School Health Services

This lesson plan is designed for a **120-minute tutorial class** for **Fourth-Year MBBS students**, focusing on **School Health Services**.

Field	Detail
Subject	Community Medicine and Public Health
Year	MBBS Fourth Year (Cum)
Topic	School Health Services
Duration	120 minutes
Format	Tutorial Class
Resources	Whiteboard, PowerPoint slides, charts, school health records, first aid kit, sample school desk pictures
Teaching Method	Interactive lecture + discussion + demonstration
Venue	Tutorial Class Room
Date and Time	120 minutes
Teacher	Dr.....Lecturer, Department of Community Medicine and Public Health

Learning Objectives

At the end of the session students will be able to:

1. Define **School Health Services** and explain its objectives.
2. Describe the **components/aspects of School Health Services**.
3. Explain the **duties and responsibilities of the School Health Medical Officer**.
4. Identify the **common health problems among school children**.
5. Describe the **management of school health emergencies**.
6. Explain the **functions of a school health clinic**.
7. Discuss the characteristics of a **healthy school environment**.
8. Describe the **different types of school desks and their importance**.

Content Outline and Time Allocation

Time (min)	Activity	Content/Key Points
0–5	Gaining Attention	Ask students: " Why is school considered the best place for preventive health care? " Discuss a real-life example of school health screening.
5–20	Introduction to School Health Services	Definition of School Health Services. Objectives: • Promote physical, mental and social well-being • Early detection of diseases • Prevention of communicable diseases • Development of healthy habits

		• Improvement of learning ability • Ensuring a safe school environment.
20–40	Components/Aspects of School Health Services	Components include: • Health appraisal • Treatment and follow-up • Immunization • Nutritional services • Mental health services • Dental and eye care • Health education • Healthy school environment • Physical education • Record keeping and referral services.
40–60	School Health Medical Officer	Duties include: • Periodic health examination • Supervision of immunization • Disease surveillance • Health education • First aid supervision • Referral services • Teacher training • Inspection of school sanitation • Maintenance of health records • Coordination with parents and community.
60–75	Common Health Problems of School Children	• Malnutrition • Worm infestation • Anemia • Dental caries • Refractive errors • Skin diseases • Respiratory infections • Ear infections • Communicable diseases • Mental and behavioral problems • Injuries and accidents.
75–90	School Health Emergencies	Emergency management of: • Fainting • Epileptic seizure • Bleeding • Fracture • Burns • Choking • Asthma attack • Anaphylaxis • Heat stroke. Importance of first aid and emergency referral.
90–105	School Health Clinic & Healthy School	School Health Clinic: First aid, health screening, counseling, referral, record keeping, health education. Healthy School

	Environment	Environment: Safe drinking water, sanitation, proper ventilation, adequate lighting, waste disposal, classroom cleanliness, playground safety, proper seating arrangement and nutrition facilities.
105–115	Different Types of School Desk and Their Importance	Types: • Single desk • Dual desk • Adjustable desk • Ergonomic desk. Importance: Maintains correct posture, prevents back pain, reduces fatigue, improves concentration, provides proper writing position and prevents musculoskeletal problems.

Resources and Evaluation

Instructional Materials

- PowerPoint slides
- Flow chart of School Health Services
- School health record format
- First aid kit
- Pictures/models of different school desks
- Whiteboard and marker

Teaching Methods

- Interactive lecture
- Group discussion
- Demonstration
- Question–answer session
- Case-based discussion

Assessment / Evaluation

- Oral questioning during the session.
- Short Answer Questions (SAQ).
- Case scenario on school health emergencies.
- Identification of common health problems from pictures.
- Discussion on the components and objectives of School Health Services.

Assignment

- Draw a flow chart showing the **components of School Health Services**.
- Write the **duties of a School Health Medical Officer**.
- Prepare a **school emergency response plan** for common school emergencies.
- Differentiate the **types of school desks** and mention their importance.
- Read the relevant chapter from **Park's Textbook of Preventive and Social Medicine** and prepare short notes on **School Health Services**.