INDIAN ASSOCIATION OF PREVENTIVE & SOCIAL MEDICINE

Logbook for MBBS Students

Community Medicine

A "free to use and adapt" undergraduate logbook recommendations prepared by the Core group task force and endorsed by IAPSM

2022

IAPSM Logbook for Community Medicine

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- **Dr. Sanjay Zodpey**, Immediate Past President IAPSM

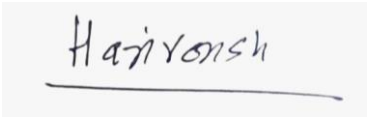
***In alphabetical order**

Community Medicine Logbook for MBBS Students

Indian Association of Preventive and Social Medicine is pleased to present the logbook for MBBS Students as per the National Medical Commission (NMC) Competency Based Medical Education (CBME) curriculum. This logbook may be used in conjunction with the existing practical record book or exercise book. This is a basic document adhering to the principles of CBME and provides flexibility to be adapted locally by the departments and institutions. We are happy to launch this logbook to help the fraternity in the implementation of CBME curriculum.

Dr Suneela Garg
National President, IAPSM

Dr A. M. Kadri
Secretary General, IAPSM



Dr. Harivansh Chopra
National President Elect, IAPSM

Dr. Sanjay Zodpey
Past National President,IAPSM

Message

Professor Suneela Garg

National President – Indian Association of Preventive and Social Medicine

Competency are the mainstay for any professional course. Competency based medical education (CBME) curriculum recently introduced by the National Medical Commission is an important step to improve and impart quality medical education in India. The competencies need to be taught, assessed and documented progressively. In this regard, this logbook would go a long way. It will help in facilitating the horizontal and vertical integration too and the faculty would find it useful to document the progress of the students as they acquire skills and build on knowledge base. I compliment the team that has developed the logbook and I am certain that this would be useful to the fraternity across India. IAPSM has always been in the forefront to equip the professionals from the speciality with the latest knowledge and skills and this is another step in our endeavor to help and guide the faculty in Community Medicine.

Prof (Dr.) Suneela Garg

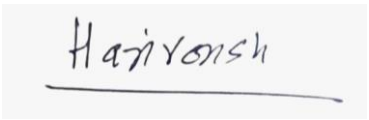
National President – Indian Association of Preventive and Social Medicine

Message

Prof (Dr.) Harivansh Chopra

President Elect – Indian Association of Preventive and Social Medicine

With the changing curriculum and the evolving teaching learning scenario, it is imperative that we adapt and upskill ourselves to the needs of the times. I am happy to note that the Indian Association of Preventive and Social Medicine (IAPSM) is launching the logbook for MBBS Students as per the National Medical Commission (NMC) Competency Based Medical Education (CBME) curriculum. I congratulate the entire core team for shaping this and bringing out a comprehensive document. I am certain that this would be helpful for the departments and faculty throughout the country and may also give ideas to other specialities too. My understanding is that the logbook will be updated in future as we go along and the faculty gain experience and expertise in implementing the CBME curriculum. I wish the faculty all the best in implementing the CBME curriculum and the use of this logbook.



Prof (Dr.) Harivansh Chopra

President Elect – Indian Association of Preventive and Social Medicine

Message

Prof (Dr.) A. M. Kadri

Secretary General – Indian Association of Preventive and Social Medicine

I am very happy to see this logbook for MBBS Students as per the National Medical Commission (NMC) Competency Based Medical Education (CBME) curriculum. Indian Association of Preventive and Social Medicine (IAPSM) has always been evolving and involving its members in various activities and this logbook is no exception. The launch of this logbook signifies our commitment towards the members and the fraternity. While I congratulate the core team for working hard and shaping this to bring this document to fruition, my earnest appeal to all faculty is to adopt and adapt this logbook and provide feedback following its use. This logbook is a living document and will be updated in future as we receive feedback and the faculty gain experience in its use while implementing the CBME curriculum. My best wishes to entire team and the faculty of Community Medicine across the country in using this logbook to its potential.

Prof (Dr.) A. M. Kadri

Secretary General – Indian Association of Preventive and Social Medicine

Message

Professor Sanjay Zodpey, MD, PhD

Immediate Past National President – Indian Association of Preventive and Social Medicine

I am extremely happy to learn that the Indian Association of Preventive and Social Medicine (IAPSM) has designed and developed the logbook for MBBS Students as per the National Medical Commission (NMC) Competency Based Medical Education (CBME) curriculum. This logbook would be complementary to the existing practical record / exercise book. I would like to congratulate IAPSM leadership and entire Editorial Team for this important initiative. I am confident that, this would be an important milestone in shaping and advancing the agenda of competency driven Community Medicine education and ultimately bring focus to transformative education. Both, institutional and instructional reforms are key to 21st century Community Medicine education and such initiatives would help us to drive that agenda more effectively.

Professor Sanjay Zodpey

Immediate Past National President – Indian Association of Preventive and Social Medicine

Preface

The competency based medical education (CBME) curriculum has introduced several changes in the medical education in India. This logbook is an attempt by the core group tasked by the IAPSM leadership to give a structure to the much-needed logbook in Community Medicine. While many members had attended the initial meeting, subsequent meetings were attended by a fewer members. Ultimately, seven faculty voluntarily came together and continued in pursuit with several rounds of meeting with leadership, brainstorming and iterative sessions and presentation of drafts with critical review of each segment. Once the draft logbook was ready, it was presented via online meeting to Dr. Suneela Garg and Dr. Harivansh Chopra. It was then shared with the leadership of IAPSM for their input and guidance. After further modification, the draft logbook was circulated via multiple social media groups and feedback and suggestions were invited within a period of 15 days with a deadline of 31st January 2022. Moreover, this logbook was also presented and discussed in the Pre-conference workshop on CBME in IAPSMCON 2022 on 27th February 2022, which had 205 participants registered. Thus after multiple rounds of iterations and review, the final logbook is being presented.

This logbook is intended to record all the skills in the SH domain that the CBME document details for Community Medicine and the core group felt that this was a good start and can be expanded as we go along and the faculty get more experienced over next 3-5 years. The user departments/institution/university may add further competencies/skills/activities as may be necessary. Further, an electronic version to document these as we progress, may make it much easier to record and retrieve. The core group would like to place on record its gratitude to Dr. Suneela Garg, Dr. Harivansh Chopra, Dr. A M Kadri and Dr. Sanjay Zodpey for giving us this opportunity and to all the members who reviewed and went through the logbook and conveyed feedback and appreciation. We also would like to share that this has been a team effort and the contribution from everyone has been phenomenal. We sincerely hope that this logbook would be useful in addressing the needs of the departments of Community Medicine across the country in implementing the CBME curriculum more effectively.

- **Amrit, Animesh, Kavita, Manjunath, Pankaj, Parul & Seema**

Core Group IAPSM Logbook (March 2022)

About the logbook and guidelines for its use:

1. This logbook has been prepared as per NMC's CBME guidelines by the Core group IAPSM CBME Logbook.
2. The format is variable and there is difference in structure for each competency owing to the diversity in the nature of competencies.
3. The different formats are given for each competency so that Faculty in a particular department may decide to adapt and use a single format for all competencies or multiple formats for each competency.
4. The logbook has intentionally avoided using a common format so that a variety and types of the format are available for use by faculty & departments.
5. This logbook is available for use by everyone and all institutions across the country as IAPSM Logbook for Community Medicine CBME Curriculum. Institutions and departments may use it with or without modification but with due acknowledgement and credit.
6. The intention of the core working group was to develop the IAPSM logbook as per NMC guidelines and in no way it is intended to replace the workbook or record book or theory information competency book which may be in use at various institutions.
7. The Core working group believes that the logbook should be easily adaptable by the departments and institutions with great ease to move CBME forward in the initial stages.
8. This logbook is a living document, which will be under the copyright of IAPSM, and it may be updated as faculty of Community Medicine gets more experience of CBME.
9. The draft logbook was circulated for 15 days until 31st January 2022 using various platforms for comments and suggestions. All feedback received was reviewed and constructive suggestions for improvement of the logbook have been incorporated.
10. The user departments/institution/university may add further competencies/skills/activities as may be necessary.
11. The core-group also feels that few of these skills may be made as certifiable skills for MBBS course at department/institutional level.

College/
Institution/
University
Logo

Logbook for MBBS Students

Community Medicine

Name of student:

Registration No.:

Name of College:

Student Particulars

Name of the student:

Name of College:

Date of admission to MBBS Course:

Date (at least MM/YY) of beginning of the current Phase:

Reg: No. (College ID):

Reg. No. (University ID)

Permanent Address:

E mail ID: (optional)

Phone No. (Optional):

LOGBOOK CERTIFICATE

This is to certify that the candidate Mr/Ms……. ……. bearing Reg. No. …….. admitted in the year……..... in ……..... Medical College ……..has satisfactorily completed / has not completed all assignments /requirements mentioned in this logbook for final year MBBS course in the subject of Community Medicine.

He/She is/is not eligible to appear for the summative (University) assessment as on the date give below.

Signature of Faculty

Name and Designation

Signature and Seal

Head of Community Medicine Department

Date:

Principal/Dean

Summary of students' activities and achievements

Description and particulars			Signature of Faculty
Attendance (percentage)	**Theory**	**Practical/Clinical**	
PY 1			
PY 2			
PY 3			
Overall attendance			
	Expected	**Actual completed**	
Family study	2		
Clinico-social Case	6		
Seminar	2		
Small group discussion overall assessment			
Self-Directed Learning overall assessment			
Field Visit			
AETCOM (Overall grade B/M/E)			
Research undertaken			
Elective in Community Medicine (if any)			
All 18 SH Competencies Completed (Grade: M/E)			
Non-Core Activities			
Co - Curricular Activities (Quiz, Poster, Debate, Essay, Skits, Model WHO)			
Participation/Volunteering in dept activities (no.)			
CME/ Workshop attended (no.)			
Conference attended (no.)			
Prizes/Awards/Outstanding achievement (number)			
Overall assessment of student			

Signature of Faculty **Signature of Head of Department**

Competencies addressed:

Sl. No.	Competency no.	Competency Statement	Page No.
1	CM1.9	Demonstrate the role of effective Communication skills in health in a simulated environment	13
2	CM1.10	Demonstrate the important aspects of the doctor patient relationship in a simulated environment	15
3	CM2.1	Describe the steps and perform clinico socio-cultural and demographic assessment of the individual, family and community	17
4	CM2.2	Describe the socio-cultural factors, family (types), its role in health and disease & demonstrate in a simulated environment the correct assessment of socio-economic status	21
5	CM2.3	Describe and demonstrate in a simulated environment the assessment of barriers to good health and health seeking behavior	22
6	CM3.7	Identify and describe the identifying features and life cycles of vectors of Public Health importance and their control measures	30
7	CM4.3	Demonstrate and describe the steps in evaluation of health promotion and education program	32
8	CM5.2	Describe and demonstrate the correct method of performing a nutritional assessment of individuals, families and the community by using the appropriate method	35
9	CM5.4	Plan and recommend a suitable diet for the individuals and families based on local availability of foods and economic status, etc in a simulated environment	35
10	CM6.2	Describe and discuss the principles and demonstrate the methods of collection, classification, analysis, interpretation and presentation of statistical data	42
11	CM6.3	Describe, discuss and demonstrate the application of elementary statistical methods including test of significance in various study designs	42
12	CM6.4	Enumerate, discuss and demonstrate Common sampling techniques, simple statistical methods, frequency distribution, measures of central tendency and dispersion	42
13	CM7.4	Define, calculate and interpret morbidity and mortality indicators based on given set of data	49

14	CM7.6	Enumerate and evaluate the need of screening tests	53
15	CM7.7	Describe and demonstrate the steps in the Investigation of an epidemic of communicable disease and describe the principles of control measures	54
16	CM7.9	Describe and demonstrate the application of computers in epidemiology	58
17	CM8.6	Educate and train health workers in disease surveillance, control & treatment and health education	62
18	CM9.2	Define, calculate and interpret demographic indices including birth rate, death rate, fertility rates	66

*** Only the SH competencies from NMC guidelines have been selected for the skills.**

Competency attainment log – at a glance

Competency no.	Date completed	Grade (M or E)	Signature of Faculty
CM1.9			
CM1.10			
CM2.1			
CM2.2			
CM2.3			
CM3.7			
CM4.3			
CM5.2			
CM5.4			
CM6.2			
CM6.3			
CM6.4			
CM7.4			
CM7.6			
CM7.7			
CM7.9			
CM8.6			
CM9.2			

CM 1.9 Demonstrate the role of effective communication skills in health in a simulated environment

Learning Objectives;

1. Demonstrate ability to communicate adequately, sensitively, effectively and respectfully with patients, colleagues, families and community so as to improve patient satisfaction and health care outcomes in a simulated environment.

No.	Phase of teaching	T/L methods	Level to be attained	Assessment method
1.	Phase-I	SGT using Standardised patient/ Simulated scenarios	SH	• Active participation of students in the sessions. • OSCE • Student reflections of the simulated situations discussed

Student Reflections/ Written Critique

S. No.	Setting: Date:
Simulated Scenario: *Illustrative examples for scenarios* - Counselling for family planning; Breastfeeding advice to a postnatal mother; Doctor advising the patient's family regarding nutrition and balanced diet etc. The department may develop their own scenarios and use for this session.	

What happened?
How was it handled?
What was the outcome?
Faculty Feedback: **Grade:** **Faculty's Signature with date**

CM 1.10 Demonstrate the important aspects of doctor-patient relationship in a simulated environment.

Learning Objectives:

1. Demonstrate ability to establish professional relationships with patients and families that are positive, understanding, humane, ethical, empathetic, and trustworthy.

No.	Phase of teaching	T/L methods	Level to be attained	Assessment method
1.	Phase -I	SGT using Standardised patient/ Simulated scenarios	SH	• Active participation of students in the sessions. • OSCE • Student reflections of the simulated situations discussed

Student Reflections/ Written Critique

S. No.	Setting: Date:
Simulated Scenario:	

What happened?
How was it handled?
What was the outcome?
Feedback **Grade:** **Faculty's Signature with date**

Grade A: Above Expectation **Grade B:** Meets Expectation **Grade C:** Below Expectation

CM2.1 Describe the steps and perform clinico socio-cultural and demographic assessment of the individual, family and community.

Milestone I: I MBBS foundation course

Session I: At the end of the session the students should be able to- I MBBS foundation session for one hour in small groups before visit to RHTC & UHTC 9 am-10 am

1. Define clinical assessment of an individual, family and community.
2. Describe the steps in involved clinical assessment of an individual, family and community.
3. Define socio cultural assessment of an individual, family and community.
4. Describe the steps in involved socio cultural of an individual, family and community.
5. Define demographic assessment of an individual, family and community.
6. Describe the steps in involved demographic assessment of an individual, family and community.

Level: K & KH

Assessment : FA

Session II: At the end of the session the students should be able to- I MBBS foundation session for one hour in small groups before visit to RHTC & UHTC 11-12 noon (1 hour excluded In the travelling time) (in very preliminary stage or way under faculty supervision)

1. Perform clinical assessment of an individual, family and community.
2. Perform socio cultural assessment of an individual, family and community.
3. Perform demographic assessment of an individual, family and community.
4. Presentation in groups clinico socio-cultural and demographic assessment of the individual, family and community

Level : S & SH

Logbook entry:

Competency no.	**Name of activity**	**Date completed**	**Attempt at activity First or Only (F), Repeat (R), Remedial (Re)**	**Rating – Below expectations (B), Meets expectations (M), Exceeds expectations (E) OR Numerical Score**	**Decision of faculty – Completed (C), Repeat (R), Remedial (Re)**	**Initial of faculty and date**	**Feedback received Initial of learner**

Assessment : FA during foundation course

Milestone 2: **I MBBS ECE**

At the end of the session the students should be able to- I MBBS ECE session for one hour in small groups before visit to RHTC & UHTC 10-12 noon (1 hour excluded In the travelling time) (in very preliminary stage to higher level under faculty supervision)

1. Perform clinical assessment of an individual, family and community.
2. Perform socio cultural assessment of an individual, family and community.
3. Perform demographic assessment of an individual, family and community.
4. Presentation in groups clinico socio-cultural and demographic assessment of the individual, family and community

Level : S & SH

Logbook entry:

Competency no.	**Name of activity**	**Date completed**	**Attempt at activity First or Only (F), Repeat (R), Remedial (Re)**	**Rating – Below expectations (B), Meets expectations (M), Exceeds expectations (E) OR Numerical Score**	**Decision of faculty – Completed (C), Repeat (R), Remedial (Re)**	**Initial of faculty and date**	**Feedback received Initial of learner**

Assessment : FA during ECE

Milestone 3: II MBBS clinical posting

At the end of the session the students should be able to- II MBBS clinical posting (three times at field level during the duration of 4 weeks of clinical posting) for two hour in small groups before visit to RHTC & UHTC 10-12 noon (1 hour excluded In the travelling time) (in very higher level to advanced level under faculty supervision)

1. Perform clinical assessment of an individual, family and community.
2. Perform socio cultural assessment of an individual, family and community.
3. Perform demographic assessment of an individual, family and community.
4. Presentation in groups clinico socio-cultural and demographic assessment of the individual, family and community

Level : S & SH

Logbook entry:

Competency no.	**Name of activity**	**Date completed**	**Attempt at activity First or Only (F), Repeat (R), Remedial (Re)**	**Rating – Below expectations (B), Meets expectations (M), Exceeds expectations (E) OR Numerical Score**	**Decision of faculty – Completed (C), Repeat (R), Remedial (Re)**	**Initial of faculty and date**	**Feedback received Initial of learner**

Assessment : FA during clinical posting (last day or assessment same day on the session). In addition, many aspects may be assessed during case presentation and family study presentation at various other occasions during clinical posting.

Milestone 4: III MBBS clinical posting

At the end of the session the students should be able to- III MBBS clinical posting (three times at field level during the duration of 4 weeks of clinical posting) for two hour in small groups before visit to RHTC & UHTC 10-12 noon (1 hour excluded In the travelling time) (in very higher level to advanced level under faculty supervision)

1. Perform clinical assessment of an individual, family and community.
2. Perform socio cultural assessment of an individual, family and community.
3. Perform demographic assessment of an individual, family and community.
4. Presentation in groups clinico socio-cultural and demographic assessment of the individual, family and community

Level : S & SH

Logbook entry:

Competency no.	**Name of activity**	**Date completed**	**Attempt at activity First or Only (F), Repeat (R), Remedial (Re)**	**Rating – Below expectations (B), Meets expectations (M), Exceeds expectations (E) OR Numerical Score**	**Decision of faculty – Completed (C), Repeat (R), Remedial (Re)**	**Initial of faculty and date**	**Feedback received Initial of learner**

Assessment : FA during clinical posting (last day or assessment same day on the session). In addition, many aspects may be assessed during case presentation and family study presentation at various other occasions during clinical posting.

CM 2.2: Describe the socio-cultural factors, family (types), its role in health and disease & demonstrate in a simulated environment the correct assessment of socio-economic status

	Competency	**SLOs** **A second phase student should be able to:**	**Domain K/S/A/C**	**Level K/KH/ SH/P**	**Core Y/N**	**T/L Method**	**Assessment**
CM 2.2:	Describe the socio-cultural factors, family (types), its role in health and disease & demonstrate in a simulated environment the correct assessment of socio-economic status	1. Define family and it's types with their characteristics	K	K	Y	Small group discussion, Family Study	Written / Viva voce
		2. To know the role of family in Health and Disease	K	K	Y	Small group discussion, Family Study, clinico-social case presentation	Written / Viva voce
		3. To Describe the socio-cultural factors in Health and Disease	K	KH	Y	Small group discussion, Family Study, clinico-social case presentation	Written / Viva voce/Family Study/clinico-social case presentation
		4. Define Social class and it's determinants	K	K	Y	Family Study, clinico-social case presentation	Written / Viva voce/Family Study

		5. Describe the different types of socio-economic classification with their merits and demerits	K	KH	Y	Family Study, clinico-social case presentation	Viva voce/Family Study/ clinico-social case presentation
		6. Demonstrate with accuracy the assessment of socio-economic status in a simulated environment.	S	SH	Y	Family Study, clinico-social case presentation	Skill assessment, OSPE, family study, clinico-social case presentation
CM 2.3	Describe and demonstrate in a simulated environment the assessment of barriers to good health and health seeking behavior	1.Describe the good health practices in the family with respect to physical, biological and pschycosocial environment.	K	KH	Y	Lecture, Small group discussion, DOAP session.	Written / Viva voce/ Clinico-social case presentation
		2.To understand the health seeking behavior of the family	K	KH	Y	Family study, PBL, Clinico-social case presentation	Clinico-social case presentation
		3.To assess the barriers to good health practices	K	KH	Y	Family study,PBL,Clinico-social case presentation	Clinico-social case presentation
		4. To assess the barriers to health seeking behaviour	K	KH	Y	Family study,PBL,Clinico-social case presentation	Clinico-social case presentation

Rubric for Small group Discussion

Score	Criteria for assessment
5	Is a proactive participant showing a balance between listening, initiating, and focusing discussion. Displays a proactive use of the whole range of discussion skills to keep discussion going and to involve everyone in the group. Understands the purpose of the discussion and keeps the discussion focused and on topic. Applies skills with confidence, showing leadership and sensitivity.
4	Is an active participant showing a balance between listening, initiating, and focusing discussion. Demonstrates all the elements of discussion skills but uses them less frequently and with less confidence than the above level. Keeps the discussion going but more as a supporter than a leader. Tries to involve everyone in the group. Demonstrates many skills but lacks the confidence to pursue them so that the group takes longer than necessary to reach consensus. Demonstrates a positive approach but is more focused on getting done than on having a positive discussion.
3	Is an active listener but defers easily to others and lacks confidence to pursue personal point of view even when it is right. Participates but doesn't use skills such as summarizing and clarifying often enough to show confidence. Limits discussion skills to asking questions, summarizing, and staying on topic. Lacks balance between discussion and analytical skills. Either displays good analysis skills and poor discussion skills or good discussion skills and poor analysis skills.
2	Is an active listener but defers easily to others and tends not pursue personal point of view, lacking confidence. Limits discussion skills to asking questions, summarizing, and staying on topic. Rarely demonstrates analysis skills because doesn't understand the purpose of the discussion, and as a result, offers little evidence to support any point of view.
1	Demonstrates no participation or effort. Participates only when prompted by the teacher. Only responds to others and initiates nothing. Provides limited responses that are often off topic. Participates minimally so that it is impossible to assess analysis skills or understanding of the issues.

1 to 3 =Below Expectations; 4=Meets Expectations; 5=Above Expectations

Assessment Tool/Rubric for Clinico-social case presentation

Ref: *Gohel M, Singh US, Bhanderi D, Phatak A. Developing and pilot testing of a tool for "clinicosocial case study" assessment of community medicine residents. Educ Health 2016;29:68-74* ***(****Gohel M, Singh US, Bhanderi D, Phatak A. Developing and pilot testing of a tool for "clinicosocial case study" assessment of community medicine residents. Educ Health 2016;29:68-74****)*

Unsatisfactory=Below Expectations, Satisfactory=Meets Expectations, Superior=Above Expectations

CM2.2 Describe the socio-cultural factors, family (types), its role in health and disease & demonstrate in a simulated environment the correct assessment of socio-economic status

CM2.3 Describe and demonstrate in a simulated environment the assessment of barriers to good health and health seeking behavior

Competency # addressed	Name of Activity	Date completed	Attempt at activity First or Only (F) Repeat (R) Remedial (Re)	Rating Below (B) expectations Meets (M) expectations Exceeds (E) expectations	Decision of faculty Completed (C) Repeat (R) Remedial (Re)	Initial of faculty and date	Feedback received Initial of learner

Clinico-social Case Presentation

CM2.2 Describe the socio-cultural factors, family (types), its role in health and disease & demonstrate in a simulated environment the correct assessment of socio-economic status

CM2.3 Describe and demonstrate in a simulated environment the assessment of barriers to good health and health seeking behavior

Competency # addressed	Name of Activity	Date completed	Attempt at activity First or Only (F) Repeat (R) Remedial (Re)	Rating Below (B) expectations Meets (M) expectations Exceeds (E) expectations	Decision of faculty Completed (C) Repeat (R) Remedial (Re)	Initial of faculty and date	Feedback received Initial of learner

Reflection on Family Visits

Name of Session:

Name of the Faculty Member/Presenter:

Date: **Time:** **Duration:**

Specific Learning Objectives of the session

1.

2.

3.

Reflection on Teaching Learning Methods

- **What Happened?**

- **So What?**

- **What Next?**

Signature of Faculty

Reflection on Clinico social case Presentation

Name of Session:

Name of the Faculty Member/Presenter:

Date: **Time:** **Duration:**

Specific Learning Objectives of the session

1.

2.

3.

Reflection on Teaching Learning Methods

- **What Happened?**

- **So What?**

- **What Next?**

Signature of Faculty

CM 3.7 Identify and describe the identifying features and life cycles of vectors of Public Health importance and their control measures

Specific Learning Objectives

1. List vectors of public health importance
2. Identify different vectors of public health importance
3. Describe lifecycle of vectors of public health importance
4. Describe control measures of different vectors of public health importance

Suggested time: 2-3 hours. Practicals or Postings.

Faculty guide

Teaching to be done during the practical classes and student may be allowed to learn and practice identification of vectors and their characteristics. Formative assessment may be scheduled on rotation at the end of the posting or teaching block.

Formative Assessment (Criteria for grading)

Exceeds Expectations	**Meets expectations**	**Below expectations**
The student is able to identify the given vector supported by all the characteristic identification features of the vector, and draw representative diagram. The student can also describe the public health importance and list all the control measures. The student is able to correctly identify all **(100 percent)** the vectors among the displayed slides (at least 10 to be displayed).	The student is able to identify the vector and describe at least two characteristic microscopic identification features of the vector and at least one public health importance. The student should be able to list at least one important prevention and control measure against the vector or disease transmitted. Additionally, the student MUST be able to correctly identify **80 percent** of the vectors among the displayed slides (at least 10 to be displayed).	The student is not able to identify the vector under the microscope and unable to correctly suggest the identification features and/or control measures.

Summative assessment (Criteria for grading)

Exceeds Expectations	Meets Expectations	Below Expectations
The student is able to correctly identify **at least 80 percent** of the vectors among the displayed slides (at least 5 to be displayed) with supporting reasons.	The student is able to correctly identify **60 percent** of the vectors among the displayed slides (at least 5 to be displayed) with reasons.	The student is able to correctly identify less than 60 percent of the vectors among the displayed slides (at least 5 to be displayed).

Grade: E/M/B

Note: The FA criteria is more stringent to train the student well.

Logbook entry:

Competency no.	Name of activity	Date completed	Attempt at activity First or Only (F), Repeat (R), Remedial (Re)	Rating – Below expectations (B), Meets expectations (M), Exceeds expectations (E) OR Numerical Score	Decision of faculty – Completed (C), Repeat (R), Remedial (Re)	Initial of faculty and date	Feedback received Initial of learner

CM 4.3 Demonstrate and describe the steps in evaluation of health promotion and education program

Professional Year 3; *Professional Year 2 may also be the time to introduce the concept (as the department decides)*

Suggested time/no. of hours: 3 to 4 hours (min)

Specific Learning Objectives

At the end of the session, the student shall be able to

1. describe the steps in evaluation of health promotion and education program
2. demonstrate the evaluation of health promotion and education programme in a given scenario/simulated environment
3. Analyse and provide feedback/comments on the health promotion and education programme in a given scenario/simulated environment

Faculty guide for session

The student may be taught about health education and involved in health promotion and education activities during field visits, postings as well as clinico-social case taking. Faculty may specifically ask students to counsel or advise/educate the patient/family during the clinic-social or family study and observe them while they do so.

TL Method – A mix of methods including field visits, demonstration, role play, SGT with video of health education. *SDL may also be considered.*

For assessment - A session with pre-recorded health education session or a video may be used and played while the student is made to assess health promotion and education activity demonstrated based on the following

a. **Amount of information provided** – Adequate/Inadequate
b. **Sequence of topics/content** – Logical and appropriate/Not logical or appropriate
c. **Creativity and Uniqueness of delivery** – Creative/Not creative or unique
d. **Terminology and language used** - Simple language without the jargon/Difficult for common person and/or jargon used
e. **Quality of information** – Good/Poor
f. **Impact assessment** – Whether the education made an impact on the recipient? (An immediate effect as judged by reaction).

Rubric for assessment

Exceeds Expectations	**Meets expectations**	**Below expectations**
The student analyses and describes the session based on all the parameters that includes analysis of all the six elements mentioned above. S/he provides inputs regarding the quality and amount of information provided in the session, comments on creativity, elaborates on the sequence of the topics while delivery of content and provides feedback regarding the terminology used. The student also checks for and provides points to substantiate the impact of the health education on the audience.	The student provides assessment of the health promotion and education session and ***includes analysis of at least 4 of the 6 elements mentioned above.*** The student provides adequate analysis and feedback on the amount and quality of the content delivered.	The student is not able to provide a coherent and appropriate assessment of the health promotion and education session.

To be certified as competent, at the least the student must meet expectations in **two out of three assessments.**

Logbook Entry

1	2	3	4	5	6	7	8	9
Sl. no & No. Of times	**Name of Activity**	**Date completed:** dd-mm-yyyy	**Method or process of Assessment/ documentation / certification**	**Attempt at activity** First or Only (F) Repeat (R) Remedial (Re)	**Rating** Below (B) expectations Meets (M) expectations Exceeds (E) expectations **OR** Numerical score	**Decision of faculty** Completed (C) Repeat (R) Remedial (Re)	**Initial of faculty and date**	**Feedback Received** Initial of learner
1	Analyse and provide feedback/comments on the health promotion and education programme in a given scenario/simulated environment							
2								
3								
4								
5								

CM5.2 Describe and demonstrate the correct method of performing a nutritional assessment of individuals, families and the community by using the appropriate method

CM5.4 Plan and recommend a suitable diet for the individuals and families based on local availability of food and economic status etc in a simulated environment.

Nutrition: PY 1 & PY 2 = 8 hrs + 8 hrs**, PY 3 =** 4 hrs in revision **(Total 20 hrs)** can be divided in LGDs & SGDs

Faculty Guide-Year wise Distribution of Topics according to Competencies, Total Duration, SLO wise T/L methods and Assessment methods

S.no.	Competency	SLOs	Phase /Prof	Session type	Level K/KH /SH/P to be attained	Core Y/N	T/L Method	Assessment method	Integration
(5.2) 1st prof and 2nd Prof	Describe and demonstrate the correct method of performing a nutritional assessment of individuals, families and the community by using the appropriate method	Describe about balanced diet, macro and micro nutrients.	I	Lecture	K/KH	Y	Lecture, sgds field study demo-cp	LQ,SAQ, MCQ, Viva	Biochemistry Horizontal
		Describe about role of nutrients in health and prevention of disease	II	Lecture	K/KH	Y	DO ", case CLINICS ,	-Do-, Presentation	Physiology/ H
		Describe about common nutritional problems in Children, Pregnant and High-risk groups (DM,HTN, Obesity)	II	Practical	K/KH /S/SH	Y	Family study cases reviews	Long case short cases, ,ospe ,clinical teaching viva	Medicine ,OBG . Paeds …Vertical

		Knows/Describe about Dietary Requirements of nutrients for different individuals at various stages of life	II or Final-Part I	Practical	SH/P		Lecture demo , sdl	Viva , short notes, clinics judgement	
		Describe about various methods of nutritional assessment.	II	Practical	SH/P	Y	MINI CEE SGD S	Portfolios,	
		Knows about using appropriate methods for identified individuals of different ages and body structure in families.	Final	Practical	SH/P	Y	Family VISIT, sccase. DOAP	CRs, Focused observation and evaluation	
		Knows/Shows about community diagnosis of common nutritional problems.	II	Practical	SH/P	N	DOAP for all measurements	Case logs , case based discussion checklist evaluation in clinical posting	Medicine
		Shows/Describe Anthropometric measurement used to assess nutritional status of community, family and individual	II	Practical	SH/P	Y			
		Shows how to measure Various Anthropometric measurements such as Birth weight, BMI, MUAC, Crown to heel length, height	Final	Practical					
		Knows/shows clinical assessment of kwashiorkor and marasmus, Stunting, Wasting	Final	Practical					

- Activity maybe selected based on the resources and manpower available in the department. All activities mentioned here are not compulsory
- Date of completion can be either the date of that specific activity. For eg. Date of OSCE exam. It can also be the date of end of the postings/ survey. The department can decide prior.

S.no.	Competency	Specific learning Objective	Phase /Prof	Session type	Level K/KH/SH/P	Core Y/N	T/L method	Assessment method	Integration
5.4	Plan and recommend a suitable diet for the individuals and families based on local availability of food and economic status etc in a simulated environment.	Knows/Describe about Home available TOOLS to measure or assess diet and food	II/ final prof part I/ foundation course	Practical /FC	SH/	Y	Clinical Teaching	Viva	
		Knows/Describe about role and availability of seasonal fruits and vegetables	II/ final prof part I/ foundation course	Practical /FC	K	Y	Do	Viva	
		Knows/Describe about cost-effective cheap nutritional therapy and remedies.	II/ final prof part I/ foundation course	Practical /FC	K	N			
		Knows to communicate about food preferences and counsel for diet in a simulated environment	II/ final prof part I/ foundation course	AETCOM classes/FC	SH/ P	Y	Clinical posting , SDGs , Role play	OSCE, Case Review	
		Knows/describe the local availability of food depending on the socio-economic status	II/ final prof part I/ foundation course	Lecture/practical	K				
		Knows how to find out the consumption unit of individual as well as of the family	II/ final prof part I/ foundation course	Practical /lecture	K				
		Knows about the energy consumption in various physical activities in various types of workers	II/ final prof part I/ foundation course	Practical /lecture	K				
		Knows/shows how to use food tables	II/ final prof part I/ foundation course	Practical/lecture	K				

		Shows how to make Diet chart with commonly used food items in the community	II/ final prof part I/ foundation course	Practical/lecture	SH				
		Shows how to make a diet plan according to food intake and energy expenditure.	II/ final prof part I/ foundation course	Practical/lecture	SH				

- **In Practical, participation in group may be graded as**

Above expectations	**Meets expectations**	**Below expectations**
Took active part in the group activity on his own.	Took active part in the group activity with some encouragement from peers and tutors	Hardly took part in the group activity in spite of being instructed by the tutor

S. No.	Competency Adressed	Name of Activity/ SLOs	Date Completed	Attempt at activity first or Only(F)/ Repeat(R)/ Remedial (Re)	Rating Below expectations (B)/ Meets expectations (M)/ Exceeds Expectations (E) / Overall Score (Out of 5)	Decision of Faculty Completed (C)/ Repeat (R)/ Remedial(Re)	Initials of Faculty and Date
1.	Describe and demonstrate the correct method of performing a nutritional assessment of individuals, families and the community by using the appropriate method	Knows/Describe about balanced diet, macro and micro nutrients.					
		Knows/Describe about role of nutrients in health and prevention of disease					
		Knows/Describe about common nutritional problems in Children, Pregnant and High-risk groups (DM,HTN, Obesity)					
		Knows/Describe about Dietary Requirements of different individuals at various stages of life					
		Knows/Shows about various methods of nutritional assessment.					
		Knows/Shows about using appropriate methods for identified and specified individuals in families.					
		Knows/Shows about community diagnosis of common nutritional problems.					
		Shows/Describe Anthropometric measurement used to assess nutritional status of community, family and individual					
		Shows how to measure Various Anthropometric measurements such as Birth weight, BMI, MUAC, Crown to heel length, height					
		Knows/shows clinical assessment of kwashiorkor and marasmus, Stunting, Wasting					

2.	Plan and recommend a suitable diet for the individuals and families based on local availability of food and economic status etc in a simulated environment.	Knows/Describe about Home available methods					
		Knows/Describe about role of seasonal fruits and vegetables					
		Knows/Describe about cost-effective cheap nutritional therapy and remedies.					
		Knows about the various socio economic classification used in both urban and rural					
		Knows/describe the local availability of food depending on the socio-economic status					
		Knows how to find out the consumption unit of individual as well as of the family					
		Knows about the energy consumption in various physical activities in various types of workers					
		Knows/shows how to use food tables					
		Shows how to make Diet chart with commonly used food items in the community					
		Shows how to make a diet plan according to food intake and energy expenditure.					

Nutritional detail assessment:

To Be Filled By Students

1. Please describe briefly what was discussed OR details of activity/assignment/assessment:

2. What did you learn from the discussion OR the activity/ assignment/ assessment:

3. Do you feel that the knowledge you have acquired will help you become a better doctor? Please explain in your own word

CM6.2 Describe and discuss the principles and demonstrate the methods of collection, classification, analysis, interpretation and presentation of statistical data
CM6.3 Describe, discuss and demonstrate the application of elementary statistical methods including test of significance in various study designs
CM6.4 Enumerate, discuss and demonstrate Common sampling techniques, simple statistical methods, frequency distribution, measures of central tendency and dispersion

Learning objectives:

At the end of the session, the learner should be able to

1. Describe the various types of data and scales of measurement
2. Discuss the various methods of data collection, merits and demerits of each method and errors in data collection
3. Describe Common samplingtechniques and their application
4. Calculate sample size for a cross-sectional study
5. Calculate and interpret the measures of central tendency and dispersion
6. Describe tests of significance
7. Choose an appropriate test of significance for a given data from different study designs
8. Perform tests of significance and interpret the results - t-test, chi-square test and correlation
9. Analyse and interpret a given data set
10. Present the results of the analysis using appropriate tables and charts
11. Develop charts and graphs using MS excel for the given data set

Faculty-guide

Learning objective No.	Learning objective	Phase of teaching	Session type	T/L method	Level to be attained	Assessment method	Remarks
1	a. Describe the various types of data and scales of measurement	II	Practicals	Lecture/ SGT	KH	Written exam- MCQ/SAQ	
2	a. Discuss the various sources of data; methods of data collection, merits and demerits of each method; errors in data collection b. Collect data during a village survey/ project	II II/ III	Practicals	Lecture/ SGT	KH SH	Written exam- MCQ/SAQ Participation in the survey	When survey is not possible, data collection and analysis from records/ reports can be attempted, tools like google forms etc can also be used, so that learners actually perform data collection
3	a. Describe the various sampling techniques- probability & non-probability b. Choose a specific sampling technique for a given scenario c. Demonstrate by using of a sampling technique during village survey	II II/ III	Practicals Clinical postings	Lecture with demonstration / SGT with demonstration	KH SH SH	Written exam- MCQ/SAQ OSCE Participation/ EOP-OSCE	
4	a. Calculate sample size for a descriptive cross-sectional study	II	Practicals	Lecture or SGT with demonstration	SH	OSCE	Demonstrate using software like open-epi

5	a. Describe the various measures of central tendency and dispersion b. Calculate the measures of central tendency c. Interpret the measures of central tendency d. Calculate the measures of dispersion e. Interpret the measures of dispersion f. Describe the characteristics of a normal distribution	II II/ III	Practicals Clinical postings	Lecture with demonstration / SGT with demonstration	KH SH SH SH SH KH	Written exam-MCQ/SAQ EOP-OSCE ’’ ‘‘ “ “ “ Written exam-MCQ/SAQ	Use examples from published journal articles to explain and interpret measures of central tendency & dispersion
6	a. Distinguish between descriptive and analytical statistics b. Describe null hypothesis and alternate hypothesis c. Distinguish between clinical and statistical significance d. Describe p-value and its significance e. Distinguish between parametric and non-parametric tests and their assumptions f. Enlist the various tests of significance g. Describe power, type I and type II errors	II	Practicals	Lecture with demonstration / SGT with demonstration	KH KH KH KH KH KH KH	Written exam-MCQ/SAQ	Use examples from published journal articles to explain and interpret hypothesis testing and p value
7	a. Choose an appropriate test of significance for a given data from different study designs	II/ III	Practicals	Lecture/ SGT	SH	OSCE	Use published journal articles to demonstrate choice

							of tests of significance
8	a. Perform a student t test for paired and unpaired data (manually/ using a software) for a given data set b. Perform a chi-square test (manually/ using a software) for a given data set c. Perform a correlation test using software for a given data set d. Interpret the findings of a test of significance	II/III	Practicals	Lecture/ SGT	SH SH SH SH	OSCE	Use published journal articles to interpret findings of tests of significance Combine with competency 7.9
9	a. Analyse and interpret a given data set b. Interpret data during a village survey/ project	II II/ III	Practicals Clinical postings	Demonstration	SH SH	OSCE presentation Participation in group activity	Combine with competency 7.9
10	a. Describe the components of a Table b. Present the results of the analysis using appropriate tables c. Describe the various graphs and pictures used for representation of data d. Present the results of the analysis using charts and pictures (Manually) e. Present data collected during a village survey/ project	II II/ III	Practicals Clinical postings	Lecture Demonstration Lecture Demonstration Seminar	KH SH	OSCE Presentation Participation in group activity	Combine with competency 7.9
11	a. Prepare charts and graphs using MS excel for the given data set	II II/ III	Practicals	Demonstration	SH SH	OSCE Participation in group activity,	Combine with competency 7.9

	b. Prepare charts for data collected during a village survey/ project		Clinical postings			response station OSCE	

- Activity may be selected based on the resources and manpower available in the department. All activities mentioned here are not compulsory
- Date of completion can be either the date of that specific activity. For eg. Date of OSCE exam. It can also be the date of end of the postings/ survey. The department can decide prior.
- Demonstration of data analysis using MS excel or other freely available softwares can be done. We can use Peytons four step approach
- Station OSCE (unobserved or observed station) for the same can be prepared such that the student does the analysis/ visual representation and interpretation of a given data set either manually with a calculator/ graph sheets or using a computer/ software.
- Checklist for OSCE can be prepared and the numerical score may be entered in the logbook
- Participation in group may be graded as

Above expectations	**Meets expectations**	**Below expectations**
Took active part in the group activity on his own	Took active part in the group activity with some encouragement from peers and tutors	Hardly took part in the group activity in spite of being instructed by the tutor

Logbook entry for CM 6.2,, CM 6.3 & CM 6.4

(Please enter numerical score for OSCE and presentation)

1	2	3	4	5	6	7	8	9
	Name of Activity *(may choose one or more based on the resources/ manpower available)*	**Date completed:** dd-mm-yyyy	**Method or process of Assessment/ documentation / certification**	**Attempt at activity** First or Only (F) Repeat (R) Remedial (Re)	**Rating** Below (B) expectations Meets (M) expectations Exceeds (E) expectations **OR** Numerical score	**Decision of faculty** Completed (C) Repeat (R) Remedial (Re)	**Initial of faculty and date**	**Feedback Received** Initial of learner
1	Choose a specific sampling technique for a given scenario		OSCE					
2	Calculate sample size for a descriptive cross-sectional study		OSCE					
3	Calculate & Interpret the measures of central tendency		OSCE					
4	Calculate and interpret the measures of dispersion		OSCE					
5	Choose an appropriate test of significance for a given data from different study designs		OSCE					
6	Perform a student t test for paired and unpaired data (manually/ using a software) for a given data set		OSCE					
7	Perform a chi-square test (manually/ using a software) for a given data set		OSCE					

8	Perform a correlation test using software for a given data set		OSCE					
9	Interpret the findings of a test of significance		OSCE					
10	Collect data during a village survey/ project		Participation					
11	Demonstrate by using of a sampling technique during village survey		Participation					
12	Analyse and interpret data from a village survey/ project		Participation					
13	Interpret the findings of a given data set		OSCE					
14	Present the results of the analysis using appropriate tables		OSCE					
15	Present the results of the analysis using appropriate charts		OSCE					
16	Present data collected during a village survey/ project		Presentation					
17	Prepare charts and graphs using MS excel for the given data set		OSCE					
18	Prepare charts for data collected during a village survey/ project		Participation & presentation					

CM 7.4: Competency: Define, Calculate and interpret morbidity and mortality indicators based on given set of data

Large group session: *(The document tells SGT only so can be small group as well depending on the department's decision)*

Specific Learning Objectives: At the end of the session the students should be able to-

1. Define morbidity indicators
2. Define mortality indicators
3. Classify morbidity and mortality indicators of public health importance with examples.
4. List the uses of morbidity and mortality indicators in public health

Small group session

SLO: At the end of the session the students should be able to-

1. Calculate the values for morbidity and mortality indicators from the given set of data
2. Interpret the values in the light of the public health measures taken/to be taken
3. Comment of the impact of national health programmes based on the given set of data on morbidity and mortality indicators

Faculty-guide:

Total protected hours for this competency: 6-8 hours

No.	Learning objective	Phase of teaching	Session type	T/L method	Level to be attained	Assessment method	Remarks
1	1. Define morbidity indicators 2. Define mortality indicators 3. Classify morbidity and mortality indicators of public health importance with examples. 4. List the uses of morbidity and mortality indicators in public health	II	Interactive Large group	Lecture/ SGT	K & KH	Written tests-MCQ/SAQ	
2	5. Calculate the values for morbidity and mortality indicators from the given set of data 6. Interpret the values in the light of the public health measures taken/to be taken	II II/ III	Practicals	SGT	SH SH	Written tests with vignettes	
3	7. Comment of the impact of national health programmes based on the given set of data on morbidity and mortality indicators	III	Practicals	SGT	SH SH	Written tests with vignettes Participation in group activity	Combine with competency 6.4, 7.9
4	8. Find out the current mortality and morbidity indicators from census, SRS, NFHS and DLHS. Comment on the current IMR and MMR.	III	Large group briefing	SDL	SH	Activity completion Reflection and narratives	Combine with competency

Logbook entry

CM 7.4: Define, Calculate and interpret morbidity and mortality indicators based on given set of data

1	2	3	4	5	6	7	8	9
	Name of Activity *(may choose one or more based on the resources/ manpower available)*	**Date completed:** dd-mm-yyyy	**Method or process of Assessment/ documentation / certification**	**Attempt at activity** First or Only (F) Repeat (R) Remedial (Re)	**Rating** Below (B) expectations Meets (M) expectations Exceeds (E) expectations **OR** Numerical score	**Decision of faculty** Completed (C) Repeat (R) Remedial (Re)	**Initial of faculty and date**	**Feedback Received** Initial of learner
1	Calculate the values for morbidity and mortality indicators from the given set of data Interpret the values in the light of the public health measures taken/to be taken							
2	Comment of the impact of national health programmes based on the given set of data on morbidity and mortality indicators Can be considered as a certifiable skill							
3	Find out the current mortality and morbidity indicators from census, SRS, NFHS and DLHS. Comment on the current IMR and MMR.							

Assessment of Small Group Learning (SGL) Sessions

Competency No :_____ PHASE _____ DATE _____

Scale: 1. Never
2. Occasionally
3. Sometimes
4. Often
5. Always

1 2 3 4 5

1.	Assembles for the session in time					
2.	Contributes relevant information in discussions					
3.	Shares learning resources relevant to the topic					
4.	Gives critical feedback					
5.	Takes criticism in a healthy manner					
6.	Seeks answer to learning questions					
7.	Integrates old and new knowledge (across the course)					
8.	Shows consideration for group process					
9.	Shows confidence in areas of understanding					
10.	Shows commitment to correct deficiencies					
	TOTAL					

Grade A: Exceeds expectations: 40-50

Grade B: Meets expectations: 30-40

Grade C: Below expectaions: Less than 30

CM 7.6 Enumerate and evaluate the need of screening tests

Specific Learning Objectives

1. List the criteria for screening of a disease
2. List and explain the evaluation indicators for a screening test.

Faculty guide:

Illustrative examples of a problem to be calculated (may be modified by the departments)

1. **A given population in a city ABC had been screened by the health department for a chronic disease X. The following table gives result of Screening test done for disease X in a population.**

Screening test	Disease present	Disease absent	Total
Positive	190	30	220
Absent	50	180	230

Calculate the sensitivity, Specificity, Positive predictive value, Negative predictive value of the test. Interpret the results.
What are the criteria for a good screening test?

2. **In a city XYZ, the prevalence of disease A is estimated to be 60 percent while that of disease B is estimated to be 20 percent. There are screening tests available for both the diseases. What are the considerations to be borne in mind before embarking on a mass screening programme?**

Guide Points for discussion: The prevalence of the detectable preclinical phase of disease has to be high among the population screened. This is related to the relative costs of the screening program in relation to the number of cases detected and to positive predictive value. The expenditure of resources on screening must be justifiable in terms of eliminating or decreasing adverse health consequences. A screening program that finds diseases that occur less often could only benefit few individuals. Such a program might prevent some deaths. While preventing even one death is important, given limited resources, a more cost-effective program for diseases that are more common should be given a higher priority, because it will help more people. Life threatening diseases have serious consequences and thus are suitable for screening.
In some cases though, screening for low prevalence diseases is also cost effective, if the cost of screening is less than the cost of care if the disease is not detected early. For example, phenylketonuria (PKU) is a rare disease but has very serious long-term consequences if left untreated. PKU occurs in only 1 out of every approximately 15,000 births, and if left untreated can result in severe mental retardation that can be prevented with dietary intervention. The availability of a simple, accurate and inexpensive test has lead many states, including New York State, to require PKU screening for all newborns.
Source: Disease Screening: Statistics Teaching Tools. Available from URL: https://www.health.ny.gov/diseases/chronic/discreen.htm

CM 7.7 Describe and demonstrate the steps in the investigation of an epidemic of communicable disease and describe the principles of control measures.

Learning Objectives:

At the end of the session, the learner should be able to

1. Define the terms outbreak, epidemic, endemic, and pandemic.
2. List the steps in the investigation of an epidemic.
3. Describe the steps in the investigation of an epidemic of communicable disease
4. Review, analyse and interpret data pertaining to investigation of an epidemic of communicable disease
5. Describe the principles of control of epidemics
6. Identify appropriate epidemic control measures for communicable diseases at local, national and international level

Faculty-guide

No.	Learning objective	Phase of teaching	T/L methods	Level to be attained	Assessment method
1	Define the terms outbreak, epidemic, endemic, and pandemic.	II/ III	**Lecture/ SGT**	K	Written exam- MCQ/SAQ
2	a. Enlist the steps in the investigation of an epidemic of communicable disease b. Describe the steps in the investigation of an epidemic of communicable disease • Given the initial information of a possible communicable disease epidemic, describe how to determine whether an epidemic exists. • Describe the importance of having a case definition and the factors to consider in developing a case definition.	II/III	**Lecture/ SGT** *Epidemic case study/ Simulated epidemic which students investigate, analyse and interpret followed by write up/ presentation*	KH	Written exam- MCQ/SAQ Participation in Group activity

3	Review, analyse and interpret data pertaining to investigation of an epidemic of communicable disease • Explain how to gather, record, and analyze descriptive data related to characteristics of person, place, and time that will generate hypotheses about the source of an epidemic • *For a given dataset*, Create a "line listing" manually and using an Excel spreadsheet. • Define and calculate prevalence and incidence. • Define and calculate a) mortality rate, b) morbidity rate, c) attack rate, d) case-fatality rate. • Identify the following types of epidemic curves: a) point source epidemic, b) continuous source epidemic, and c) propagated source epidemic.	II/III	**SGT** *Epidemic case study/ Simulated epidemic which students investigate, analyse and interpret followed by write up* / presentation	SH	Participation in group activity
4	a. Describe the principles of control of epidemics of communicable disease b. Identify appropriate epidemic control measures for communicable diseases at local, national and international level	II/III	**SDL**	SH	Group Presentation on Epidemic Investigation

Grading Rubric

Skill	Exceeds expectations (15)	Meets expectations (10)	Below expectations (5)
Learner contribution	Always willing to help and do more. Routinely offered useful ideas. Always displays positive attitude. (3)	Cooperative. Usually offered useful ideas. Generally displays positive attitude. (2)	Sometimes cooperative. Sometimes offered useful ideas. Rarely displays positive attitude. (1)
Learner commitment	Tries to keep people working together. Almost always focused on the task and what needs to be done. Is very self-directed. (3)	Does not cause problems in the group. Focuses on the task and what needs to be done most of the time. Can count on this person. (2)	Sometimes not a good team member. Sometimes focuses on the task and what needs to be done. Must be prodded and reminded to keep on task. (1)
Learner Team skills	Participated in all group tasks. Assumed leadership role as necessary. Did the work that was assigned by the group. (3)	Participated in most group tasks. Provided leadership when asked. Did most of the work assigned by the group. (2)	Participated in some group tasks. Provided some leadership. Did some of the work assigned by the group. (1)
Learner Communication skills	Always listens to, shares with, and supports the efforts of others. Provided effective feedback to other members. Relays a great deal of information–all relating to the topic. (3)	Usually listens to, shares with, and supports the efforts of others. Sometimes talks too much. Provided some effective feedback to others. Relays some basic information–most relate to the topic. (2)	Often listens to, shares with, and supports the efforts of others. Usually does most of the talking–rarely listens to others. Provided little feedback to others. Relays very little information–some relate to the topic. (1)
Completion of work	Work is complete, well organized, has no errors and is done on time or early. (3)	Work is generally complete, meets the requirements of the task, and is mostly done on time. (2)	Work tends to be disorderly, incomplete, not accurate, and is usually late. (1)

Grade A: 12 - 15 Grade B: 8-11 Grade C: < 8

CM 7.7 Describe and demonstrate the steps in the investigation of an epidemic of communicable disease and describe the principles of control measures.

	Name of Activity *(may choose one or more based on the resources/ manpower available)*	**Date completed:** dd-mm-yyyy	**Method or process of Assessment/ documentation / certification**	**Attempt at activity** First or Only (F) Repeat (R) Remedial (Re)	**Rating** Below (B) expectations Meets (M) expectations Exceeds (E) expectations **OR** Numerical score	**Decision of faculty** Completed (C) Repeat (R) Remedial (Re)	**Initial of faculty and date**	**Feedback Received** Initial of learner
1	Define the terms outbreak, epidemic, endemic, and pandemic.							
2	List the steps in the investigation of an epidemic.							
3	Describe the steps in the investigation of an epidemic of communicable disease							
4	Review, analyse and interpret data pertaining to investigation of an epidemic of communicable disease							
5	Describe the principles of control of epidemics							
6	Identify appropriate epidemic control measures for communicable diseases at local, national and international level.							

CM7.9 Describe and demonstrate the application of computers in epidemiology

Milestone I: I MBBS foundation course in addition to computer based training indicated in foundation course

Session I: At the end of the session the students should be able to- I MBBS foundation session for one hour in small groups before visit to RHTC & UHTC 9 am-10 am - family survey at community or with sample data

1. Describe the steps in computer for data analysis for various surveys
2. List various computer applications available both in free version as well as paid version
3. Describe concepts of bio-statistics for data analysis.

Level: K & KH
Assessment : FA

Session II: At the end of the session the students should be able to- I MBBS foundation session for one hour in small groups before visit to RHTC & UHTC 11-12 noon (1 hour excluded In the travelling time) family survey at community or with sample data. (in very preliminary stage or way under faculty supervision)

1. Perform analysis of data on computer using various software.
2. Present and report the findings of the analysis

Level : S & SH
Logbook entry:

Competency no.	Name of activity	Date completed	Attempt at activity First or Only (F), Repeat (R), Remedial (Re)	Rating – Below expectations (B), Meets expectations (M), Exceeds expectations (E) OR Numerical Score	Decision of faculty – Completed (C), Repeat (R), Remedial (Re)	Initial of faculty and date	Feedback received Initial of learner

Assessment: FA during foundation course

Milestone 2: **I MBBS ECE**

At the end of the session the students should be able to- I MBBS ECE session for one hour in small groups before visit to RHTC & UHTC 10-12 noon (1 hour excluded In the travelling time) (in very preliminary stage to higher level under faculty supervision) family survey at community or with sample data

1. Perform analysis of data on computer using various software.
2. Present and report the findings of the analysis

Level : S & SH

Logbook entry:

Competency no.	**Name of activity**	**Date completed**	**Attempt at activity First or Only (F), Repeat (R), Remedial (Re)**	**Rating – Below expectations (B), Meets expectations (M), Exceeds expectations (E) OR Numerical Score**	**Decision of faculty – Completed (C), Repeat (R), Remedial (Re)**	**Initial of faculty and date**	**Feedback received Initial of learner**

Assessment : FA during ECE

Milestone 3: II MBBS clinical posting

At the end of the session the students should be able to- II MBBS clinical posting (three times at field level during the duration of 4 weeks of clinical posting) for two hour in small groups before visit to RHTC & UHTC 10-12 noon (1 hour excluded In the travelling time) (in very higher level to advanced level under faculty supervision) family survey at community or with sample data

1. Perform analysis of data on computer using various software.
2. Present and report the findings of the analysis

Level : S & SH

Logbook entry:

Competency no.	Name of activity	Date completed	Attempt at activity First or Only (F), Repeat (R), Remedial (Re)	Rating – Below expectations (B), Meets expectations (M), Exceeds expectations (E) OR Numerical Score	Decision of faculty – Completed (C), Repeat (R), Remedial (Re)	Initial of faculty and date	Feedback received Initial of learner

Assessment : FA during clinical posting (last day or assessment same day on the session).

Milestone 4: III MBBS clinical posting

At the end of the session the students should be able to- III MBBS clinical posting (three times at field level during the duration of 4 weeks of clinical posting) for two hour in small groups before visit to RHTC & UHTC 10-12 noon (1 hour excluded In the travelling time) (in very higher level to advanced level under faculty supervision) family survey at community or with sample data

1. Perform analysis of data on computer using various software.
2. Present and report the findings of the analysis
3. Describe the use of these analyzed data for policy making and national health planning.

Level : S & SH

Logbook entry:

Competency no.	Name of activity	Date completed	Attempt at activity First or Only (F), Repeat (R), Remedial (Re)	Rating – Below expectations (B), Meets expectations (M), Exceeds expectations (E) OR Numerical Score	Decision of faculty – Completed (C), Repeat (R), Remedial (Re)	Initial of faculty and date	Feedback received Initial of learner

Assessment: FA during clinical posting (last day or assessment same day on the session).

Milestone 5: only for the selected or identified students who have requested for elective in Research in Elective 1

At the end of the one week long training session the students should be able to- (in very higher level to advanced level under faculty supervision) family survey at community as per planned activity (possible if elective allotment happens in the beginning of III MBBS) or with sample data using larger data sets

1. Perform analysis of data on computer using various software.
2. Present and report the findings of the analysis
3. Describe the use of these analyzed data for policy making and national health planning.

Level : S & SH

Logbook entry: (Portfolio entry required: preferably electronic portfolio)

Competency no.	Name of activity	Date completed	Attempt at activity First or Only (F), Repeat (R), Remedial (Re)	Rating – Below expectations (B), Meets expectations (M), Exceeds expectations (E) OR Numerical Score	Decision of faculty – Completed (C), Repeat (R), Remedial (Re)	Initial of faculty and date	Feedback received Initial of learner

Assessment: Day to day FA with portfolio and logbook. (Note: paper presentation in conferences to be avoided to avoid overburdening the students and it should be considered as desirable activity- other many poor quality papers and reports will be generated)

CM 8.6: Educate and train health workers in disease surveillance, control & treatment and health education

Specific Learning Objectives: At the end of the session, the students should be able to-

1. List the different training methods for grass root health workers.
2. Prepare a plan for training ASHA workers in disease surveillance, control and health education
3. Conduct a mock training programme for ASHA workers in disease surveillance at RHTC/UHTC

Faculty-guide:

Total protected hours for this competency: 6-8 hours

No.	Learning objective	Phase of teaching	Session type	T/L method	Level to be attained	Assessment method	Remarks
1	1.Define disease control, elimination and eradication 2. Define disease surveillance 3. List types of surveillance 3. Enlist notifiable diseases in India 4. Plot the organogram of surveillance team	III part 1	Interactive lecture	Lecture	K & KH	Written tests-MCQ/SAQ	Module 3.3 of **Pandemic module** covers this competency Combine with competency NO: 1.6,1.9 AETCOM 2.4
2	1.List the different training methods for grass root health workers 2. Prepare a plan for training ASHA workers in disease surveillance, control and health education	III	Demonstration/FV	SGT	SH	Participation in FV using the checklist provided below Reflection and narrative writing	Can be combined with Interns training where Interns will act as mentors RHTC/UHTC visit and interacting with medical officers and field

							staff about surveillance activities going on there as part of IDSP. Getting acquainted with different registers and reporting formats for all three types of surveillance.
3	1.Conduct a mock training programme for ASHA workers in disease surveillance at RHTC/UHTC	III	Demonstration/FV/Observation of a training session (tag along session)	SGT	SH	Mock training session Role play/skit MSF Kalamazu consensus checklist	Can be done during Internship also *This element can be a part of elective in CM*

Logbook entry

CM 8.6: Educate and train health workers in disease surveillance, control & treatment and health education

1	2	3	4	5	6	7	8	9
	Name of Activity *(may choose one or more based on the resources/ manpower available)*	**Date completed:** dd-mm-yyyy	**Method or process of Assessment/ documentation / certification**	**Attempt at activity** First or Only (F) Repeat (R) Remedial (Re)	**Rating** Below (B) expectations Meets (M) expectations Exceeds (E) expectations **OR** Numerical score	**Decision of faculty** Completed (C) Repeat (R) Remedial (Re)	**Initial of faculty and date**	**Feedback Received** Initial of learner
1	1.List the different training methods for grass root health workers 2. Prepare a plan for training ASHA workers in disease surveillance, control and health education							
2	Conduct a mock training programme for ASHA workers in disease surveillance at RHTC/UHTC (Role play or reflective writing in case not able to conduct a mock training)							
3	Reflection on the training session • What happened • So, what (what went well) • What next (what improvements can be made)							

Check list for Evaluation of Field Visit Report

Field Visit Report will be marked on five-point Likert Scale:

1=Strongly, 2=Disagree, 3=Neutral, 4= Agree, 5= Strongly Agree

1. There is a comment on whether the objectives of the visit have been fulfilled, if not which objective has not been covered					
2. There is Clear Description of student observation / skill learned.					
3. Analysis of strengths and weaknesses of the services in light of theory and key concepts of the course					
4. Report include information that supports student analysis { Picture, Maps, forms }					
5. There is evidence of active participation of student during the visit					
6. There is statement of Limitation / suggestions					

CM 9.2: Define, calculate and interpret demographic indices including birth rate, death rate, fertility rates

Specific learning Objectives: At the end of the session the students should be able to-

1. Enumerate demographic and fertility indicators
2. Define, birth rate and death rate
3. Define General fertility rate, Age specific fertility rate, Total fertility rate and Net Reproductive Rate
4. Describe the public health importance of demographic and fertility indicators
5. Demonstrate the understanding of family welfare through calculation and interpretation of vital statistics and fertility indicators

Faculty-guide:

Total protected hours for this competency: 3-4 hours

No.	Learning objective	Phase of teaching	Session type	T/L method	Level to be attained	Assessment method	Remarks
1	1.Enumerate demographic and fertility indicators 2.Define, birth rate and death rate 3.Define Fertility indicators (GFR,ASFR, GRR, TFR and NRR) 4.Describe the public health importance of demographic and fertility indicators	I/II	Interactive lecture	Lecture	K & KH	Written tests-MCQ/SAQ	Integrate with competency NO: CM1.8, CM10.1 and Foundation course 3.2 Vertical integration with OBG (OG 1.1 & 1.2)
2	Demonstrate the understanding of family welfare through calculation and interpretation of vital statistics and fertility indicators	III	Demonstration/Field Visit (FV)	SGT/Case based learning on vital statistics, fertility indicators and trends	SH	Written tests Participation in FV using the checklist provided below	Visit to RHTC/UHTC to study the various fertility and vital statistics registers maintained and their use

Logbook entry

CM 9.2:Define, calculate and interpret demographic indices including birth rate, death rate, fertility rates

1	2	3	4	5	6	7	8	9
	Name of Activity *(may choose one or more based on the resources/ manpower available)*	**Date completed:** dd-mm-yyyy	**Method or process of Assessment/ documentation / certification**	**Attempt at activity** First or Only (F) Repeat (R) Remedial (Re)	**Rating** Below (B) expectations Meets (M) expectations Exceeds (E) expectations **OR** Numerical score	**Decision of faculty** Completed (C) Repeat (R) Remedial (Re)	I**nitial of faculty and date**	**Feedback Received** Initial of learner
1	Demonstrate the understanding of family welfare through calculation and interpretation of vital statistics and fertility indicators							

EXTRA-CURRICULAR ACTIVITY

Sl. No.	Date	Activity	Remarks, if any	Signature of faculty

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