A COMPREHENSIVE SOLUTION FOR BSC NURSING STUDENTS

(Management of Nursing Services and Education, Community Health Nursing and Midwifery and Obstetrical Nursing)

Dear Readers,

This book has been designed primarily to support nursing students in their exam preparations. We recognize that the journey through nursing education can be both demanding and fulfilling, with success often hinging on the mastery of key concepts, comprehension of critical points, and the ability to effectively convey this knowledge in exams.

Upon completing this book, students will learn to apply a structured approach to exam revision, develop critical thinking skills, and relate their knowledge to real-world clinical scenarios. By concentrating on essential points and grasping the underlying principles, students will be better prepared to tackle exam questions in a thoughtful and organized way. Our objective is to provide a comprehensive guide to the three core subjects featured in this book: Community Health Nursing, Management of Nursing Services and Education, and Obstetrical and Gynecological Nursing. Each subject is presented with an emphasis on the essential facts and principles necessary for exam success. By focusing on these critical areas, we aim to help students to confidently approach their exams, ensuring they are well-prepared to achieve outstanding results.

Some distinctive features of this book include:

- *Simple and accessible language*
- *Concise and accurate content aligned with the INC syllabus*
- *Diagrammatic representations of key concepts*

We hope that this book serves not only as a valuable study resource but also as a means to enhance nursing knowledge, contributing to nursing students' success in exams and their future careers as healthcare professionals.

Happy reading!

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Dr. S. Suvitha

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The completion of this book stands as a testament to the collaborative efforts and dedication of three remarkable individuals, whose contributions were essential in bringing this project to life.

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Dr. S. Suvitha

Associate Professor

College of Nursing

MTPG&RIHS

(A Government of Puducherry Institution)

Contents

Preface

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Happy reading!

19 December, 2024,

MANAGEMENT OF NURSING SERVICE AND EDUCATION

MODEL QUESTION PAPER AND ANSWER KEY-I

SECTION - A

1. Essay questions:

1. a). What are the functions of management?

The functions of management may be classified as

- Planning
- Organizing
- Staffing
- Directing
- Controlling
- Reporting
- Budgeting

b). Explain any two theories of management in detail

(i). The Leadership theory

Leadership is a process of empowering beliefs and teaching others to exploit their potentiality by shifting the beliefs that have been restricting them.

Leadership roles:

- Decision maker
- Critical thinker
- Advocate
- Forecaster
- Influencer
- Creative problem solver
- Communicator
- Evaluator
- Counsellor
- Mentor
- Teacher
- Change agent
- Role model
- Coach
- Energizer
- Risk taker

(ii). Classical management theory

Subclassification

- Scientific management theory
- Bureaucratic management theory

- Administrative management theory

(a). Scientific management theory

The focus is on goal productivity

(b). Bureaucratic management theory

The focus is on superior. Subordinate communication transmitted from top to bottom via a clear chain of command, a hierarchy of authority and division of labor chain

(c). Administrative management theory

Focus on the science of management and principles of an organization applicable in any setting+

2. a). What are the functions of management process?

The functions of management process may be classified as

- Planning
- Organizing
- Staffing
- Directing
- Controlling
- Reporting
- Budgeting

b). What are the functions of human resource management?

(i). Operative functions

- Recruitment
- Training and development
- Professional development
- Compensation and benefit
- Performance appraisal
- Ensuring legal compliance

(ii). Managerial functions

- Planning
- Organizing
- Directing
- Controlling

(iii). Advocatory functions

- Top management advice
- Departmental head advice

3. a). Narrate the job description of head nurse in the hospital

- Carrying out the instructions of the medical officer
- General cleanliness and upkeep of the ward
- Supervision of care
- Keeping the ward equipment in optimum state of readiness
- Assigning duties for patient's care to the ward staff
- Making an indent of various items
- Ensuring that all specimens are sent to the laboratory in time
- Maintaining strict control over accounting and distribution of drugs
- Maintaining all the registers and documents required in the ward
- Overall supervision of the ward
- Requisition of diet as per the instructions of Medical officer
- Ensuring sufficient linen is available in the ward

b). What are the steps of successful delegation?

- Identify the task
- Select the right person
- Define the task clearly
- Provide the necessary resources
- Set clear expectations
- Establish a timeline
- Empower and trust
- Provide support
- Monitor progress
- Give feedback and recognition
- Reflect and learn

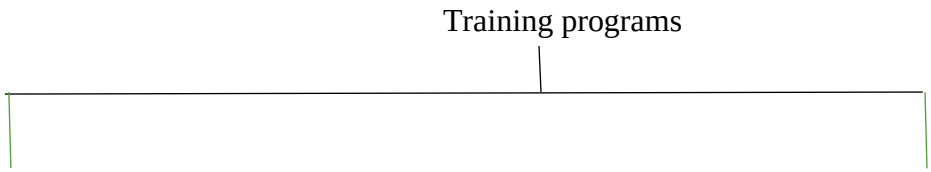
2. Short notes:

4. Enumerate the principles of management

- Unity of command
- Discipline
- Authority
- Division of labour
- Centralization
- Remuneration
- Unity of direction
- Subordination of individual interest to the common good
- Stability of staff

- Hierarchy
- Order
- Equity
- Esprit de corps
- Initiative

5. What are the methods of staff development?



On the job method

- Job rotation
- Coaching
- Job instruction
- Internships

➢ E learning
➢ Performance appraisals
➢ Peer learning groups
➢ Project assignments
➢ In service education
➢ Job orientation

Off the job method

- Role playing
- Lecture methods
- Conference/discussion

6. List down the principles of budgeting

- A budget should focus on policies and objectives of the organization
- It should provide sound financial management
- It should require that programme activities are planned in advance
- It should ensure the most effective use of the available resources
- Budgeting should include coordinating efforts of various departments
- Budget period must be appropriate to the nature of business or service
- List the feedback of a subordinated staff to the budget
- Budget should be prepared and interpreted consistently throughout the organization
- Estimation should be based on the past performance and existing assets and plans
- All resources of income and expenditure should be included in the budget
- The responsibility for the budget maintenance should be given to a suitable person
- Budget should be prepared under the direction and supervision of the administrative or financial officer
- Setting budget target requires adequate checks and balances

SECTION – B

I. Essay questions:

7. (a). List out the theories of organizational behavior

To understand the organization of a health care agency or any such institution, one must be familiar with organizational theory

Organizational theories are classified into three categories:

- Classical doctrine
- Humanistic school
- Modern organization theory

(b**). Explain any two theories with suitable examples**

(i). Humanistic school (1930's)

It is also called behavioral/neoclassical theory. Humanistic school organizational theories emphasize the importance of human needs, interpersonal relationships, and the overall well-being of individuals within an organization. These theories advocate for an environment that fosters personal growth, collaboration, and satisfaction among staff and students. Key elements include participative decision-making, empowerment, and a focus on the psychological and social aspects of the school community.

Functions:

- Maintaining the external balance
- Maintaining the internal balance

Maslow's Hierarchy of Needs
Application in Schools: Recognizing that teachers and students have basic physiological needs (like a comfortable classroom environment), safety needs (job security for teachers, safe school environment for students), social needs (a sense of belonging), esteem needs (recognition and respect), and self-actualization (opportunities for creativity and personal growth).
Example: A school providing professional development opportunities for teachers, ensuring a safe and clean learning environment, and promoting a positive school culture where achievements are celebrated.

(ii). Classical doctrine

Classical organizational theories focus on structuring organizations to achieve efficiency and productivity. Key theories include Scientific Management, Bureaucratic Theory, and Administrative Theory. Here's a breakdown of each with examples:

Scientific Management (Frederick W. Taylor)

High production was his primary concern in developing this theory. He believed that high production could be achieved by paying high wages. Taylor's scientific management approach involves timing various work activities with a stopwatch.

Principles:
- Science, no rule of thumb
- Harmony, not discord
- Co-operation and individualism
- Development of each and every person

Example:
In a manufacturing setting, Taylor's principles might be applied by breaking down each task into simple steps, standardizing tools used, and timing each step to find the most efficient way to perform it. Workers are then trained to follow these steps exactly, with performance monitored and incentives given for meeting targets.

8. (a). What are the aims and objectives of nursing practice

- Patient care
- Health promotion
- Disease prevention
- Advocacy
- Professional development
- Collaboration
- Research and evidence-based practice
- Ethical practice
- Cultural competence
- Quality improvement

(b).Discuss "Professional ethics of nursing practice"

The professional ethics of nursing practice are guided by a commitment to provide high-quality care while respecting the dignity, autonomy, and rights of patients. Here are some key principles:

- Autonomy
- Beneficence
- Non-Maleficence
- Justice
- Confidentiality
- Fidelity
- Accountability
- Integrity
- Professional Competence
- Advocacy

These principles form the foundation of ethical nursing practice, guiding nurses in their daily interactions with patients, families, and colleagues.

Importance of ethics:

- Provides profit
- Protection
- Decision making
- Basic human need
- Create credibility to public
- Credibility to employee

II. Short notes:

9. Describe about "Gantt chart"

Definition:

According to Henry L. Gantt, 1917;

A Gantt chart is a horizontal bar chart developed as a production control tool. It is frequently used in project management, a Gantt chart provides a graphical illustration of a schedule that helps to plan, coordinate and track specific tasks in a project.

Uses of gantt chart:

- To show the current schedule status
- To measure task duration in the project
- To represent cost, time and scope of the project
- A useful tool for planning and scheduling projects
- To plan how long a project should take
- Lays out the order in which the task need to be carried out
- Modern Gantt chart software provides dependencies between tasks
- To monitor a project's progress

Components:

- Horizontal axis
- Vertical marker
- Broken lines
- Diamond symbol

Advantages:

The following are the advantages of the Gantt chart:

- It helps in planning and monitoring the work of project
- Time is explicitly expressed in the chart in relation to other
- All tasks are visible at a glance in relation to other
- Deadlines are depicted in the chart

Disadvantages:

- It cannot effortlessly display more than 30 activities
- It is valuable only for short projects
- Chart can communicate only little information at a time

10. What are the objectives of nursing audit?

The objectives of a nursing audit are as follows:

- To justify costs occurred on human or material resources
- To take remedial action towards cost effectiveness
- Evaluate the Quality of Care
- Ensure Compliance
- Identify Areas for Improvement
- Promote Accountability
- Enhance Patient Safety
- Support Continuous Education
- Optimize Resource Utilization
- Facilitate Evidence-Based Practice
- Improve Documentation
- Strengthen Communication

11. What are the principles of adult learning?

- Engagement of learner/Active learning
- Psychomotor domain
- Immediacy of the learning
- Learning by doing
- Reinforcement
- Safety in environment

- Assessment of needs
- Sound relationship
- Decision making
- Role development
- Teamwork
- Accountability

12. What are the objectives of performance appraisal?

- To determine the productivity
- To identify the gap between desired and actual performance of employers
- To find out their strengths for promotion and advancement
- Assess performance
- Provide feedback
- Identify training needs
- Set goals
- Support career development
- Recognize and reward
- Improve communication
- Make administrative decisions
- Enhance organizational performance
- Document performance

13. What are the current trends and issues in nursing?

Current trends in nursing

- Telehealth and remote monitoring
- Increased focus on mental health
- Advanced practice roles
- Technology and informatics
- Patient-centered care
- Workforce diversity
- Professional development
- Emphasis on preventive care
- Health policy advocacy
- Burnout and well-being

Current issues in nursing

- Demographical changes
- Environment changes
- Changes to healthy practices
- Emerging bioethical issues

MANAGEMENT OF NURSING SERVICE AND EDUCATION

MODEL QUESTION PAPER AND ANSWER KEY-II

SECTION – A

I. Essay questions:

1. Define management. Explain the principles of management and describe the role of nurse as nurse manager

Definition of management

According to John Mee, Management may be defined as the art of securing maximum results with a minimum of effort so as to secure maximum prosperity and happiness for both employer and employee and give the public the best possible service.

Principles of management

Fayol's principles of management

- Unity of command
- Discipline
- Authority and responsibility
- Division of labor/work
- Centralization
- Remuneration
- Unity of direction
- Subordination of individual interest to the common good
- Stability of staff
- Hierarchy
- Order
- Equity
- Esprit de corps
- Initiative

Role of nurse as nurse manager

Specific roles :

- Preparing objectives
- Patient assignment

- Delegation of duties
- Supervision
- Co ordinate activities
- Programme evaluation
- Evaluation of performance
- Record and report keeping
- Co ordination
- Auditing
- Public relations
- Advisor
- Budgeting
- Staff development

General roles:

- Towards owner of enterprise
- Towards the government
- Towards worker
- Towards profession
- Towards consumers
- Towards economic policy
- Towards society
- Towards organizations

2. What is quality assurance and describe briefly the models of quality assurance?

Quality assurance:

Quality assurance is deciding the best possible nursing care that has contributed to provide valued outcomes of nursing care.

Quality assurance is a systematic process designed to determine whether a product or service meets specified requirements and standards.

Models of quality assurance:

- ANA model
- Donabedian model
- Quality health outcome model
- Sumedha software quality assurance model

3. **Define in-service education. Describe the steps of an in-service education program for nursing staff of a hospital**

Definition of in-service education

In service education is defined as a continued programme of education provided by the employing authority, with the purpose of developing the competences of personnel in their functions appropriate to the position they hold, or to which they will be appointed in the service.

Steps of an in-service education program

- Establishing goals
- Formulating
- Determining the course of action
- Resources
- Budget
- Evaluating
- Reassessing

II. Short notes:

1. Inventory control

It is the process of having the necessary equipment and supplies available at the appropriate time. It means stocking adequate number and kind of stores, so that the materials are available whenever required and wherever required. Scientific inventory control results in optimal balance

Objectives

- To facilitate smooth production operation
- If an offer of discount comes for a bulk purchase, to decide whether to go for it or not
- To reduce financial investment

Functions of inventory control

- To provide maximum supply service, consistent with maximum efficiency and optimum investment.
- To provide cushion between predicted and actual demand for a material

Classification of inventory

- Raw material inventory
- Finished goods inventory
- In process inventory
- Indirect inventory

Steps

- Creating store account
- Arrange a method for allocation of material
- Order
- Fixing quantities for order (Min or Max)

Selective controls in material management

- ABC analysis
- VED analysis
- HML analysis
- XYZ analysis
- FSN analysis
- SDE analysis
- GOLF analysis
- SOS analysis

Principles of inventory management

- Determination of where the reorder will be needed
- Determination of quantity to be ordered

RON

- Keep only required amount of equipment
- Ensure equipment's are in working condition
- Be a good controller and observer of waste and misuse
- Divide the responsibilities of handling supplies
- Provide with set standard protocols
- Make the ward sister accountable and responsible for the material used

Advantages of inventory management

- Possibility of discount for bulk purchases
- Delivery in time
- Workers and machinery need not be idle
- Unforeseen circumstances can be handled to some extent

Disadvantages

- Charges of damage, pilferage, replacement etc.

- Increase in insurance charges
- Increased charge for obsolescence
- Working capital is tied up
- Increased overhead expenses
- More space required

2. Career opportunities in nursing

- Nurse anaesthetists
- Staff nurse
- Ambulatory care nurses
- Cardiac rehabilitation nurse
- Genetic nurse
- Infection control nurse
- Intravenous therapy nurse
- Nephrology nurse
- Neuroscience nurse
- Occupational health nurse
- Oncology nurse
- Ophthalmic nurse
- Psychiatric nurse
- Rehabilitation nurse
- Transplantation nurse
- Trauma nurse
- Flight nurse
- Forensic nurse
- Holistic nurse
- Military nurse
- Pediatric nurse
- Nursing informatics

3. Maintenance of discipline among nursing personnel

Maintaining discipline among nursing personnel is crucial for ensuring high standards of patient care, safety and professional conduct. Here are some strategies to achieve and maintain discipline:

- Clear policies and procedures
- Leadership and role modeling
- Training and development
- Effective communication
- Accountability
- Conflict resolution

- Supportive environment
- Regular evaluation
- Team building
- Consistency in enforcement

SECTION – B

III. Essay questions:

1. Define profession. List the characteristics of profession and discuss the nursing as a profession

Definition of profession:

Profession means specific kind of job that require advanced education and training

Characteristics of profession:

- A concept of deputation open to change
- Mastery and thorough knowledge of nursing theory
- Ability to solve problems
- Application of theoretical knowledge
- Continued seeking of self-enrichment by its members
- Official training
- Authorization system to certify competence
- Development of a subculture
- Legal augmentation of professional standards
- Ethical practice
- Penalties against incompetent or unethical practices
- Public acceptance

Nursing as a profession:

(i). Aims and objectives of nursing

It has main aims to promote higher quality of nursing care to improve the quality and availability resources of health care and to nurture the professional growth of nurses.

(ii). Essential qualities of a nurse

- Sense of humor
- Sense of responsibility
- Sympathy and patience
- Observation and adaptability

- Economy
- Gentleness and quietness
- Discipline and obedience
- Loyalty
- Honesty
- Courtesy
- Dignity
- Personal appearance

(iii). Regulatory bodies

- INC
- SNC
- TNAI
- DME
- CMAI
- WHO
- UNO
- UNICEF

2. Explain group dynamics. Enumerate the characteristics of an effective group and describe the dynamics of change process

Group dynamics

Group dynamics refers to the study of how people interact and behave in a group setting. It encompasses the various forces and factors that influence the functioning and development of groups. Key aspects of group dynamics include:

- Formation and development
- Roles and norms
- Cohesion and conflict
- Communication patterns
- Leadership decision making
- Power and influence

Characteristics of an effective group

- Trust
- Informal, comfortable
- Task-oriented group
- Working towards objectives
- Assignments are accepted
- Free expression of thoughts
- Dynamic leadership

- Aware of own operation

Dynamics of change process

- Awareness and identification
- Preparation and planning
- Communication
- Implementation
- Sustainability
- Leadership
- Employee involvement
- Training and support
- Feedback mechanism

Five stages of group dynamics

- Forming
- Storming
- Norming
- Performing
- Adjourning

IV. Short notes:

1. The steps in planning process

- State the organizational objectives
- List the alternative channels of reaching the objectives
- Develop premises on which each alternative is listed
- Select the best alternative which fits into organizational objectives
- Prepare a sound plan out of selected alternative
- Implement the designed plan

2. Nursing rounds

Nursing rounds are conducted by the head nurse with the members of her staff for a clear understanding of the disease and the effect of nursing care for each patient.

Types of ward rounds

- Rounds with the doctors
- Rounds to discuss psychological problem of patients
- Social service rounds
- Medical rounds for nurses
- Rounds with the physical therapists
- Nursing rounds

Purposes of nursing rounds

- To observe the work of staff
- To introduce patients to the personnel and vice versa
- To carry out the plan made for the care of patients
- To evaluate the results of treatment and patient satisfaction
- To prescribe any medication in nursing action

Advantages of nursing rounds

- No other type of rounds is a substitute for nursing rounds
- It is always very valuable for the head nurse to go on regular nursing rounds with a clinical instructor
- Rounds help in orienting a new nurse\student to the patients
- They offer a real-life learning situation

Disadvantages of nursing rounds

- The confidentiality of the patient is hampered
- Distractions are present in the ward
- An unprepared nursing round has little teaching-learning value
- The value of nursing rounds depends on the quality and presentation of the nurse teacher/head nurse

3. Code of ethics in nursing

- Respect for human dignity
- Confidentiality
- Advocacy
- Accountability
- Quality of care
- Ethical obligation
- Non-discrimination
- Collaboration
- Informed consent

4. Recruitment and selection

Recruitment and selection are key components of the hiring process in any organization. Here's a breakdown of each term and their importance:

Recruitment

Definition: Recruitment is the process of finding and attracting capable applicants for employment. The process begins when new recruits are sought and ends when their applications are submitted.

Key Steps:
1. Identifying Vacancy
2. Job Analysis
3. Sourcing Candidates
4. Advertising the Job
5. Screening Applicants

Selection

Definition: Selection is the process of choosing the most suitable candidate from those recruited to fill the job vacancy.

Key Steps:
1. Initial Screening
2. Interviews
3. Assessment Tests
4.Background Checks
5. Decision Making
6.Job Offer

Importance

- Right Fit
- Efficiency
- Organizational Success
- Compliance

Effective recruitment and selection processes are essential for building a strong workforce and achieving organizational goals.

5. Performance appraisal

A performance appraisal is a regular review and evaluation of an employee's job performance and overall contribution to a company. Here are key aspects of performance appraisals:

- Purpose
  - Assess employee performance
  - Provide feedback
  - Set goals and objectives
  - Identify training needs
  - Inform salary adjustments and promotions

- Types of Performance Appraisals

- Annual Review: A comprehensive review conducted once a year.
- 360-Degree Feedback: Collects feedback from peers, subordinates, and supervisors.
- Self-Assessment: Employees evaluate their own performance.
- Continuous Feedback: Ongoing, real-time feedback.

- Process
  - Preparation: Setting clear performance criteria and goals.
  - Evaluation: Reviewing employee performance against set criteria.
  - Feedback Session: Discussing the evaluation with the employee.
  - Action Plan: Creating a plan for improvement and development.

- Benefits
  - Clarifies expectations
  - Improves communication
  - Motivates employees
  - Identifies strengths and areas for improvement
  - Helps in career development

- Challenges
  - Bias and subjectivity
  - Anxiety among employees
  - Time-consuming process
  - Potential for negative impact on morale

Effective performance appraisals require clear criteria, consistent implementation, and constructive feedback.

Elements:

- Observation of task
- Formal supervision
- Criteria evaluation as per policy
- Feedback and input

MANAGEMENT OF NURSING SERVICE AND EDUCATION

MODEL QUESTION PAPER AND ANSWER KEY-III

SECTION - A

3. Essay questions:

14. a). Explain the concepts and theories of management

Concepts of management:

- Management is the process of achieving its objectives by utilizing and controlling the group of appointed candidates in order to complete the management task
- Providing good work environment ensures that the workers perform well, and ultimately, the group performance removes the hurdles and provides ways for maximizing the skill in attaining the objectives of the management
- Management involves a set of activities directed at the efficient and effective utilization of resources-human, financial and physical-through planning, organizing, leading and controlling functions
- It is based on economic resources, goals, processes and authority

Theories of management:

- Classical management theory
- The leadership theory
- The great man theory
- Behavioral theories
- Situational and contingency theories
- Contemporary theories

b). Principles of management

Fayol's principles of management

- Unity of command
- Discipline
- Authority and responsibility
- Division of labor/work
- Centralization
- Remuneration
- Unity of direction
- Subordination of individual interest to the common good
- Stability of staff
- Hierarchy
- Order

- Equity
- Scalar chain
- Esprit de corps
- Initiative

15. **a). Define leadership and explain the various types of leadership styles**

Definition: It means influencing people to follow you and to work willingly for the advancements of a common goal – Koontz and O'Donnell.

Various types of leadership styles:

- Autocratic leadership
- Democratic leadership
- Laissez-Faire leadership
- Transformational leadership
- Transactional leadership
- Servant leadership
- Situational leadership
- Bureaucratic leadership
- Charismatic leadership

b). Enumerate about leadership theories

- Great man theory or Charismatic theory
- Trait theory
- Behavioral theory
- Situational theory or Contingency theory
- New theory of leadership
- Path –goal theory of leadership

16. **a). Discuss the factors influencing quality patient care**

Quality patient care is influenced by various factors, including:

- *Clinical Competence*: The skills and knowledge of healthcare providers are fundamental. Continuous education and training ensure they stay updated with the latest medical advancements.
- *Patient-Centered Care*: Understanding and respecting patients' preferences, needs, and values are crucial. Effective communication and empathy contribute significantly to patient satisfaction and outcomes.
- *Access to Care*: Timely access to necessary healthcare services, including preventive, curative, and palliative care, ensures better health outcomes.

- *Health System Infrastructure:* Well-equipped facilities, availability of necessary medications and technology, and efficient management systems support high-quality care.
- *Teamwork and Collaboration*: Effective collaboration among healthcare professionals, including doctors, nurses, and support staff, ensures coordinated and comprehensive care.
- *Safety:* Minimizing risks and harm to patients through proper protocols, infection control measures, and a culture of safety is essential.
- *Evidence-Based Practice:* Utilizing clinical guidelines and research evidence to inform treatment decisions enhances care quality and effectiveness.
- *Patient Education and Engagement:* Educating patients about their conditions and involving them in decision-making fosters better adherence to treatment plans and self-care.
- *Cultural Competence:* Understanding and addressing cultural, linguistic, and socioeconomic factors that affect health beliefs and behaviors improves patient-provider interactions and care outcomes.
- *Healthcare Policies and Regulations:* Effective policies, standards, and regulations at local, national, and international levels play a critical role in maintaining and improving care quality.
- *Technology and Innovation:* Adoption of electronic health records, telemedicine, and other technological advancements can streamline processes, improve accuracy, and enhance patient experiences.
- *Quality Improvement Initiatives:* Continuous monitoring, evaluation, and improvement of care practices through quality improvement programs ensure ongoing enhancement of care quality.

Balancing these factors effectively can lead to improved patient outcomes, higher satisfaction and overall better quality of care.

b). Describe the responsibilities of a head nurse in a hospital with regard to providing patient care

The head nurse, often referred to as a nurse manager or nursing director, plays a crucial role in overseeing patient care in a hospital. Their responsibilities include:

- *Supervising Nursing Staff:* Managing the nursing team, ensuring adequate staffing levels, and coordinating schedules to maintain continuous patient care.
- *Ensuring Quality Patient Care:* Implementing and monitoring standards of care to ensure patients receive high-quality treatment. This includes developing and enforcing protocols and guidelines.
- *Patient Advocacy:* Acting as an advocate for patients, ensuring their needs are met and their rights are respected. They also address patient concerns and complaints.

- *Staff Training and Development:* Providing ongoing education and training opportunities for nursing staff to maintain competencies and stay updated on the latest medical practices and technologies.
- *Collaborating with Other Healthcare Professionals:* Working closely with doctors, therapists, and other healthcare professionals to coordinate patient care and ensure comprehensive treatment plans.
- *Resource Management:* Managing the budget and resources of the nursing department, ensuring the availability of necessary equipment and supplies.
- *Policy Development:* Developing and implementing hospital policies related to patient care and nursing practice.
- *Performance Evaluation:* Conducting performance evaluations of nursing staff, providing feedback, and implementing improvement plans as necessary.
- *Health and Safety Compliance*: Ensuring compliance with health and safety regulations to create a safe environment for patients and staff.
- *Data Management:* Maintaining accurate patient records and ensuring data confidentiality and security.

By fulfilling these responsibilities, the head nurse ensures that patients receive optimal care while supporting and guiding the nursing team.

4. Short notes:

1. Nursing audit

Definition: A systematic process of determining the quality of nursing care in retrospective through analysis of nursing records

Methods of auditing:

- Retrospective
- Concurrent

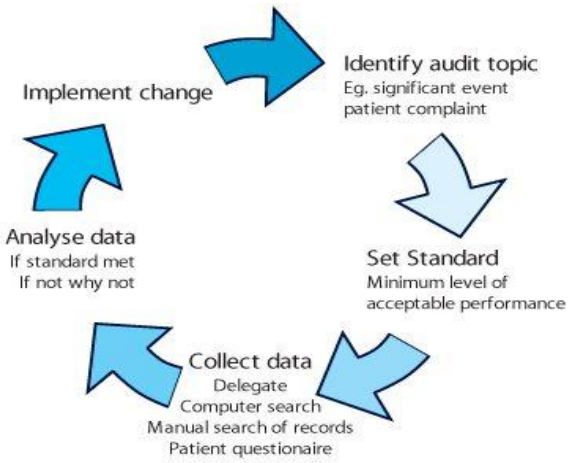
Purposes of nursing audit:

- Evaluating nursing care given
- Achieves deserved quality of nursing care
- Stimulates better health
- Focus on care provides
- Contribute to research

Types of audits:

- Internal audit
- External audit

Audit cycle:



Advantages of nursing audit:

- Useful method of measuring and assessing in all areas of nursing
- All functions are easily understood
- Simple scoring system
- No difficulty in understanding results
- Helps in determining the work of people involved in recording care
- Useful tool in a quality assurance programme in areas where accurate records of care and kept

Disadvantages of nursing audit:

- Analysis becomes difficult because of overlap in components
- Demands more time
- Only trained auditors can handle this
- Detailed information is required
- Useful for evaluating record keeping and improving documentation process

2. Methods of In-service education

In-service education, also known as professional development, refers to training and education provided to employees during the course of their employment to help them develop skills and knowledge relevant to their job. Various methods can be used for in-service education:

- *Workshops and Seminars:* These are short-term training sessions focusing on specific skills or knowledge areas. They are often interactive and can include lectures, discussions, and hands-on activities.
- *Conferences:* These are larger gatherings that provide opportunities for networking, learning about industry trends, and attending sessions on various topics related to the profession.

- *Online Courses and Webinars*: These offer flexibility and accessibility, allowing employees to learn at their own pace. Webinars can be live or recorded, providing opportunities for interaction or self-paced study.
- *On-the-Job Training:* This involves learning new skills while performing the job. It can include job shadowing, mentoring, and coaching.
- *Professional Learning Communities (PLCs):* These are groups of professionals who regularly meet to discuss and share best practices, challenges, and solutions in their field.
- *Peer Observations and Feedback:* Employees observe each other's work and provide constructive feedback. This helps in learning new techniques and improving existing practices.
- *Self-Study Programs:* Employees take the initiative to study independently, using resources like books, online materials, and professional journals.
- *Formal Education:* This includes enrolling in courses or degree programs at educational institutions to gain advanced knowledge and qualifications.
- *Simulation and Role-Playing:* These methods provide a safe environment for practicing skills and decision-making without the risk of real-world consequences.
- *Action Research*: Employees conduct research on their own practice, often involving cycles of planning, acting, observing, and reflecting to improve their methods and strategies.

Each method has its advantages and can be selected based on the specific needs and goals of the employees and the organization.

3. Stages of curriculum planning

Curriculum planning typically involves several stages to ensure a coherent and effective educational program. Here are the main stages:

- *Needs Assessment:* Identify the needs of the learners, the community, and the educational institution. This stage involves gathering data and analyzing gaps in the current curriculum.
- *Define Objectives and Outcomes:* Establish clear, measurable objectives and desired outcomes. These should align with educational standards and the needs identified in the previous stage.
- *Content Selection and Organization:* Determine what content will be covered and how it will be organized. This includes selecting topics, materials, and resources that support the learning objectives.
- *Instructional Strategies and Methods:* Decide on the teaching methods and strategies that will be used to deliver the content. This can include lectures, group work, hands-on activities, and technology integration.
- *Assessment and Evaluation:* Develop assessment tools and methods to evaluate student learning and the effectiveness of the curriculum. This includes formative and summative assessments.

- *Implementation:* Put the curriculum into practice. This stage involves preparing teachers, providing necessary resources, and ensuring that the planned strategies and methods are executed.
- *Review and Revision:* Continuously monitor and evaluate the curriculum to identify areas for improvement. This involves gathering feedback from students, teachers, and other stakeholders, and making necessary adjustments.

Each stage is interconnected and iterative, often requiring revisiting and revising earlier steps based on feedback and new insights.

SECTION – B

III. Essay questions:

1. (a). Explain the methods of evaluation used in nursing

In nursing clinical services, evaluation methods are essential to ensure that patient care is effective and that nursing practices are continuously improved. Here are some common methods used in nursing evaluation:

(i). Patient Outcomes:

- Clinical Outcomes: Measuring patient recovery, improvement, or stabilization of health conditions.

- Functional Outcomes: Assessing the patient's ability to perform activities of daily living.

- Patient Satisfaction: Surveys and interviews to gauge patient satisfaction with the care received.

(ii). Nursing Audits:

- Concurrent Audit: Reviewing patient care during the patient's stay to ensure standards are being met.

- Retrospective Audit: Reviewing patient records after discharge to evaluate the quality of care.

(iii). Peer Review:

- Internal Peer Review: Colleagues within the same institution review nursing practices and outcomes.

- External Peer Review: Professionals from outside the institution review practices to provide an unbiased evaluation.

(iv). Quality Assurance Programs:

- Benchmarking: Comparing performance metrics with industry standards or other institutions.

- Root Cause Analysis: Investigating adverse events to identify underlying causes and prevent future occurrences.

(v). Performance Appraisal:

- Self-Evaluation: Nurses assess their own performance and set goals for improvement.

- Supervisor Evaluation: Supervisors assess the performance of nurses based on predefined criteria.

(vi). Continuous Quality Improvement (CQI):

- Plan-Do-Study-Act (PDSA) Cycle: Implementing changes on a small scale, studying the results, and refining the process.

- Total Quality Management (TQM): Comprehensive approach to improving all aspects of care delivery.

(vii). Evidence-Based Practice (EBP) Reviews:

- Evaluating nursing practices against current research and best practices to ensure the most effective care is provided.

(viii). Patient and Family Feedback:

- Collecting and analyzing feedback from patients and their families to identify areas for improvement in care and communication.

(ix). Competency Assessments:

- Testing and evaluating nurses' skills and knowledge to ensure they are competent in their roles.

These methods help ensure that nursing care remains effective, efficient, and patient-centered, leading to better health outcomes and higher patient satisfaction.

(b**). Discuss the equipment and supplies influencing good management of nursing educational institutions**

Good management of nursing educational institutions relies on various types of equipment and supplies that support both the administrative and educational aspects. Here are some key categories:

Administrative Equipment and Supplies

1. Office Supplies: Pens, paper, binders, filing cabinets, and other basic office materials are essential for maintaining records and managing daily operations.

2. Computers and Software: Reliable computers and administrative software (such as student information systems, scheduling programs, and financial management systems) are crucial for efficient management.
3. Communication Tools: Phones, email systems, and video conferencing tools enable effective communication within the institution and with external parties.
4. Furniture: Desks, chairs, and ergonomic furniture ensure a comfortable and productive working environment for staff.

Educational Equipment and Supplies
1. Classroom Technology: Projectors, interactive whiteboards, and smartboards enhance the teaching and learning experience.
2. Simulation Equipment: High-fidelity mannequins, simulation software, and other medical simulation equipment are vital for practical training.
3. Laboratory Supplies: Medical instruments (e.g., stethoscopes, blood pressure cuffs), lab coats, gloves, and other supplies are necessary for hands-on training in clinical skills.
4. Textbooks and Learning Materials: Updated textbooks, e-books, and access to online learning platforms provide necessary educational resources.
5. Library Resources: A well-stocked library with books, journals, and electronic databases supports research and learning.

Infrastructure and Facilities
1. Classrooms and Lecture Halls: Well-equipped, spacious, and well-ventilated classrooms are essential for a conducive learning environment.
2. Computer Labs: Access to computers and the internet is crucial for research and learning.
3. Simulation Labs: Dedicated spaces for simulation training, equipped with the latest technology, provide students with realistic practice scenarios.
4. Clinical Training Facilities: Partnerships with hospitals and clinics ensure students receive practical, hands-on experience.

Health and Safety Equipment
1. First Aid Kits: Readily available in various locations around the institution.
2. Fire Safety Equipment: Fire extinguishers, smoke detectors, and emergency exits are crucial for ensuring safety.
3. Personal Protective Equipment (PPE): Masks, gloves, and other PPE are essential, particularly in clinical settings or during health crises.

IT and Technical Support
1. Technical Support Staff: On-site IT support to handle technical issues and maintain equipment.
2. Network Infrastructure: Reliable internet and intranet connectivity for seamless operation of online resources and communication tools.

Sustainability and Maintenance
1. Maintenance Supplies: Tools and materials for regular upkeep of facilities and equipment.

2.Sustainable Practices: Implementation of eco-friendly practices, such as recycling programs and energy-efficient systems, to promote sustainability.

Effective management of these resources ensures that nursing educational institutions can provide high-quality education and training, preparing students to excel in their future careers.

2. (a). Define budget

According to Taylor, Budget is a financial plan of the government for a definite period

(b). Enlist the types of budget

- Incremental budget
- Programme budget
- Open-ended budget
- Flexible budget
- Revenue and expense budget
- Sales budget
- Rollover budget
- Fixed-ceiling budget
- Production budget
- Performance budget
- Capital expenditure budget
- Cash budget
- Sunset budget

(c). Discuss the role and functions of a nurse administrator in budgeting

A nurse administrator plays a crucial role in the budgeting process within healthcare settings. Their responsibilities encompass various functions to ensure financial stability and the effective allocation of resources. Here are key roles and functions of a nurse administrator in budgeting:

- Budget Preparation:

- Develop annual budgets for nursing departments.

- Collaborate with other department heads to forecast expenses and revenues.

- Identify staffing needs, equipment, and supplies necessary for optimal patient care.

- Resource Allocation:

- Ensure that resources are distributed efficiently and effectively to meet patient care needs.

- Prioritize spending based on departmental goals and patient outcomes.

- Cost Control:

- Monitor and manage departmental expenditures to stay within budget.

- Implement cost-saving measures without compromising the quality of care.

- Analyze financial reports to identify areas where costs can be reduced.

- Financial Reporting:

- Prepare regular financial reports for upper management.

- Provide insights into budget performance and variances.

- Use financial data to make informed decisions about resource allocation.

- Revenue Management:

- Develop strategies to maximize revenue, such as improving billing processes and reducing patient readmissions.

- Work with billing departments to ensure accurate and timely billing.

- Policy Development:

- Establish policies and procedures for financial management within the nursing department.

- Ensure compliance with organizational, state, and federal financial regulations.

- Staffing and Payroll Management:

- Plan and manage payroll budgets, ensuring adequate staffing levels are maintained.

- Address overtime and staffing issues to control labor costs.

- Training and Education:

- Educate nursing staff on the importance of budget adherence and cost-effective practices.

- Foster a culture of financial responsibility within the nursing team.

- Capital Expenditure Planning:

- Plan for significant capital expenditures, such as new equipment or facility upgrades.

- Justify and advocate for capital budget requests to upper management.

- Evaluation and Adjustment:

- Continuously evaluate the budget performance and make necessary adjustments.

- Implement corrective actions when budget variances occur.

Overall, nurse administrators ensure that the nursing department operates within its financial means while providing high-quality patient care. Their expertise in budgeting

helps balance financial constraints with the demands of patient care, ultimately contributing to the overall success of the healthcare organization.

IV. Short notes:

1. Conflict management

- Understanding Conflict: Conflict arises from differences in values, beliefs, or needs. It's important to identify the underlying causes.
- Communication: Open and honest communication is crucial. Active listening helps in understanding each party's perspective.
- Negotiation: Finding a mutually acceptable solution through negotiation can resolve conflicts effectively. Focus on interests, not positions.
- Mediation: Involving a neutral third party can help facilitate resolution when direct negotiations fail.
- Resolution Strategies:

-Avoidance: Ignoring the conflict, suitable for minor issues.

-Accommodation: One party gives in to the other, useful to maintain harmony.

-Competition: One party seeks to win, which may be effective in emergencies but can harm relationships.

-Collaboration: Working together to find a win-win solution, ideal for complex issues.

-Compromise: Both parties give up something to reach a solution.

- Emotional Intelligence: Managing one's own emotions and understanding others' emotions are key in navigating conflicts.
- Follow-Up: After resolving a conflict, it's important to review the solution and ensure that both parties are satisfied with the outcome.

Effective conflict management can improve relationships, enhance team performance, and contribute to a positive work environment.

2. Indian Nursing Council

The Indian Nursing Council (INC) is a regulatory body for the nursing profession in India. Established in 1947, its primary functions include:

- Regulation and Standardization: Setting standards for nursing education and practice across India.
- Accreditation: Accrediting nursing schools and colleges to ensure quality education.
- Licensing: Licensing nurses and midwives to practice in the country.

- Policy Formulation: Developing and implementing policies related to nursing and midwifery.

The INC aims to ensure high standards of nursing practice and education to improve healthcare delivery in India.

3. Principles of Guidance and Counselling

Guidance and counseling are essential for helping individuals navigate personal and academic challenges. Here are some core principles:

- Confidentiality: Information shared in counseling sessions should be kept private to build trust and ensure that clients feel safe sharing their concerns.
- Respect and Empathy: Counselors should approach clients with respect and empathy, understanding their experiences and perspectives without judgment.
- Client-Centered Approach: The needs and goals of the client should be the focus of the counseling process, with interventions tailored to their unique situation.
- Ethical Practice: Counselors should adhere to professional ethics and standards, ensuring that their practices are both legally and morally sound.
- Empowerment: The aim of counseling is often to empower clients to make informed decisions and develop skills for managing their own challenges.
- Holistic Perspective: Counselors should consider the client's overall well-being, including emotional, social, and psychological aspects, rather than focusing on a single issue.
- Professional Development: Counselors should engage in continuous learning and professional development to stay updated with best practices and emerging research.
- Cultural Sensitivity: Understanding and respecting the diverse cultural backgrounds of clients is crucial for effective guidance and counseling.

These principles help ensure that guidance and counseling are effective and supportive for those seeking help.

4. Group dynamics

Group dynamics refers to the study of how people interact and behave in a group setting. It encompasses the various forces and factors that influence the functioning and development of groups. Key aspects of group dynamics include:

- Formation and development
- Roles and norms
- Cohesion and conflict
- Communication patterns
- Leadership decision making

- Power and influence

Characteristics of an effective group

- Trust
- Informal, comfortable
- Task-oriented group
- Working towards objectives
- Assignments are accepted
- Free expression of thoughts
- Dynamic leadership
- Aware of own operation

Dynamics of change process

- Awareness and identification
- Preparation and planning
- Communication
- Implementation
- Sustainability
- Leadership
- Employee involvement
- Training and support
- Feedback mechanism

Five stages of group dynamics

- Forming
- Storming
- Norming
- Performing
- Adjourning

5. Disaster management

Disaster management involves a range of activities aimed at preparing for, responding to, and recovering from disasters. Here's a brief overview:

- Preparedness:

-Planning: Develop and implement plans for various types of disasters.

-Training: Conduct regular drills and training for emergency responders and the public.

-Education: Raise awareness about disaster risks and safety measures.

- Response:

-Coordination: Ensure effective communication and collaboration among emergency services, government agencies, and organizations.

-Relief Operations: Provide immediate assistance such as medical care, food, water, and shelter to affected individuals.

- Recovery:

-Restoration: Rebuild infrastructure and restore services.

-Support: Offer psychological and financial support to individuals and communities.

-Evaluation: Assess the response and recovery efforts to improve future preparedness and response strategies.

- Mitigation:

-Risk Reduction: Implement measures to reduce the impact of disasters, such as building codes and land-use planning.

-Resilience Building: Strengthen communities' ability to withstand and recover from disasters.

Effective disaster management requires a coordinated approach involving government, communities, and individuals.

MANAGEMENT OF NURSING SERVICE AND EDUCATION

MODEL QUESTION PAPER AND ANSWER KEY-IV

SECTION - A

I. Essay question:

1. (a). State the steps in budgeting

- Assess goals of the institution or hospital to identify activities of highest priority, as they are most likely to receive funding
- Assess objectives of the present and proposed programmes to ensure that achievement of these objectives will support the agency and achieve maximum goals
- Assess all old and new programmes for computation of manpower, capital and operating expenses
- Identify alternative methods for realizing the objective
- Compare alternatives to determine the most cost effective
- Develop a budget request that details a fiscal plan for the preferred programme

(b). Draw a budget plan for 25 bedded medical unit

(i). Infrastructure costs

- Land and building construction: Rs. 500,000-1,000,000
- Utilities setup: Rs. 50,000-100,000
- Interior design and furnishing: Rs. 100,000-200,000

(ii). Medical equipment

- Beds and furniture: Rs. 50,000-100,000
- Medical equipment (X-ray, MRI, Ultrasound, etc.): Rs. 50,000-1,000,000
- Surgical instruments and supplies: Rs. 100,000-200,000
- Laboratory equipment: Rs. 100,000-200,000

(iii). Staffing costs

- Doctors (5-10doctors, salaries for 1 year): Rs. 600,000-1,000,000
- Nurses (10-15 nurses, salaries for1 year): Rs. 300,000-600,000
- Support staff (10-15 staff, salaries for1 year): Rs. 200,000-400,000
- Administrative staff (5-10 staff, salaries for1 year): Rs. 150,000-300,000

(iv). Operational expenses

- Medical supplies (Drugs, consumables): Rs. 200,000-400,000 per year
- Utilities (Electricity, water, internet): Rs. 50,000-100,000 per year
- Maintenance and repairs: Rs. 50,000-100,000 per year
- Insurance: Rs. 50,000-100,000 per year

(v). Other expenses

- Licensing and accreditation fees: Rs. 20,000-50,000
- Marketing and advertising: Rs. 20,000-50,000 per year
- Miscellaneous: Rs. 50,000-100,000 per year

Total estimated budget:

- Initial setup costs: Rs. 1,900,000-3,500,000
- Annual operating costs: Rs. 1,620,000-3,200,000

These figures are estimates and can vary depending on location, quality of materials and specific requirements. It's advisable to consult with professionals in medical facility planning and management for a detailed and accurate budget tailored to your; specific needs.

2. (a). Describe the various styles of leadership

- Autocratic leadership
- Democratic leadership
- Laissez-Faire leadership
- Transformational leadership
- Transactional leadership
- Servant leadership
- Situational leadership
- Bureaucratic leadership
- Charismatic leadership

(b). Explain the role of nurse administrator in collective bargaining

- Representation of management
- Policy implementation
- Communication
- Conflict resolution
- Data analysis
- Advocacy for staff
- Education and training
- Strategic planning

3. (a). Formulate philosophy and objectives of your institution

Philosophy:;

- Patient – centered care
- Professionalism
- Lifelong learning
- Collaboration
- Advocacy

Objectives:

- Educational excellence
- Clinical competence
- Ethical practice
- Research and Innovation
- Community engagement
- Cultural competency
- Leadership development

(b). Explain the characteristics of performance appraisal

- Objective and criteria – based
- Periods
- Goal-oriented
- Feedback and development
- Documentation
- Two-way communication
- Motivational tool
- Fairness and consistency
- Performance standards
- Outcome-oriented

II. Short notes:

4. Management theories

- Classical management theory
- The leadership theory
- The great man theory
- Behavioral theories
- Situational and contingency theories
- Contemporary theories

5. Sources of recruitment

(i). Internal recruitment

- Promotions
- Transfers
- Employee referrals

(ii). External recruitment

- Job portals/websites

- Social media
- Recruitment agencies
- Career fairs
- University/ college recruitment
- Professional associations

(iii). Other methods

- Walk-ins
- Print media
- Employee leasing
- Freelance/contract workers

6. Audit

Definition: A systematic process of determining the quality of nursing care in retrospective through analysis of nursing records

Methods of auditing:

- Retrospective
- Concurrent

Purposes of nursing audit:

- Evaluating nursing care given
- Achieves deserved quality of nursing care
- Stimulates better health
- Focus on care provides
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Types of audit:

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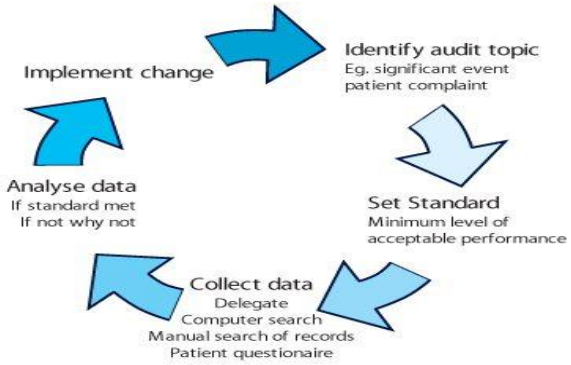

Advantages of nursing audit:

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- Simple scoring system
- No difficulty in understanding results
- Helps in determining the work of people involved in recording care
- Useful tool in a quality assurance programme in areas where accurate records of care and kept

Disadvantages of nursing audit:

- Analysis becomes difficult because of overlap in components
- Demands more time
- Only trained auditors can handle this
- Detailed information is required
- Useful for evaluating record keeping and improving documentation process

SECTION – B

III. Essay questions:

1. (a). State the welfare activities for nurses existing in your institution

- Health and wellness program
- Work-life balance initiative
- Professional development
- Financial benefits
- Employer leave
- Recognition programs
- Safe working environment
- Support networks
- Accommodation and transportation

(b). Prepare a plan of staff development program for nurses working in emergency unit

(i). Needs assessment

- Survey and feedback
- Performance data

(ii). Program objectives

- Clinical competence
- Teamwork and communication
- Stress management

- Continuing education

(iii). Curriculum development

- Clinical skills training
- Simulation based training
- Communication and team work
- Mental health and wellness
- Continuing education

(iv). Implementation strategy

- Scheduling
- Resource allocation
- Mentorship programs

(v). Evaluation and feedback

- Pre and post assessments
- Ongoing feedback
- Performance metrics

(vi). Continuous improvement

- Regular review
- Adaptation and innovation

(vii). Budget and resources

- Funding
- Partnerships

2. (a). Define team work. Enlist the characteristics of effective team

Definition:

Teamwork refers to the collaborative effort of a group of individuals working together towards a common goal or purpose. It involves sharing responsibilities, supporting each other and combining different skills and strengths to achieve better results than could be accomplished individually.

Characteristics of effective team:

- Working towards objectives
- Assignments are accepted
- Free expression of thoughts
- Informal, comfortable
- Task oriented group
- Clear goals

- Roles and responsibilities
- Open communication
- Trust and mutual respect
- Diversity of skills and perspectives
- Strong leadership
- Collaborative climate
- Accountability
- Problem-solving and decision-making
- Adaptability
- Recognition and rewards
- Conflict resolution

(b). Describe the methods to manage the conflicts effectively as nurse manager

- Active listening
- Clear communication
- Address issues early
- Establish ground rules
- Encourage collaboration
- Use mediation
- Provide training
- Stay neutral
- Document incident
- Follow-up

IV. Short notes:

3. Role of nurse manager

(i). Interpersonal role

- As figurehead
- As leader
- As liaison

(ii). Informational role: Monitoring

- Disseminating

(iii). Decisional role

- Entrepreneur
- Disturbance handler
- Resource allocator role

(iv). Negotiating role

4. Quality assurance

Objectives and goals:

- To establish technical assistance and frame effective planning strategies
- To upgrade the existing system of nursing care
- To create awareness and popularize the work of nurses in the public
- To frame the evaluation process methodically
- To demonstrate the efforts of the health care provider to deliver quality care
- To set incremental goals as needed
- To successfully achieve sustained improvement in health care

Components of quality assurance:

- Structure evaluation
- Process evaluation
- Outcome evaluation

Steps in quality assurance process:

- Plan
- Set the standards
- Communicate the standards
- Monitor the quality of care
- Identify and prioritize opportunities for improvement
- Define the problem
- Identify who will work on the problem
- Analyse and study the problem
- Find and design the solution
- Implement the solution

Factors affecting quality assurance:

- The extent of employer's involvement
- Time and hard work needed
- Support from health care team
- Depends on group interaction skills
- Evaluation tools to facilitate improvement

Quality assurance methods:

- Nursing audit
- Peer review
- Patient care profiles analysis
- Quality circles
- Patient satisfaction

Models of quality assurance:

- ANA model
- Donabedian model
- Quality health outcome model

5. Guidance and counselling

Definition: According to Crow and Crow, the fundamentals of all guidance include the assistance given by a competent person to an individual so that the latter may make his own decisions and carry them out.

Elements of guidance:

- Focuses on individual not on problem
- Discovery of abilities
- Based on interest and abilities
- Self-development and self - direction
- Plan for present and future
- Adjustable
- Success and happiness

Purposes of guidance:

- Understanding the individual
- Helping the individual make adjustments
- Developing personal abilities and potentialities
- Improving school activities
- Coordinating home, school and society

Types of guidance:

- Educational guidance
- Vocational guidance
- Personal guidance
- Recreational guidance
- Group guidance

Characteristics of guidance:

- Individual differences
- Continuous process
- Educational and vocational objectives
- Child – centered
- Developmental and comprehensive
- Practical aspect of education
- Specialized and generalized service

Planning for comprehensive guidance and counselling:

- Identification of priorities or key objectives
- Statement of vision and mission
- Statement of expected outcomes
- Measurable indicators of success
- Strategies and action plans to achieve the outcomes

Organization of Guidance and Counselling Centre in a School/College of Nursing:

- Identifying signs of disturbed behavior at the earliest
- Helping adolescents with normal developmental problems
- Helping individuals through temporary crisis situations
- Supporting tutors who help individuals but themselves need reassurance and guidance
- Referring cases that need specialist treatment

Problems in student counselling:

- Clash of goals and beliefs
- Personal quality lack
- Lack of skill and high order
- Patience and persistence
- Lack confidentiality
- Frustration
- Complexities of relationships
- Poor environment

6. Current trends in nursing

- Telehealth and remote monitoring
- Increased focus on mental health
- Advanced practice roles
- Technology and informatics
- Patient-centered care
- Workforce diversity
- Professional development
- Emphasis on preventive care
- Health policy advocacy
- Burnout and well-being

7. Job specification

A job specification, also known as a job description, is a document that outlines the duties, responsibilities, required qualifications and reporting relationships of a particular job. It typically includes:

- Job title
- Department
- Reports
- Job purpose
- Key responsibilities
- Qualifications
- Working condition
- Salary range
- Job location
- Physical requirements

MANAGEMENT OF NURSING SERVICE AND EDUCATION

MODEL QUESTION PAPER AND ANSWER KEY-V

SECTION - A

I. Essay question:

1. **Describe the Indian Nursing Council norms to establish a Nursing college with an annual intake of 50 students for B.Sc. Nursing program**.

   (i). The following Establishments/organizations are eligible to establish/open a nursing college

Administrative control

- State government
- Medical university
- Private or independent state nursing organization
- Autonomous central body

(ii). The eligible organizations should have their own 100 bedded parent hospital

(iii). The eligible organizations should obtain essentiality certificate/NOC from the concerned state government where the college to be established. The particulars of the name of the nursing institution along with the name of the trust as also full address shall be mentioned in NOC

(iv). After receipt of the NOC, the eligible institution shall get recognition from the concerned state nursing council for the B.Sc. programme for the particular academic year, which is a mandatory requirement

(v). The INC shall after receipt of the above documents/proposal would then conduct Inspection

Academic control

Governing bodies.

Administration of a nursing college-

1. Principal cum professor Essential qualification MSc (V) Experience. MSc (N), PhD (N) having total 15 years' experience with MSc (N) out of which 10 years after MSc (N) in collegiate programme PhD (M) is desirable
2. Vice principal cum professor :Essential qualification: MSc (N) Experience: MSc (N) Total 12 years experience with MSc (N) out of which 10 years teaching MSc (N). PhD (N) is desirable.

3. Professor : Essential qualification: MSc (N) Experience: MSc (N) Total 12 years experience with MSc (N) out of which 10 years teaching experience after MSc (N). PhD (N) is desirable.
4. Associate professor: Essential qualification: MSc (M) Experience: Total 8 years experience with MSc (N) including 5 years teaching experience. PhD (N) desirable.
5. Assistant professor: Essential qualification: MSc (N) Experience: MSc (N) with total 3 years teaching experience. PhD (N) desirable.
6. Tutor: MSc-(N), preferable experience: BSc (N)/PBBSc (V) with 1 year experience.

Department organization within the college:

1. Medical-surgical nursing (MSN)
2. Obstetric and gynaecological nursing
3. Community health nursing
4. Paediatric nursing
5. Psychiatric nursing

Facilities:

1. Physical facilities
2. Clinical facilities
3. Community care facilities.
4. Budgeting
5. Audits.

2. a). Define leadership and write the functions and qualities of good leader.

Definition: It means influencing people to follow you and to work willingly for the advancements of a common goal – Koontz and O'Donnell.

Functions of good leader:

- Administrator of rewards and punishment
- Executive
- Goal setter
- Planner
- Mediator
- Expert
- Symbol of group
- Exemplar
- Surrogate for individual responsibility

- External group representative
- Controller of internal relationship in the organization
- Scapegoats
- Father figure
- Ideologist

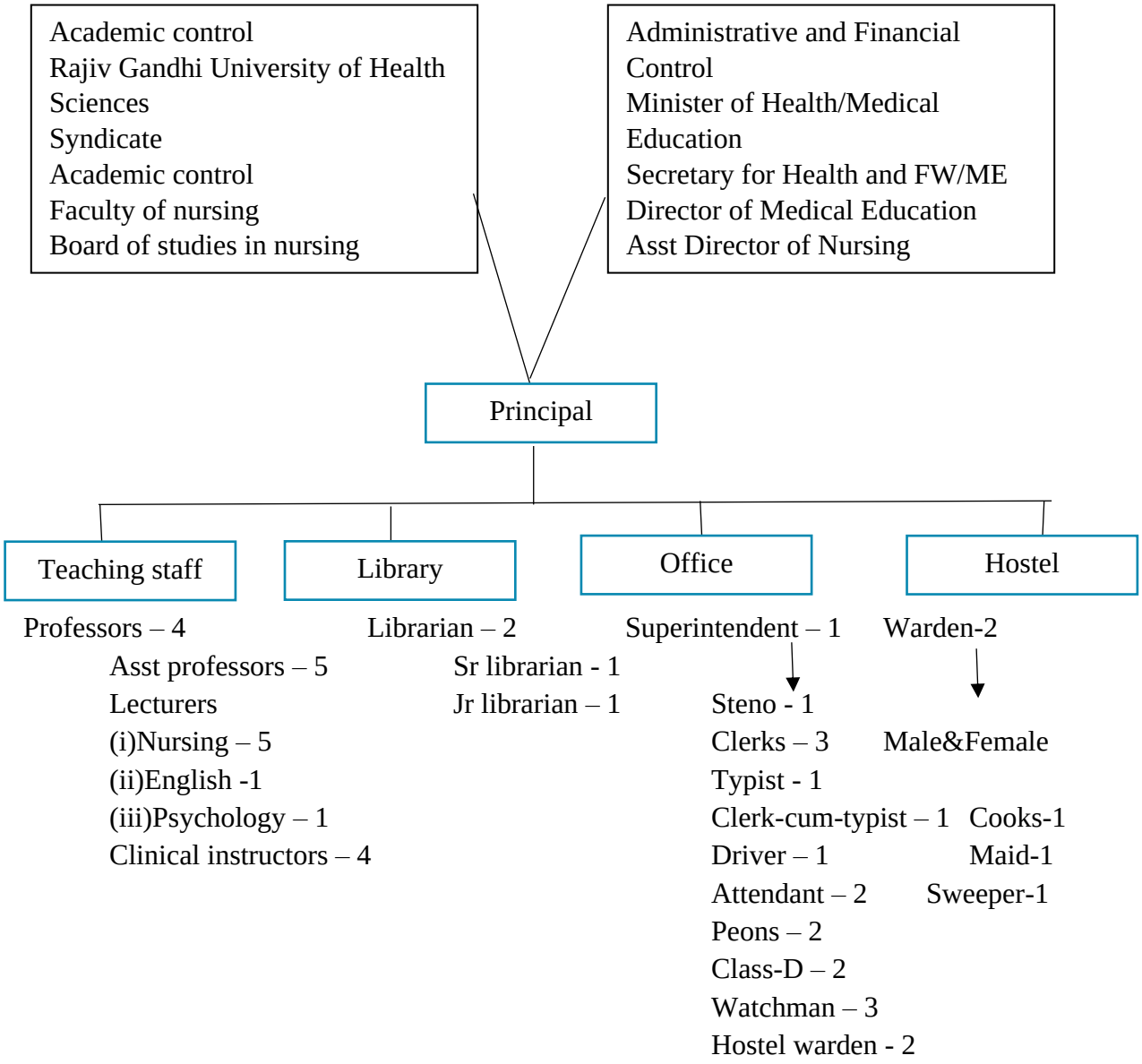
Qualities of good leader:

- Managerial abilities
- Interpersonal relationships
- Temperament
- Credibility and forward thinking
- Professionalism
- Advocacy

b). **Explain the role of a Nurse in an Emergency and disaster management.**

- Immediate care providers
- Government and voluntary organizations
- Human rights
- Alternative care
- Maintain the social justice and equality
- Accountability
- Relief development and planning

3. a). Explain the organization of School of Nursing



b**). Discuss about faculty recruitment**

Faculty recruitment is a critical process for educational institutions, aiming to attract and retain qualified educators who can contribute to the institution's academic goals. Here's an overview of the key aspects involved:

- Identifying needs
- Job description and advertisement
- Application process
- Screening and selection
- Interview process
- Decision and offer

- Onboarding
- Retention and development

c). Discuss the responsibility of the Principal School of Nursing in relation to administration of student and faculty

Administrative responsibilities for students:

- Admissions and enrollment
- Academic support
- Curriculum management
- Student affairs
- Career services

Administrative responsibilities for students:

- Recruitment and hiring
- Professional development
- Evaluation and feedback
- Resource management
- Governance and policy
- Mentorship and support

General administrative responsibilities:

- Accreditation and compliance
- Budget and finance
- Strategic planning
- Community and industry relations

II. Short notes:

4. Functions of staff development

Educational objectives

- Continuing education
    - In-service education
    - Orientation
    - Skill, attitude and knowledge
- Post basic nursing education

Socioeconomic functions

1. Manpower planning
   a). Recruitment
   b). Selection

c). Placement

2. Counselling
   a). Performance evaluation
   b). Career planning
   c). Promotion
3. Employee-employer relations
   a). Personnel policies and practices
   b). Health services
   c). Labour relations

Clinical Experience

1. Nursing practices
2. Other real-life experiences

5. Responsibilities of head nurse

- Carrying out the instructions of the medical officer
- General cleanliness and upkeep of the ward
- Supervision of care
- Keeping the ward equipment in optimum state of readiness
- Assigning duties for patient's care to the ward staff
- Making an indent of various items
- Ensuring that all specimens are sent to the laboratory in time
- Maintaining strict control over accounting and distribution of drugs
- Maintaining all the registers and documents required in the ward
- Overall supervision of the ward

6. Collective bargaining

Definition:

It is an activity of negotiations between workers and a group of workers aimed at reaching agreements to regulate working conditions

Importance of Collective Bargaining in Nursing

Collective bargaining agreements are designed to address the unique circumstances of each facility that falls within the scope of nursing.

- Safe nursing staffing
- Safe patient handling
- Adverse event prevention
- Maintenance of a safe environment for patient care
- A process that is time and cost-effective for all parties while protecting patients and nurses

Features

- Strength
- Flexible
- Group and collective action
- Voluntary
- Dynamic
- Power relationship
- Two-part process

Classification

- Integrative bargaining
- Attitudinal structuring
- Distributive bargaining
- Intra-organizational bargaining

Advantages

- Standard guidelines
- Give economic security
- Provide safe environment

Disadvantages

- It can be a financial burden to the union
- Interfere the harmony among members

SECTION – B

III. Essay questions:

7. Explain the role and functions of the Multi-purpose health workers

Multi-purpose health workers are essential to the healthcare system, especially in rural and underserved areas. Their roles and functions include:

- Primary healthcare services
- Health education and promotion
- Disease surveillance and control
- Maternal and child health services
- Environmental sanitation
- Community engagement
- Record keeping and reporting
- Support in health programs

8. **a). Explain the principles of management**

- Unity of command
- Maintain strict discipline
- Discipline
- Authority
- Division of labour
- Centralization
- Remuneration
- Unity of direction
- Subordination of individual interest to the common good
- Stability of staff
- Hierarchy
- Order
- Equity
- Esprit de corps
- Initiative

b). **As a nurse administrator, prepare and plan for continuing nursing education**

Planning for continuing nursing education as a nurse administrator involves several key steps to ensure the programs are effective, relevant and accessible. Here's a structured approach:

(i). Assessment of needs

- Survey staff
- Evaluate trends
- Regulatory requirements

(ii). Setting objectives

- SMART goals
- Competency development

(iii). Program design

- Content development
- Diverse formats
- Accreditation

(iv). Resource allocation

- Budget planning
- Technological resources

(v). Implementation

- Scheduling
- Marketing and communication
- Incentives

(vi). Evaluation and feedback

- Assessment
- Feedback mechanism
- Continuous improvement

(vii). Documentation and compliance

- Record keeping
- Compliance checks

(viii). Professional development support

- Career pathways
- Mentorship programs

IV. Short notes:

9. Principles of supervision

- A supervisor should not become overburdened or overwhelmed by any individual or group
- Good supervision helps the individual to set up objectives that are reasonable and worthwhile
- Supervision causing unreasonable pressure for accomplishment results in low performance and subsequent low confidence in the supervisor
- Supervisors should keep this in mind that human behavior has inherent human weaknesses
- Facilitate an atmosphere of cordiality and mutual trust
- Possess sound professional knowledge or expertise

10. Bedside clinic

Bedside clinic refers to the practice of teaching medical students and professionals at the patient's bedside. It is a traditional and effective method of medical education that emphasizes direct patient interaction, practical skills and real-time clinical decision-making. Here are some key points:

- Direct patient interaction
- Clinical skills
- Real-time learning
- Mentorship
- Holistic approach
- Ethics and professionalism

11. Role of university in nursing educational institutions

- Frame the updated syllabus
- Check that requirements in all the nursing colleges are fulfilled by a series of inspections
- Provide job description for all nurse educators in the nursing colleges
- Coordinate academic activities by intimating the colleges through circulars
- Assign nurse examiners for examination duties in different places to conduct the practical examination
- Conduct theory exams at regular intervals through permitting examination centres in certain colleges
- Appoint chief superintendent invigilators for correcting the exam papers
- University enrollment number/registration number
- Confeny degree certificate

12. Delegation

It is the process through which the manager assigns specific tasks or duties to workers with appropriate authority to perform the job.

Purposes of delegation:

- Assigning routine tasks
- Problem solving
- Changes in the emphasis of a nurse manager's own job requirements
- Capability building
- Assigning tasks for which the nurse manager does not have time

Principles of delegation:

- Select the right person to whom the job is to be delegated
- Delegate both interesting and uninteresting tasks
- Provide subordinate with enough time to learn
- Delegate gradually

Types of delegation:

- Formal delegation
- Written delegation
- Oral delegation
- Downward delegation
- Sideward delegation
- Informal delegation

Elements

- Assignment of responsibility and accountability
- Grant of authority
- Development of accountability

13. Accreditation

Definition: A process whereby any agency recognizes a college or school programme of study as having met certain predetermined qualifications or standards.

Purposes of accreditation:

- Maintenance of adequate admission requirements
- Maintenance of minimum academic standards
- Stimulation of institutional self-improvement
- Protection of institutions of higher education against educationally and socially harmful pressures

Types of accreditation:

- Regional accreditation agencies
- National professional accreditation agencies
- State accrediting agencies

Accreditation agencies:

- Central Advisory Board of Education
- All India Council for Elementary Education
- All India Council for Secondary Education
- University Grants Commission
- All India Council for Technical Education
- National Assessment and Accreditation Council

Advantages:

- It improves and maintains the firm's reputation
- It increases the customer satisfaction and confidence
- It gives a high business competition over non accredited competitors
- It provides good resource of additional monetary profits

COMMUNITY HEALTH NURSING – II

MODEL QUESTION PAPER AND ANSWER KEY - 1

SECTION - A

1. Aspects of school health nursing

- Health appraisal of school children and school personnel
- Remedial measures and follow up.
- Prevention of communicable diseases.
- Healthful school environment
- Nutritional services
- First aid and emergency care.
- Dental health
- Eye health
- Mental health
- Health education
- Education of handicapped children.
- Proper maintenance and use of school health records.

2. Role of occupational health nurse in prevention of occupational diseases.

Also includes medical measures for occupational safety for role of nurse.

Professional role

- Initial screening of workers.
- First aid and emergency nursing services.
- Periodical health status examination and follow up care.
- Epidemiological surveillance
- Training and supervision.

Environmental role

- Periodical assessment of working environment
- Assessment of optimal working conditions.
- Assessment of protective devices (PPE).
- Assessment of basic facilities.

Educational role

- Health education about nutrition, immune boosting diets.
- Teaching about safety precautions, facilities available, sanitation, hygiene practices, risk factors, first aid care, preventive measures,

Management role

- Participation of policy making, laws, nursing process.
- Participate in nursing research activities.
- Organisation of health programs, camps, clinics
- Report the suspected cases and unsafe/ hazardous conditions.

Researcher and reporter role:

- Document the health records of the workers and maintain properly.
- Conduct research activities related to specific problems and search for solutions.

3. Revised national tuberculosis control programme (RNTCP)

Goals:

- ❖ To reduce the mortality and morbidity due to TB.
- ❖ To cut down the chain of transmission of infection of tb by DOTS.

Objectives:

- ❖ Achievement of at least 85% cure rate of tb infectious cases through dots involving peripheral health functionaries.
- ❖ Augmentation of case finding activities through quality sputum microscopy to detect at least 70 % of estimated cases.

Components of RNTCP:

- Recognise/ diagnose tb by quality assured sputum smear microscopy.
- National political will and administrative commitment.
- Treatment of tb- dots
- Chemotherapy drug supply adequate.
- Program monitoring and accountability.

Strategies of RNTCP:-

- Thirty days deadline within which all tb case to be notified.
- Tuberculin skin test (Mantoux).
- TB training centres in major states.
- Under 2025, tb has to be eliminated is the target of RNTCP.
- Bedaquiline and dexaminid drugs for tb approved (newer drug for tuberculosis).
- BCG – bacillus Calmette Guerin vaccination.
- Airborne infection control (AIC).
- Active tb case detection by house-to-house survey.
- Regimen for treatment and diagnosis guidelines formed
- Chemoprophylaxis of anti-tubercular drugs.
- Under 10 % case failure is permissible (90- 90-90 strategy)

- 90% case has to be detected/ identified.
- 90% cases have to be adequately treated among which
- 90% cases have to be completely cured.
- Levels of organization.
- Laboratory testing for tb freely- sputum, chest x ray.
- Software for tb is Nikshay to notify and manage the tb case.
- Strengthening of dots quality.
- Incentives
- Indicators for monitoring and evaluation of tb cases annually.
- Surveille passively- examination of patients.
- Supply of anti- tb drugs freely by state government.

In the year of 2020- RNTCP renamed as NTEP- national tuberculosis elimination programme

4. National health policy

National health policy (NHP) in 1983, which was approved by parliament in response to alma Ata declaration to achieve "health for all" by 2000.

Definitions:

Health policy:

- **According to who:** national health policy is an expression of goals for improving the health situation, the priorities among these goals and then main directions for attaining them.
- Health policy is defined as course of action or interventions for the achievement of health objectives.

National health policy- 1983

Initiatives:

- Comprehensive primary health care services.
- Health volunteers having appropriate knowledge and skills.
- Establishment of well worked out referral system.
- Integrated network of evenly spread specialty and super-specialty health care services.

National health policy- 2002

Objectives:

- Achieving an acceptable standard of good health of Indian populations.
- Equitable access to health care services across the social and geographical expanse of India.
- Enhance the private sectors contribution in providing health care for people who can afford to pay.
- Increasing access to tried systems of traditional medicine.

National health policy- 2017

Aims:

- Inform, clarify, strengthen and prioritise role of government in health system at all dimensions.
- Attainment of highest possible level of health and wellbeing for all at all ages.

Objectives:

- Health status and programme impact
- Health system performance.
- Health system strengthening.

Principles:

- Increase trust in public health system.
- Progressively achieving universal health coverage.
- Equity, professionalism, affordability, universality, dynamism etc.,

Major goals: Primary health care

- Preventive and promotive focus.
- Quality assurance-based approach.
- Regulatory mechanism and quality control.
- Sectoral/ intersectoral convergence for holistic health care delivery.
- Top digital interventions for nation's health.
- India – make healthy.

Major highlights:

- Free diagnostics, free drugs and free emergency and essential health care services in all public hospitals.
- Regulatory environment
- Reforms in existing regulatory systems- reform medical education.
- Health care in public expenditure to be increased from 1.4% to 2.5% .
- Comprehensive primary health care through health and wellness centres- PHC.
- Disability adjusted life years (DALY)- should be tracked regularly.
- Development of mid-level service providers.

Targets to be achieved:

- Beds- 2 bed per 1000 population within golden hour.
- Fertility rate- TFR reduced to 2.1 by 2025.
- Still birth rate reduced by single digit.
- Life expectancy to be increased from 67.5 to 70 years of age by 2025.

- Mortality rate reduction in
    - Infant (IMR): 28/ 1000 live births within the year 2019
    - Maternal (MMR): 100/ lakh within 2020.
    - Under 5 mortalities : 23 per 1000 within 2025.
    - Neonatal (NMR): 16

NHP- 2017 identifies seven priority areas:

1. Swachh Bharat Abhiyan.
2. Addressing tobacco use.
3. Balanced diet and exercise.
4. Reducing pollution.
5. Reduced stress in work place.
6. Yatri Suraksha (accidents).
7. Nirbhaya Nari (against gender violence)

5. Concepts, principles, and elements of primary health care.

Elements/ components of primary health care:

E	Education
L	Locally endemic diseases
E	Expanded programme for immunization (epi)
M	Maternal & child health including family planning
E	Essential drugs provision
N	Nutrition
T	Treatment
S	Safe drinking water and basic sanitation.

Concepts/ principles of primary health care

Equitable distribution:

It is the universal access of the health services to all peoples irrespective pay, gender , rich/ poor and rural/ urban peoples to provide basic medical care to all individuals in the community to prevent social injustice.

Provision of equal care by moving the health services from higher (cities/ towns) to lower (rural/ slums/tribe) areas to provide continuum of care to them and eliminate factors contributing to ill health.

Equitable distribution is the key to attain health for all.

Community participation:

- Involvement of individuals, families and communities in promotion of their own health and welfare.
- Meaningful involvement of the community in the planning, implementation and maintenance of health care services.

Inter/ multi sectoral coordination

Health care services cannot be provided by health worker alone. All other health related sectors should co-operate and coordinate to provide integrated primary health care.

Appropriate technology:

It means use the simple technology that can saving the natural resources and economy of the country that contributes to national and social goals by using:

- ✓ Cheaper equipment's/ procedures , avoid costly things.
- ✓ Socially acceptable to users and recipients.

If machinery or equipment are involved, it should be simple to run and repair. It should be locally produced as far as possible.

6. Maternal mortality rate

Definition:

According to who: maternal death is defined as the death of a woman while pregnant or within 42 days of termination of pregnancy (postpartum), irrespective of the duration and size of pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental/ incidental causes.

Factors affecting maternal mortality:

Socio-economic factors:

The low social and economic status of girls and women is a fundamental determinant of maternal mortality in many countries.

- ❖ Poor availability of health care , family planning services, education and good nutrition.
- ❖ Lack of access to essential obstetric services contributes to high maternal mortality.
- ❖ Excessive physical work with poor dietary intake also contributes to poor maternal outcomes.

Nutritional factors:

Inadequate nutrition intake before and during pregnancy contributes to variety of ways to poor maternal health, obstetric problems, and poor pregnancy outcomes.

- ❖ **Stunting during childhood (low height for age)** : risk of obstructed labour due to contracted pelvis/ cpd.
- ❖ **Anaemia during pregnancy:**
- Risk of sepsis during pregnancy , labour and postpartum.
- Risk of death due to obstetric haemorrhage.
- Poor operative risks in the event that caesarean delivery are needed.

- ❖ **Vitamin a deficiency** : risk of obstetric complications associated maternal mortality.
- ❖ **Iodine deficiency** : risk of stillbirths and spontaneous abortion may contribute to maternal death through severe hypothyroidism.
- ❖ **Calcium deficiency:** risk of developing pre-eclampsia and eclampsia during pregnancy. Supplementary calcium helps to prevent pre-eclampsia.

Preventive, control & social measures to reduce MMR:

- Medical conditions such as hypertension, diabetes, anaemia, should be treated.
- Antenatal check-up should be regular- at least 4 ANC visit.
- Tetanus-t t immunization and malaria prophylaxis.
- Early registration of pregnancy
- Rx- treatment for infection and haemorrhage during labour.
- Nutritional supplementation- IFA and calcium tablets.
- Abortion services should be safe to prevent from sepsis and bleeding.
- Labour complications- malpresentation, obstructed labour, ruptured uterus, PPH should be prevented.
- Delivery practices should be clean- 5 c's of labour.
- Every maternal death should be identifying and search for its cause.
- Advice spacing of births and family planning.
- Trained local dais/ village health workers.
- Hospital delivery should be promoted rather than home delivery.

Interventions to reduce the maternal mortality:

Historical review:

- Traditional birth attendants.
- Antenatal, intranatal , postnatal and neonatal care.
- High risk screening.

Current approach:

- Skilled attendant at delivery.

Levels of prevention of MMR:

Primary prevention: health promotion and specific protection**.**

- Early registration and at least 4 antenatal check-up is must.
- Proper iron folic acid supplementation in pregnancy and postpartum.

Secondary prevention: early diagnosis and proper treatment.

7. Medical termination of pregnancy act – MPT

Introduction:

The medical termination of pregnancy (MTP) act, enacted in India 1971, governs the provision of abortions in India. This act allows the termination of a pregnancy up to 20 weeks, for a broad range of indications. It also offers protection to a practitioner if he/she adheres to and fulfils all the requirements of this act. The MTP act was amended in December 2002 and the rules, in June 2003.

Objectives:

- Objectives of MTP act 1971 was to liberalize provisions of termination of pregnancy.
- To keep the record of a woman under -MTP secret.
- To protect the registered medical practitioner who perform abortion as per the provisions under this act.

Aim:

To provide safe and secret abortion services under prescribed indications decided by registered medical practitioner to avoid criminal abortions in untrained, unauthorised hand done in government hospital or government approved hospital.

Indications: mesh:

- Medical: Serious infections- rubella, radiation exposure, teratogens exposure
- Eugenics: Fatus has congenital abnormalities which leads to life threatening to child.
- Social : Rape, unwanted pregnancy, poor socioeconomical statuses.
- Failure of contraceptive methods.
- Humanitarian

SURAKSHIT GARBHPAT-BETI BACHAO KE SATH (safe abortion with saving girl child):

Complications of abortion are the third major cause of maternal death, after haemorrhage and sepsis. Hence it is important to address this issue, which is beautifully done by **national health mission-govt of India in ensuring access to safe abortion and addressing gender biased sex selection.**

Aim :

Access to safe and legal abortion to all women and no mortality due to unsafe abortion.

Actions:

- ❖ Make sure that 'all' abortion is not understood as illegal.
- ❖ Promote use of data related to sex ratio at birth and emphasise it as a more accurate indicator of the extent of sex selection.
- ❖ Do not use population sex ratio (number of females to 1,000 males in total population) to point to the problem of sex selection .
- ❖ Do not use the term 'female foeticide' or kanya bhrun hatya: endangering women who seek abortion for legal reasons.
- ❖ Do not use images of a female foetus speaking from the womb: this tends to ascribe life to the foetus and furthers the perception of 'life being murdered'.
- ❖ **Do not use images** of foetuses being crushed, stabbed and strangled, daggers going through the stomach of a pregnant woman, blood being splattered to prevent poor attention for value of daughters in the family.
- ❖ So, use images that express joy and celebration linked to the birth of a girl child.
- ❖ Abortion for reasons of sex selection definitely needs to be prevented, and its illegality should be emphasized.

	MTP act 1971	MTP act 2021
Until 12 weeks	Advice of one doctor	Advice of two doctor
12 to 20 weeks	Only to save life of pregnant women	Advice of one doctor
20 to 24 weeks	Only to save life of pregnant women	Advice of two doctor if the pregnant woman falls under categories prescribed below.
After 24 weeks	Only to save life of pregnant women	Approval of medical board and only if there is substantial foetal abnormality.

Roles & responsibilities of nurse:

the royal college of nursing states nurse's role in abortion care has the following responsibilities:

- Inform his/her employer if they choose not to participate.
- Request removal from any non-emergent provision of care.
- Nurses must recognize that they can't refuse to provide care for women in emergent situations, no matter what the case.

The nurse's role in pregnancy testing and pre-procedure counselling includes:

- Performing an assessment of unwanted pregnancy.
- Ensure that privacy and confidentiality are maintained during counselling.
- Establish rapport , make the woman feel comfortable mentally as well as physically with the woman.
- Be non-judgmental while interacting with the woman and be sensitive to her needs gain her confidence, as abortion is a very sensitive issue .
- Building rapport is also critical for finding out if any attempts to terminate the present pregnancy; this is important for predicting likely problems and may affect their management.
- Identify the reason for the termination of pregnancy by asking relevant questions related to her personal, social, family and medical history and the past use of contraceptive methods.
- Use simple language and allow the woman to clarify her doubts.

Advantages of pre-procedure counselling:

- It helps the woman to decide to do or not for MTP& to choose the method of termination.
- It ensures that the consent for the procedure is given after receiving complete information about the procedure and understanding its implications.
- It helps the woman to adopt a contraceptive method after the procedure.
- MTP should not be denied irrespective of the woman's decision to refuse concurrent contraception.

The nurse's role in obtaining consent includes:

- Explaining the procedure.
- identifying potential complications.
- Talking about procedures in the event of complications (although complications are rare in the setting of abortion).

The nurse's role in post-procedure counselling include:

- Reviewing what to expect in a normal course after abortion in terms of physical and emotional symptoms.
- Providing adequate information about how and where to seek continued care.
- Providing counselling for post-procedure contraceptive care (when appropriate).

8. Concept of community health nursing

Who concepts:

Skills of nursing programs or skilled nursing services at door steps- bag technique.

Integrated health services:

- Promotive services
- Preventive services
- Curative services
- Restorative services
- Rehabilitative services.

Specific difference:

- Levels of prevention- primary prevention
- Focus on whole family.

Emphasis:

- Community diagnosis
- Community treatment.

Staff assigned to definite areas:

- Traditional birth attendant (tba)
- Anganwadi worker (aww)
- Village health guide
- Health workers male and female
- Health assistant male and female.
- Community health nurse / nurse midwife.
- Medical officer
- DPHN/DPHNO

- PHNS

Areas:

- Home school
- Industries/ factories
- Health centres
- Clinics and camps

Basic concepts:

- Assessing health needs and resources of community
- Essential part of health care:
- Focus on social determinants of health
- Delivery of high-quality health care
- Prevention of illness & promotion of health

9. Breast self-examination:

Definition:

Breast self-examination (BSE) is performed by a woman on her own breast tissue in the comfort at her home.

Time & frequency:

- ❖ BSEshould start at puberty and continue throughout her lifetime .
- ❖ It should be made on a monthly basisusually one week(5 to 7 days) after the start of each menstrual period as the breasts become less tender and less engorged.
- ❖ The procedure takes for only 5-10 minutes, and is best performed in standing and lying down position.

Purpose :

- To learn the topography of the breasts.
- Knowing how the breasts normally feel will allow to notice changes in the future.
- Feel the breasts for any tumor, masses and diagnose breast cancer.
- Helpful to be familiar with their breast tissue through self-examination.

Procedure steps:

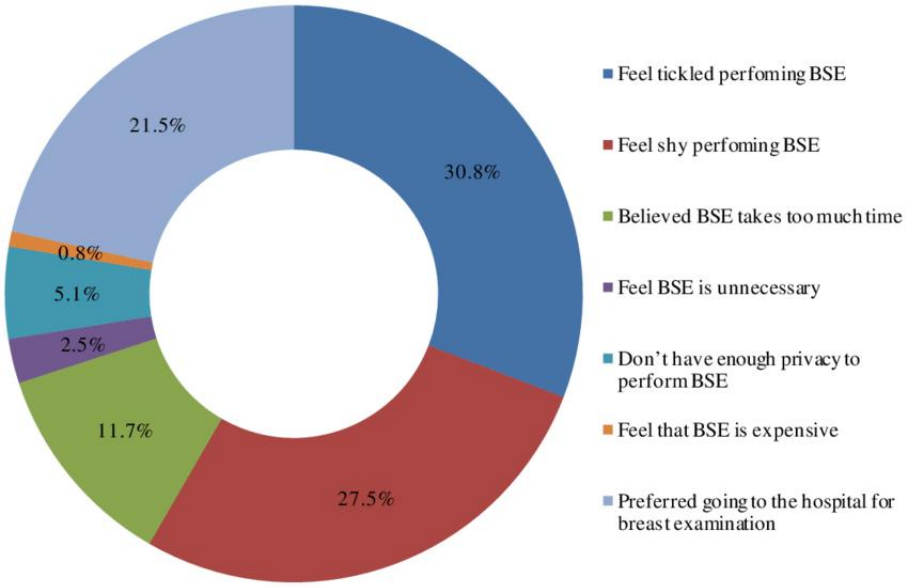
step 1 (standing): inspection

- Stand in front of the mirror to look the changes in breast by inspection.
- As move the arms, check to make sure both breasts move the same, and that the skin does not dimple or pucker.
- Raise arms above head, then place hands on hips and bring the elbows forward.
- Visually inspect breasts for the following:
    - Changes in colour, size, shape, or symmetry
    - Visible distortion, bulging.
    - Dimpling
    - Inverted nipples
    - Puckering
    - Asymmetrical ridges at the bottom
    - Redness, soreness, rashes or swelling.
- While standing in front of the mirror, gently squeeze each nipple between thumb and fingers and check the nipples for any discharges(could be milky/yellow fluid/blood)
- Check for these signs with hands at sides. Then, with arms over head, and again when lifting one breast at a time.

Step 2 (lying down): palpation

- Lie in supine position then place a pillow under the breast .
- Use a firm, smooth touch and keeping the fingers flat and together.
- Using the pads of the middle three fingers of the opposite hand (right breast-left hand; &left breast- right hand), move fingers around the breast in a circular, up-and-down, or wedge motion, and feel for anylump, massesthat is different than the surrounding breast tissuees.
- complete the exam by gently squeezing the nipple to check for bleeding /any discharges.

Barriers/ problems for doing BSE:



10. United nations international children's emergency fund (UNICEF)

- Organization: UNICEF- united nations international children's emergency fund.
- Established: 11thDecember 1946,
- Location: New York in us during World War ii.
- Members: 36 nations executive board.
- Nobel prize: 1965.

Objectives:

To save the lives of children , defend their right and help them fulfil their potential from early childhood through adolescence.

Aims:

- Provide long term humanitarian and development assist ANC to children and mothers in developing countries.
- Emphasize developing community local services to promote health and wellbeing of children.

Functions of UNICEF;

Inequality of gender should be eliminated(provide gender equality). UNICEF in emergencies.
Nutrition to the children
Immunization Infection such as HIV/ aids prevention and care.
Child protection and survival
Education and environmental hygiene to the children.
Family and child welfare

Mnemonics; GOBI-FFF

G	Growth monitoring
O	Oral rehydration solution
B	Breastfeeding
I	Immunization up to date
F	Feeding supplementary
F	Female child care
F	Family welfare

COMMUNITY HEALTH NURSING – II

MODEL QUESTION PAPER AND ANSWER KEY - 2

DECEMBER 2019

1.a) principles for community health nursing- 20 points

- Community focused care is the basic unit of health care.
- Health education, guidance and supervision are an integral part.
- Health programmes to be carried out.
- Need based care
- Professional relationship and etiquette.
- Policies, rules and regulations should be followed where he/ she is appointed.
- Recording and reports should be properly maintained.
- Realistic health services to be provided.
- Responsible to the authorised health authority
- Involvement of community services.
- Nurses' functions as a team.
- Continuous services
- Create awareness among community to health promotion and illness prevention.
- Individual and family participation- decision making.
- Periodic and continuous appraisal and evaluation
- Local resources
- Equitable- accessible and available.
- Ethics should be followed
- Supervision and guidance should be high quality.
- Should not accept any gifts from the patients/ relatives.

1. b) functions/ responsibilities of community health nurse

- Advisor, advocator and administrator
- Basic health care provider.
- Counsellor, caregiver, coordinator, communicator, consultor, collaborator.
- Changing agent
- Direct care giver
- Educator and evaluator
- Facilitator
- Guide
- Health care delivery manager / provider
- Investigator, implementer
- Judge
- Knowledge updater, knowledge provider
- Leader

- Motivator , medical assistant
- Nurse practitioner and nurse clinician
- Organizer and observer
- Planner, protector
- Quality manager/ assessor
- Resource person, researcher, rehabilitator, recorder/ reporter
- School health provider and supervisor
- Teacher, trainer
- Under stander
- Vigilant observer
- Workaholic , ward manager in CHC
- Exemplar- role model

2. a) functions of primary health centre (PHC):

- Basic laboratory services.
- Prevention and control of locally endemic diseases.
- Public health service and outreach.
- Health education
- Health programmes at national ,state and district levels.
- Continuous and comprehensive health care.
- Care- medical services such as OPD, emergency services.
- Care for maternal and child health including family planning
- Safe water supply and sanitation
- Educational and research activities.
- Referral services
- Vital statistical data collection and reporting
- Vaccination/immunization.
- Integrated hospital/ community care training.
- Information education and communication (IEC) activities.
- Communication for behavioural change.
- Education and training for health guides, health workers, local dais and health assistants.
- Elderly and palliative care.
- Safe abortion services – medical termination of pregnancy (MTP)
- Sexually transmitted diseases (std) prevention and management.

2. b) referral chain system

Definition:

- Transfer/ shift the patients from a unit of lower complexity which have poor/ low treatment resources to a unit with a higher resolution capacity having all the major treatment resources to manage a clinical condition.
- Referral system is the process in which a health care worker at one level of the health system, having insufficient resources (drugs, equipment, skills) to differently resourced

facility at the same or higher level to assist in, or to take over, the management of the client's case.

Main objectives : improvement of the quality of health care.

- Patients receive the optimal care at the appropriate level and at an affordable cost.
- Primary health services are well utilized and their role in both prevention and curative aspects is enhanced.
- Implement a comprehensive, accessible and adequate model of health care with emphasis on the development and implementation of standardized norms, procedures and management protocols.

Purposes:

- To provide need based comprehensive care.
- Help the people to avail health care services at higher levels.

Importance:

- Providing diagnostic services to patient & community.
- Providing specialist's services to the patient.
- Preventing further complications and for appropriate treatment.
- Sending the patients comfortably to the referral institute.

Principles:

- The referral should meet the needs and objectives of the clients and should be necessary and appropriate- there should be merit in referral.
- The client should be able to use the referral in an efficient manner- it should be practical.
- The referral should be timely.
- The referral should be coordinated with other activities.
- The referral should incorporate the client and family into planning and implementation.
- The referral should have the rights to refuse the referral.

Types of referrals:

1. Traditional type
2. Modern type
3. Others.(incentives, review, business and social media)

Basic steps of referral system:

- Establishing a working relationship with the client.
- Define the need for a referral.
- Set objectives for the referral.
- Explore resource availability.
- Client decides to use or not use referral.

- Make referral to a resource.
- Facilitates and follow- up.

Roles & responsibilities of the nurse:

- Address and telephone number of the client.
- Client's age, sex, IP number should be correct and clear.
- Name, and birth dates of family member and significant.
- Source of medical care and health history.
- Financial status and records.
- Offering advice and support to lower- level health¬ facilities.
- Providing quality assurance and improvement.
- Education and training.
- Management and administration.
- Research and innovation.
- All nursing personnel working in sub-centre PHCs/ CHCs or in district hospital should have the knowledge of referral system. Patients should be carefully selected for referral system.
- Nurses should be aware of their limitations and¬ responsibilities in their referral system.

4. **A) sources of vital statistics**:

Definition

- **According to Benjamin:** vital statistics is the data or record regarding marriage, birth, diseases and death on the basis of which community health and development are studied.
- **According to uno:** vital statistics is the numerical description of birth, death, abortion, marriage, divorce, adoption and judicial separation.

Aim:

- To reduce maternal, foetal and neonatal deaths related to pregnancy and labour by evaluating the data and taking measures to prevent the causes.
- Providing reliable, relevant up to date adequate timely complete information to the health authority at all levels.

Purposes:

- To promote health legislation at local and national level.
- To develop policies and procedure at state and central level.
- To describe the level of community health, diagnose community illness and solution of health problems.
- To determine the success or failure of specific health problems.

Importance:

- Primary tool for research activities.
- To evaluate the impact of various national health programmes.
- To plan for better future measures of disease control.
- To explain hereditary nature of disease.
- To evaluate economic and social development.

Sources:

Census:

The total process of collecting, compiling and publishing the demographic, economic and social data pertaining at a specific time to all persons in a country delimited territory. Taken in most countries of the world at regular intervals usually of 10 years.

Registration of vital events:

Legal process for recording and reporting of the occurrence of statistical data and the collecting, compiling, presenting, analysing and distributing of statistics pertains to essential or vital events.

Example: live birth rate and death rate data are collected then analysed and documented.

Sample registration system (SRS):

It is a dual record system consists of continuous enumeration of births & deaths used to provide reliable estimates of birth and death rates at the national and state level.

Notification of disease:

Notification provides early warning about new occurrence or outbreaks of disease, information about fluctuations in disease frequency.

Hospital records:

Records in the hospital provides data such as age, gender, personal information, diagnosis, treatment data about the patients , etc.,

Disease register:

It is the morbidity data register includes duration of illness, case fatality, survival rates. These registers allow the follow up of patients and provide continuous account of frequency of diseases in the community.

Record linkage:

Medical record of individual health status in a population includes birth, marriage, death, hospital admission, discharge and referral.

Epidemiological surveillance: System used to report the occurrence of new cases and control measures to prevent diseases.

Environmental health data:

It is the identification and qualification of the causative agents of the disease which plays a vital role to control major diseases in future. It may be data of air, water, noise pollution, industrial intoxicants, waste disposals etc., Environmental data can be helpful in identification and quantification of factors causative of diseases

Manpower statistics:

It is a data about doctors, dentists, pharmacists, nurses, lab technicians that are maintained by the state medical/ nursing council and the directorate of medical education.

Health survey:

Study about incidence, prevalence of the epidemiological diseases in the field and methods to control the diseases.

Uses of vital health statistics

Measure the health status:

- To measure the health status of the individuals and community.
- Identify the met and unmet medical and health care needs/ health problems.

Comparison of health status:

- To compare the health status of one country with another.
- To compare local, national and international health status of the people.
- To compare the present health status with the past health status of the country.

Assessment: Assess the attitudes and degree of satisfaction of the beneficiaries with the beach system.

Evaluation:

- Evaluating the progress, success or failure of specific health programmes and health care services.
- Evaluate the effectiveness and efficiency of accomplishing the objectives of health services.

Research activities: To conduct research on particular problems of health and disease.

Make health policies and principles:

- Helps to create the administrative standards of the health activities.
- To promote health legislation.

Indicators of vital statistics:

Mortality indicators	**Morbidity indicators**
Maternal mortality rate (MMR)	Maternal morbidity rate
Perinatal mortality rate	Perinatal morbidity rate
Neonatal mortality rate (NMR)	Neonatal morbidity rate
Infant mortality rate (IMR)	Infant morbidity rate
Child mortality rate (CMR)	Under 5 morbidity rates.
Crude death rate (CDR)	Absence from work or duty
Crude birth rate (CBR)	Duration of hospital stay
General fertility rate (GFR)	Attendance rate at OPD.
Under 5 proportionate mortality rates	Notification rate
Diseases specific death rate	Incidence
Case fatality rate	Prevalence

Other health status indicators:

- Disability rates
- Nutritional status indicators
- Health care delivery indicators (doctor population ratio, doctor nurse ratio).
- Health policy indicators
- Indicators of quality of life.

3.b) role of nurse in organising and conducting maternal , child health and family planning clinic:

Antenatal (prenatal) care	• **Antenatal assessment** • **Adequate nutrition.** • IFA supplementation to prevent anaemia.
Intranasal care	• Fundal assessment and CTG monitoring • Maintain 6 c's of delivery care to prevent sepsis. • Birth companion, emotional supports. • Teach breathing techniques, pain management. • Delivery of newborn and newborn care. • Active management of third stage of labour (AMTSL) • Prevent and manage post-partum bleeding. • Prevent and manage intranasal complications.
Postnatal care	• Postnatal examination and postnatal visit. • Adequate postnatal diet for lactating/ nursing mothers. • Promote breastfeeding

	• Breast care, perineal care. • Home visit frequently for follow up care. • Awareness about contraception.
Newborn and infant care	• Newborn assessment & immediate/ essential newborn care, cord care. • Infant assessment- anthropometry. • Immunization • Breastfeeding promotion • Weaning diet after 6 months of age. • Prevent and manage dehydration- ORS therapy. • Maintain hygiene practices and prevent sepsis.
Under 5 children	• Assessment of health status & anthropometry. • Conduct under 5 clinics • Immunization • Promote adequate nutrition & prevent malnutrition. • Health education- safety , diet, hygiene, growth & development.
Adolescent girls	• Health assessment • Anaemia prevention by IFA supplementation. • Supplementary nutrition. • Teach menstrual hygiene and breast self-examination (BSE).

4.health planning objectives:

Definition:

Health planning is an orderly process of defining community health problems, identifying unmet needs and surveying the resources to meet them establishing priority goals .

Objectives:

- To clarify nature of existing health problems.
- To clarify inter relationship between health sectors and its components and various socio-economic factors.
- To identify national objectives as far as possible.
- To identify new and existing program areas.
- To help elaborate alternative strategies and to produce feasible programs for choice by decision making.
- To define mechanism for the formulation and implementation of the projects.
- To prioritize rural development
- To generate adequate employment opportunity and create a liberal market for private investment.
- To stabilize the prices.

5. Major health problems in India

- Communicable disease problems
- Non- communicable disease problems.
- Nutritional problems
- Environmental sanitation problems
- Medical care problems
- Population problems

Communicable disease problems

Respiratory	Small pox, chickenpox, measles, rubella, Mumps, diphtheria, pertussis. Influenza, pneumonia, tuberculosis, Sars, meningococcal meningitis
Intestinal	Cholera, typhoid, viral hepatitis, Food poisoning, acute diarrhoeal diseases Amoebiasis, ascariasis, hookworm, Poliomyelitis, dracunculosis
Surface	Std- aids/ HIV, Leprosy, tetanus, trachoma
Vector borne	Malaria, dengue, chikungunya, filariasis

Non- communicable disease problems.

Respiratory	Asthma/ COPD, lung cancer.
Cardiovascular	Hypertension, cardiovascular diseases, rheumatic heart diseases
CNS	Cerebra vascular diseases, meningitis
Renal	Renal failure, glomerulonephritis
Endocrine	Diabetes mellitus, hypothyroidism
Accidental	Road traffic accidents, injuries, poisoning
Cancers	Breast, lung, oral cancers

Common nutritional problems in under 5 age group children

- Protein energy malnutrition - kwashiorkor and marasmus
- Over nutrition- obesity
- Low birth weight (lbw) babies.
- Nutritional anaemia
- Iodine deficiency disorder
- Vitamin a deficiency disorder
- Low birth weight (lbw) babies.
- Endemic fluorosis
- Lathyrism
- Market distortion
- Cancer / cardiovascular disorders, etc.,

Environmental sanitation problems	Low water quality of river Lack of safe drinking water. Industrialisation
Medical care problems	Lack of availability and accessibility of medical care Overcrowded hospitals. Less skilled health care giver.
Population problems	Population explosion

6. Aspects of the school health services:

- Health appraisal of school children and school personnel
- Remedial measures and follow up.
- Prevention of communicable diseases.
- Healthful school environment
- Nutritional services
- First aid and emergency care.
- Dental health
- Eye health
- Mental health
- Health education
- Education of handicapped children.
- Proper maintenance and use of school health records.

7. a)principles of home visit

- First of all, introduce yourself as a nurse.
- Carefully listen the family and understand the other person's view.
- Home visits should be planned with objectives and purpose.
- The purpose of home visits should be clear and must meet the needs of the patients &planned according to priority.
- Home visits should be regular and flexible.
- Home visit should be educative, care and health education should be scientific.
- Use safe technical skills and scientific nursing procedures.
- Home visits should give excellent opportunities for nurses to demonstrate hygienic principles.
- Home visit should be convenient, acceptable and educative to the patients.
- The nurse should make an attempt to include each family member while using nursing process.
- The nurse and the family must develop good/ positive interpersonal relationship and be polite, courage & friendly in their work to achieve the goal.
- The nurse must respect the patient's rights.
- Important facts/ procedures done in hhome visits should be recorded in the diary and family folder.
- Evaluate your own work periodically.
- Thanks to the family members and individual for good response.

8. b) job description of community health nursing personnel

Collaborative and co-operative work of all the members of health care team is essential to achieve the desired outcomes of the health status of community. The following members of the health care team members to the community with collaboration.

Levels of health care	Health care workers
Supervisor / director at district level.	❖ District public health nursing officer (DPHNO) ❖ District public health nurse (DPHN)
Primary health centre/ community health centre level.	❖ Public health nurse (PHN)

District public health nurse (DPHN)

- Works continuously for the improvement of quality of health care .
- She is directly responsible for district health officers and delegates the responsibilities of all nursing personnel in the district community health field such as sub-centre (Sc), primary health centre (PHC), community health centre (CHC), family planning and all the national health programmes.

An administrator:

Make recommendations to district health officer regarding:

- Requirements of nursing staff and participate in budgeting.
- Staff development programmes and in-service training programme for nurses
- Maintain discipline among the health care workers.
- Conducts field studies at least 4 times a month to ensure quality care.
- Helps in collection and compiling annual reports from the CHC/PHC in the district.
- Evaluation of total community health services.

A supervisor:

- Supervision and guidance of health supervisors, nurses regarding reports, records and on collection of statistical data and record keeping system.
- Conducting meetings regularly & solving problems.
- Interpretation of policies, plans and rules to the staffs so as to regulate and develop the services.
- Participation in health teaching programmers.

An educator:

- Initiate and assist in planning and organising the orientation programme for new staffs.
- Observation of nursing educational institutions.
- Provide facilities and resources to the students and staffs.
- Organise Inservice education programme for all nursing staffs.
- Helps in organizing community health field experience for nursing students.
- Suggest in selection of areas for gaining new practical knowledge and experience.

Role of public health nurse:

- Advisor, advocator and administrator
- Basic health care provider.
- Counsellor, caregiver, coordinator, communicator, consultor, collaborator.
- Changing agent
- Direct care giver
- Educator and evaluator
- Facilitator
- Guide
- Health care delivery manager / provider
- Investigator, implementer
- Judge
- Knowledge updater, knowledge provider
- Leader
- Motivator , medical assistant
- Nurse practitioner and nurse clinician
- Organizer and observer
- Planner, protector
- Quality manager/ assessor
- Resource person, researcher, rehabilitator, recorder/ reporter
- School health provider and supervisor
- Teacher, trainer
- Under stander
- Vigilant observer
- Workaholic , ward manager in CHC
- Exemplar- role model

9. A) objectives of national family welfare programme:

Related to family planning:

- To promote the adoption of small family norms on the basis of voluntary acceptance by the couples.
- To promote the use of spacing methods of contraception.
- To ensure adequate supply of contraceptives to all eligible couples within easy reach.
- To arrange for clinical and surgical services so as to achieve the set targets.
- Participation of voluntary organizations or local leaders or self-government in family welfare programme at various levels.

Related to maternal and newborn care:

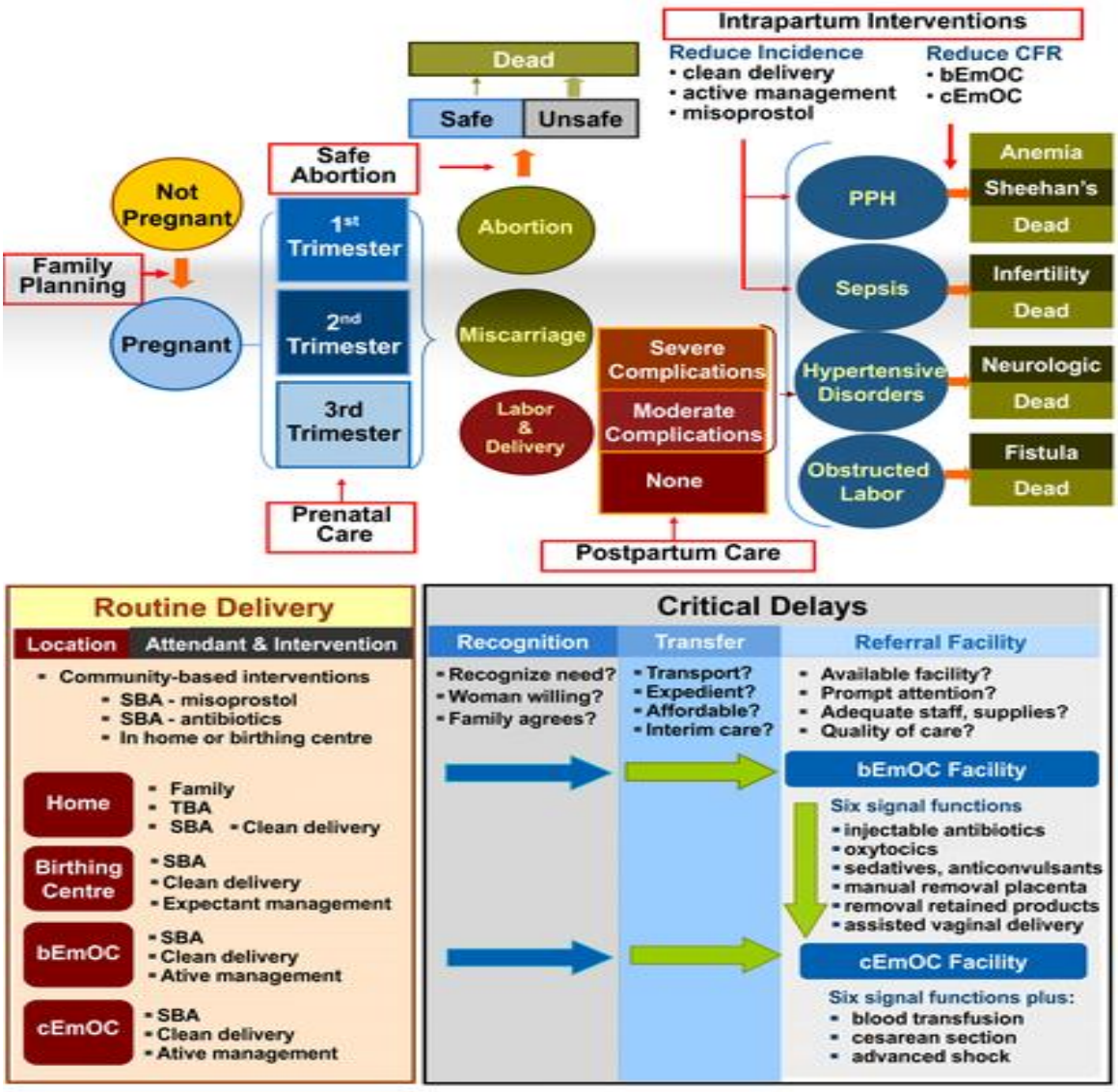
- To reduce the maternal, infant and childhood mortality and morbidity
- To promote the reproductive health.
- To promote the physical and psychological development of children and the adolescents.

10. b) role of nurse in preventing MMR in our country

According to who: maternal death is defined as the death of a woman while pregnant or within 42 days of termination of pregnancy (postpartum), irrespective of the duration and size of pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental/ incidental causes.

- **Primary prevention:** reduce unwanted pregnancies.
- **Secondary prevention:** reduce obstetric complications.
- **Tertiary prevention:** reduce death after complications.

Conditions	**Diagnosis & management**
Haemorrhage	Treat anaemia in pregnancy. Prevent or treat PPH. Use oxytocics at time. Replace fluid loss. Transfuse blood if needed.
Infection / sepsis	**6 c's:** clean hand (sterile gloves), clean delivery surface, clean perineum ,clean cord tie/ clamp, clean blade/scissors for cutting the cord, clean cord care. Skilled attendant at birth.
Hypertension	Early detection of bp and its warning signs. Antihypertensive drugs to reduce bp. Mgso4 to prevent the convulsions if eclampsia. Anticonvulsants to treat seizure.
Anaemia	Hgb estimation at 1^{st}, 30^{th} and 34^{th}ANC visit. Prophylaxis for hookworm infestation-oral albendazole Routine IFA supplementation. Treatment for anaemia.
Unsafe abortion	Skilled birth attendant should be there. Antibiotics to prevent and treat sepsis. Post abortion care services
Obstructed labour	Use of partograph and detection of obstructed/ prolonged labour earlier.
Other indirect causes	Safe drinking water Proper immunisation Appropriate referral system and supportive care.



8. Principles of primary health care:

Equitable distribution:

- It is the universal access of the health services to all peoples irrespective pay, gender , rich/ poor and rural/ urban peoples to provide basic medical care to all individuals in the community to prevent social injustice.
- Provision of equal care by moving the health services from higher (cities/ towns) to lower (rural/ slums/tribe) areas to provide continuum of care to them and eliminate factors contributing to ill health.
- Equitable distribution is the key to attain health for all.

Community participation:

- Involvement of individuals, families and communities in promotion of their own health and welfare.
- Meaningful involvement of the community in the planning, implementation and maintenance of health care services.

Inter/ multi sectoral coordination

Health care services cannot be provided by health worker alone. All other health related sectors should co-operate and coordinate to provide integrated primary health care.

Appropriate technology:

It means use the simple technology that can saving the natural resources and economy of the country that contributes to national and social goals by using:

- ✓ Cheaper equipment's/ procedures , avoid costly things.
- ✓ Socially acceptable to users and recipients.

- If machinery or equipment are involved, it should be simple to run and repair. It should be locally produced as far as possible.

9. Methods that help to empower the women

Definition:

- **Empowerment"** is the process of increasing the authority and responsibility of individuals or groups to make choice and to transform those choice into desired actions and outcomes.
- **Women's empowerment** is defined as making an effort to raising the status of women through education, awareness, literacy, and training. Women's empowerment equips and allows women to make life-determining decisions through the different societal problems.
- **Women empowerment** refers to increasing the spiritual, political, social or economic strength of women. It often involves the empowered developing confidence in their own capacities.

Principles of women's empowerment

- Establish high-level corporate leadership for gender equality.
- Treat all women and men fairly at work – respect and support human rights and non-discrimination.
- Ensure the health, safety and well-being of all women and men workers.
- Promote education, training and professional development for women.

Importance/ need for women empowerment:

- ❖ Female infanticide/ female foeticide will be reduced.
- ❖ Dowry will be prohibited.
- ❖ Marriage in same caste and child marriage (still existing)

- ❖ Atrocities on women: raped, kicked, killed, subdued and humiliated almost daily.
- ❖ Women should be empowered in different sections like education, politics, work force and even more power within their own households

Methods to empower the women/ types of women empowerments:

Equality in gender/ social justice:

- Social justice and gender equality is a fundamental human right. Gender equality means that women and men have equal rights, opportunities, and resources, and can participate equally in all aspects of life.
- Women and girls are often subject to discrimination, violence, and other forms of oppression simply because of their gender.
- Empowering women helps to create a more just and equitable society for everyone.

Money/ economic growth:

- This refers to women's ability to participate in economic activities on an equal basis with men.
- When women / girls have equal access to education, training, employment, equal wages, access to credit and financial services and other opportunities, they are better able to contribute to the economy and society as a whole.

Political empowerment

- It refers to women's ability to participate in political life and decision-making on an equal basis with men.
- It includes the ability to vote and run for office, as well as access to leadership positions and participation in policy-making processes.

Social empowerment

- It refers to women's ability to participate fully in social and cultural life, free from discrimination and violence.
- It includes access to education, healthcare, and legal services, as well as the ability to exercise their rights and freedoms.

Wellbeing/ health empowerment

- This refers to women's ability to access healthcare and make decisions about their health and well-being.
- It includes access to information, services, and resources that promote reproductive health, maternal health, and overall well-being.
- When women have access to education and healthcare, they can better take care of themselves and their families.

Educational empowerment

- This refers to women's ability to access education and develop skills and knowledge that enable them to make informed decisions, pursue their goals, and contribute to society.
- it includes access to quality education at all levels and opportunities for lifelong learning.

Raising sustainable goals:

- Women's empowerment is critical for achieving sustainable development.
- When women are empowered, they are better able to contribute to efforts to address environmental challenges, reduce poverty, and promote social justice.

Ways to empower women:

- Providing education
- Self-employment and self-help groups
- Providing minimum needs like nutrition, health, sanitation, housing
- Other than this, society should change the mentality towards the word "women".
- Encouraging women to develop in their fields they are good at and make a career.
- Changes mobility and social interaction;
- Changes in women's labour patterns;
- Changes in women's access to and control over resources; and in
- Changes in women's control over decision making.

Issues and problems faced by women in India

- Selective abortion and female infanticide
- Sexual harassment of girl
- Dowry and bride burning:
- Disparity in education & low status in the family
- Domestic violence
- Child marriages
- Inadequate nutrition
- Women are considered as inferior to men
- Widows are considered as worthless & forced to wear white clothes.

Legal rights for women in India

1. Right to equality
2. Right to education
3. Right to work
4. Right against sexual harassment
5. Right to property
6. Right to marriage and divorce
7. Right to health
8. Right against domestic violence

11. Objectives of national nutritional programmes in India

- To achieve the nutritional wellbeing of all peoples to maintain a healthy life to contribute in the socio-economic development of the country through implementation of the national nutritional programs in collaboration with the relevant health sectors.
- Enhance the nutritional wellbeing, reduce the child and maternal mortality and contribute to equitable human development.
- To reduce the protein energy malnutrition (PEM) for children less than 5 years of age and women of reproductive age group.
- To improve the maternal nutrition.
- To reduce the prevalence of anaemia among children, adolescent girls, pregnant and postpartum women.
- To reduce the vitamin a and iodine deficiency disorders.
- To reduce the infestation of the intestinal worms among the children and pregnant women.
- To reduce the prevalence of low-birth-weight babies (lbw).
- To improve household food security to ensure that all people can have adequate access, availability and use of food needed for healthy life.
- To promote the practice of good dietary habits.
- To prevent and control of infectious diseases.
- To control life style related diseases such as coronary artery diseases, hypertension, diabetes, etc.

COMMUNITY HEALTH NURSING – II

MODEL QUESTION PAPER AND ANSWER KEY - 3

DECEMBER 2020

1.a)major health problems in India

- Communicable disease problems
- Non- communicable disease problems.
- Nutritional problems
- Environmental sanitation problems
- Medical care problems
- Population problems

Communicable disease problems

Respiratory	Small pox, chickenpox, measles, rubella Mumps, diphtheria, pertussis. Influenza, pneumonia, tuberculosis Sars, meningococcal meningitis
Intestinal	Cholera, typhoid, viral hepatitis Food poisoning, acute diarrhoeal diseases Amoebiasis, ascariasis, hookworm Poliomyelitis, dracunculosis
Surface	Std- aids/ HIV Leprosy, tetanus, trachoma
Vector borne	Malaria, dengue, chikungunya, filariasis

Non- communicable disease problems.

Respiratory	Asthma/ COPD, lung cancer.
Cardiovascular	Hypertension, cardiovascular diseases, rheumatic heart diseases
CNS	Cerebra vascular diseases, meningitis
Renal	Renal failure, glomerulonephritis
Endocrine	Diabetes mellitus, hypothyroidism
Accidental	Road traffic accidents, injuries, poisoning
Cancers	Breast, lung, oral cancers

Common nutritional problems in under 5 age group children

- Protein energy malnutrition- kwashiorkor and marasmus
- Over nutrition- obesity
- Low birth weight (lbw) babies.
- Nutritional anaemia
- Iodine deficiency disorder
- Vitamin a deficiency disorder

- Low birth weight (lbw) babies.
- Endemic fluorosis
- Lathyrism
- Market distortion
- Cancer / cardiovascular disorders, etc.,

Environmental sanitation problems	Low water quality of river Lack of safe drinking water. Industrialisation
Medical care problems	Lack of availability and accessibility of medical care Overcrowded hospitals. Less skilled health care giver.
6.population problems	Population explosion

1.b) antimalaria programme -1999

Introduction:

At the time of independence, malaria was contributing 75 million cases with 0.8 million deaths every year prior to the launching of national malaria control programme in 1953. The national programme against malaria has a long history since that time.

Evolution:

Year	**Programme**
1953	National malaria control programme
1958	National malaria eradication programme.
1971	Urban malaria scheme
1977	Enhanced malaria control project- modified plan of operation
1999	National anti-malaria control programme (nap).
2002	National vector borne disease control programme

Objectives:

- Reduce the mortality and morbidity rate associated with malaria.
- Reduce malaria transmission.
- Enhance diagnostic and treatment services.
- Increase access to prevention measures.
- Strengthen surveillance and monitoring.
- Promote community engagement and education.
- Support research and innovation.
- Ensure sustainable financing.
- Integrate malaria control program with other health programs.

Malaria surveillance parameters:

- Annual parasite incidence

- Annual blood examination rate
- Annual *falciparum* incidence
- Slide positivity rate
- Slide *falciparum* rate

Malaria control action plan:

- Mass screening of migrants whenever necessary.
- Minor environmental engineering measures like cleaning/ de-silting the drainage, sanitation.
- Strengthening of PHC with quality microscopic facilities.
- Strengthening of malaria surveillance services.
- Urgent referral of positive cases with free of cost after made the early diagnosis.
- Regular and efficient supply chain management.
- Radical treatment for species-specific positive cases on the spot.
- Vector control measures according to degree of risks.- integrated vector management
- Epidemiological tracking and follow up of all the malaria positive cases .
- Intensive training of all community staffs.
- Indoor residual sprays.
- Larval source management
- Lower levels of health care members such as Anganwadi workers, local medical/ health care providers, village headman, school teachers can also be trained and get help from them to diagnose and treatment.
- Locally available persons- NGO's non-governmental organizations should be involved.
- Asha worker involved in hamlet wise instead of village wise.
- Nets for mosquito control should be used and its social marketing to be increased.
- Community mobilization
- Education- health awareness and behaviour change communication (bcc).

Roles and responsibilities of community health nurse in malaria control:

- Monitoring of vital signs for all cases attending the PHC, subcentre.
- Avoid starting treatment on an empty stomach.
- First dose should be given under observation.
- Provide health education to the individual and family about malarial fever.
- Advise to drink plenty of liquids.
- No single case should be ignored.
- Iv fluids should be started for those who are unable to take anything orally.
- Any patient complaints of drowsiness- immediate referral to the hospital for further diagnosis.

3. Various voluntary health agencies available in India

Health agencies	Services
Indian red cross society –irks	Medical camps Disease prevention and control Training of volunteers
Central social welfare board	Education for women and girls Rajiv Gandhi crèche scheme for children of working mothers Poverty reduction Gender equality
Indian council for child welfare	Street children project Indira Gandhi holiday home Adoption of child Learning to live together camp.
All India women's conference	Literacy and education Health, family welfare and population
Bharat Sewak samaj	Welfare extension project Holiday home
Hind KushnavarinSangh	Bal bhavans Play centres, public parks
Kasturba Gandhi memorial trust	Nutritional services Educational programmes Block training Maternity centres, hospitals

Others:

- All India blindness relief society
- Saint john ambulance association
- Family planning association of India
- Tuberculosis association of India
- Ford foundation
- Child in need institute
- Child rights and you –cry.
- Smile
- Sos village

3. indigenous/ alternative system of medicine in India

Ayush

A	Ayurveda
Y	Yoga
U	Unani
S	Siddha
H	Homeopathy

The siddha and ayurveda are twin treatment systems of India and have greater similarities in health care.

Objectives of Indian systems of medicine and homoeopathy

- Upgrade the educational standards in Indian systems of medicines
- Strengthening of research
- Draw up schemes for promotions, cultivations and regeneration of medicinal plants used in these systems.

Ayurveda

It has eight major clinical specialties such as.

Internal medicine - this branch deals with general ailments of adults not treated by other branches of ayurveda.

Surgery - this branch deals with various surgical operations using different surgical instruments and devices. Medical treatment of surgical diseases is also mentioned.

Disease of supra-clavicular origin -this branch deals with dentistry, diseases of ear, nose, throat, oral cavity, head and their treatment by using special techniques.

Paediatrics, obstetrics and gynaecology - this branch deals with the maternal and child health care & diagnosis, management of various diseases during pregnancy, postnatal, neonatal and paediatrics.

Psychiatry – deals with mental diseases and their treatment methods include medicines, diet regulation, psycho- behavioural & spiritual therapy.

Toxicology - deals with the treatment of toxins from vegetables, minerals and animal origin along with development of their antidotes. The pollution of air, water, habitats and seasons has been given special consideration in understanding epidemics and pandemics.

Rejuvenation and geriatrics - deals with prevention of diseases and promotion of a long and healthy life .

Yoga

Practices of yoga was originated in India about several thousand years ago. Experts of various branches of medicines including modern medical science are realising the role of yoga techniques in the prevention and mitigation of diseases and promotion of health.

Father of yoga: maharishi Patanjali, popular name is as "ashtanga yoga".

World yoga day: on 21 June 2014, the ministry of Ayush celebrated the first ever International Day of Yoga which was celebrated world-wide .

Naturopathy

Naturopathy is a treatment system of vital curative force within the body based on the principles of nature on physical, mental, moral and spiritual mode of living and has great health promotion, disease prevention and curative as well as restorative potential.

Unani

The Unani system is holistic in nature and offers preventive, promotive, curative and rehabilitative healthcare.

Six essential components for Unani:

(a) Pure air
(b) Food and drinking water
(c) Physical movement and rest
(d) Psychic movement and rest
(e) Sleep and wakefulness and
(f) Retention of useful materials and evacuation of waste materials.

Siddha

- The term siddha is a Tamil word derived from "siddhi" which means from attaining perfection in life or heavenly bliss. It is exclusively linked with Tamil culture and civilization. It was originated at 4000 B.Sc. to 10,000 B.Sc.
- The siddha system is one of the oldest systems of medicine in India, it is therapeutic in nature. It emphasizes on the patient, environment, age, sex, race, habits, mental frame work, habitat, diet, appetite, physical condition, physiological constitution of the diseases for its treatment which is individualistic in nature .

Homeopathy

- The word homoeopathy is derived from the Greek word 'homes' means similar & 'pathos' means suffering. Homoeopathy is the treatment method for treating the sick person by therapeutic agents that have the power to produce similar symptoms in healthy human beings and simulate the natural disease, which is capable of bringing cure in the diseased person.
- Homoeopathic medicine stimulates the human immune mechanism of disease to counter the disease conditions in a natural way. It rectifies the diseased person's derangement by producing artificial disease conditions similar to the existing disease conditions in patient.

Sowa-rig-pa (am chi medicine):

- "Sowa-rig-pa", is also known as am chi medicine is the traditional medicine of many parts of the Himalayan region used mainly by the tribal and hot people.
- In India, this system of medicine has been popularly practiced in Ladakh and paddar-pangay regions of Jammu and Kashmir, lahul-spiti, panga, dharmshala and kinnara region of Himachal Pradesh, Uttarakhand, Arunachal Pradesh, Sikkim, Darjeeling Kaling pong (west Bengal).

4. Components of school health programme

Definition:

According to modern concepts, school health services is an economical and powerful means of raising community health and more important in future generations.

History and organisation:

- ❖ School health services first started in India .
- ❖ School health services run under primary health centre (PHC).
- ❖ It requires all time duty medical officer to cover around 5000 to 6000 children a year.

Health problems of school children:

- Malnutrition
- Infectious diseases
- Intestinal parasite
- Diseases of skin, eye and ear.
- Dental caries.

Objectives:

- Promotion of positive health.
- Prevention of the diseases.
- Early diagnosis, treatment and follow up services.
- Awakening of health consciousness (health education) in children.
- Provision of healthful environment.

Aspects / components of the school health services:

- Remedial measures and follow up.
- Prevention of communicable diseases.
- Healthful school environment
- Nutritional services
- First aid and emergency care.
- Dental health
- Eye health
- Mental health
- Health education
- Education of handicapped children.
- Proper maintenance and use of school health records.

Role of nurse in school health services:

- Health assessments
- Health care services
- Health care education
- Emergency plans and training staffs.
- School health environment.
- School health promotion activities.
- Health policies and programs.

Health assessments:

- Screen students for care needs, identify and refer students for improving health conditions.
- Assess for visual defects, dental problems, mental problems, nutritional problems, minor ailments.
- Screening of 30 identifies health conditions through Rastriya ball Saathiya Karakoram (risk) mobile health services with referral and treatment.

Health care services:

- Dealing with chronic health conditions, cure the injuries and illness.
- Provide iron and folic acid supplementation, albendazole tablets.
- Provision of sanitary napkins through menstrual hygiene scheme.
- Age-appropriate vaccination.
- Treat all the issues faced by the students and refer immediately if emergency.

School health environment:

The nurse should know the healthful school environment and maintain it as listed below:

- Water supply should be safe, portable and continuous.
- Walls should be heat resistant, thickness should be >10-inch exterior wall
- White color wall and it should be whitewashed annually.
- Windows should be at least 2.5 feet above the floor.
- area of primary schools- 5 acres.
- Area of elementary schools- 10 acres + 1 acre per 100 children.
- Toilet : 1 urinal for 60 students and 1 latrine for 100 students.
- Enclosed by fence.
- Edibles – canteen should be school approved vendor.
- Room for students should be adequate – 40 students/ classroom.
- Light naturally should come from left side of the classroom.
- Avoid heavy noise near the school.
- Air/ ventilation should be adequate.

- Minus desk should be provided.
- Playground facilities.

School health promotion activities:

- Age-appropriate learning for healthy behaviour.
- Delivery through school teachers as health and wellness ambassadors.

Primary school	**Middle school**	**High school**
*Health- growth and development. *Personal safety *Nutrition and physical activity. *Hygiene practices *__Prevention of diseases__: dengue, malaria, tb, HIV, diarrhoea, worms, anaemia, vaccine preventable diseases.	*Puberty changes *Eye care, oral care *Mental health *Nutrition *meditation & yoga *Media literacy *Prevent substance abuses *HIV/ aids-prevention.	*Prevention of substance abuse *Sexual and reproductive health Violence prevention Unintentional injury Road safety Nutrition Meditation and yoga

7.a) occupational health services

Occupational health services are essential for employers and employees to have a safe, healthy and efficient work environment.

7.b) occupational hazards & its prevention.

Physical hazards:

Heat	Heat hyperpyrexia, heat syncope, heat exhaustion, heat cramps.
Cold	Trench foot, frost bite, chilblains
Light	Nystagmus, occupational cataract
Noise	Occupational deafness
Radiation	Cancer , leukaemia, aplastic anaemia ,
Electricity	Burns
Pressure	Air embolism , blast explosion

Chemical hazards:

- Hazardous gases
- Chemical dusts – inorganic and organic dusts.

Biological hazards:

Disease	Source of exposure	Major antigen
Organic dusts		
Farmer's lung	Mouldy hay or grain dust	Saccharopolyspora recti virgula
Bagaces's	Sugarcane fibre	Thermoactinomycessacchari
Grain handler's lung	Moldy grains	S. Rectivirgula, t. Vulgaris.
Byssinosis	Cotton	
Tobaccossis	Tobacco	
Inorganic dusts		
Anthracosis	Coal dust	
Silicosis	Silicon	
Hemosiderosiss	Iron	

Mechanical hazards:

Mechanical	Injuries , fractures, accidental falls,..

Psychosocial hazards:

Physical and mental health can be affected when workers fails to adapt to an psychosocial working environment , it may be influenced by many factors such as education, family situation, social habits, cultural backgrounds and expectation of worker from employment/ industry.

Psycho-behavioural changes
• Aggressiveness • Hostility • Depression and anxiety • Substance and drug abuse • Sickness • Absenteeism

Prevention of occupational health hazards:

- Medical measures
- Engineering measures
- Legislative measures

Medical measures:

Pre placement examination
Medical and health care services
Periodical examination
Health education and counselling
Notification
Supervision of work environment
Record maintenance and analysis

Pre-placement examination:

- Examine the employee or worker at the time of recruitment.
- It is the most useful benchmark for the future comparison of the health status of the worker**.**

Medical & health care services:

- Esi- employee state insurance services.
- Factory- first aid care.
- Immunizations

Periodical examination:

Health assessment for employee/ workers should be conduct at least once in a year, monthly/ daily assessment can also be done depends upon the risks of exposure.

Health education and counselling:

- Ideally starts before the recruitment of the employee.
- Content of teaching should be: risk factors, measures to prevent harm, immediate first aid management, correct use of pep kits/ protective measures, simple rules of hygiene practices.

Notification:

- Supervise and periodical inspection of the working environment.
- Periodical check up by the physician.

Supervision of working environment:

- Supervise regularly below the following needs:
- Clean water supply and general plant cleanliness.
- Toilet cleanliness
- Proper garbage and waste disposals.
- Adequate lighting and ventilation.
- Protection against hazards.

Record maintenance and analysis:

Worker's health record book and disability record should be maintained properly and periodical update about their health conditions is necessary.

Engineering measures:

- Research
- Environmental monitoring
- Statistical monitoring
- Substitution
- Isolation

- Design of building
- Dust control
- Enclosure
- Natural ventilation
- Technical mechanization
- Initiate protective measures
- Adequate house keeping
- Local exhaust fan

Research works:

Research in occupational health provides a better understanding about industrial health issues and hazards to prevent the diseases and further complications.

Environmental monitoring:

- Periodical environment survey especially sampling the atmosphere to determine whether the dusts/ gases from the industry are within the permissible (safe limit) concentration to prevent exposure to toxic substances.
- Frequent monitoring of ventilation, adequate lighting, temperature of working environment by collaboration with doctors & engineers.

Substitution:

Replacement of most harmful materials by a least harmful source or harmless one as much as possible.

Examples:

- Lead paint is replaced by zinc iron paint to prevent inhalational lead poisoning (plumbism).
- Silver salts can be used in the place of mercury salts, acetone can be used in the place of benzene.

Design of building:

- For the prevention of occupational health problems , infrastructure of working area must be free from hazards and have safe environment.
- First make a blueprint to construct an industry for safe working area, once constructed it is difficult to alter the building.

Enclosure:

- Enclosing (fully cover the hazardable things without exposure to environment) the harmful materials to prevent the escape of dusts and fumes in the industrial areas.

Natural ventilation:

- Good general ventilation must be provided to prevent airborne hazards from dusts/ gases and continued supply of fresh air is necessary.
- Indian factories act recommends a minimum of 500 cu. Feet of air space for each worker (at least 5 square feet for each worker)

Technological machinery:

- Hazardous handling things must be fully mechanised to prevent contact with those substances.

Initiate protective measures:

All the personal protective equipment's should be used such as

- Respiratory masks to prevent pneumoconiosis,
- Ear plugs/ muffs to prevent auditory fatigue/ deafness in case of heavy noise.
- Helmets to prevent head injury
- Barrier creams, sunscreens, gloves to prevent dermatitis.
- Aprons, boots, googles to prevent contact exposure to hazards.

Adequate housekeeping:

Maintain general cleanliness, ventilation, lighting, washing, food safety/ arrangements and general hygiene maintenance is a basic need for the control/ elimination of occupational hazards.

Local exhaust ventilation / fan:

Dust, fumes and other harmful/ hazardous substances can be trapped and removed before they spread into other atmosphere to prevent health related illness.

Legislative measures:

1. **Occupational safety laws:**
- Factories act- 1948.
- Mines act- 1952.
2. **Social security laws:**
- Workers' compensation act- 1923.
- Esi act- 1948.
- Equal wages act- 1976.
3. **Others:**
- Employment order- 2009.
- Sectoral employment order- 2019.

Role of nurse in prevention:

Also includes medical measures for occupational safety for role of nurse.

Professional role

- Initial screening of workers.

- First aid and emergency nursing services.
- Periodical health status examination and follow up care.
- Epidemiological surveillance
- Training and supervision.

Environmental role

- Periodical assessment of working environment
- Assessment of optimal working conditions.
- Assessment of protective devices (PPE).
- Assessment of basic facilities.

Educational role

- Health education about nutrition, immune boosting diets.
- Teaching about safety precautions, facilities available, sanitation, hygiene practices, risk factors, first aid care, preventive measures,

Management role

- Participation of policy making, laws, nursing process.
- Participate in nursing research activities.
- Organisation of health programs, camps, clinics,
- Report the suspected cases and unsafe/ hazardous conditions.

Researcher and reporter role:

- Document the health records of the workers and maintain properly.
- Conduct research activities related to specific problems and search for solutions.

8.a) community health nursing:

- ***According to American nurses' association (ana):*** *community health nursing is a synthesis of nursing practice and public health practice applied to promoting and preserving the health of populations. The practice is general and comprehensive. The dominant responsibility is to population as a whole, nursing directed to individuals, families or group contributes to the total population—the focus of community health nursing is on the prevention of illness and the promotion and maintenance of health.*
- ***Community health nursing*** is a specialized field of nursing practice that focuses on the health of individuals, families, and communities. It primarily focuses on health promotion, disease prevention, and providing primary care services by working in various health care settings such as public health departments, community clinics, schools, long-term care facilities, and private practice.

8. Scope of community health nursing

Education	Principal

	Vice principal Professor, lecturer.
Health service	School health nurse Occupational health nurse Home care nursing Much and family planning nursing Geriatric nursing Mental health nursing Domiciliary nursing Industrial nursing Rehabilitation centre nursing.
Research	Analyser Data collector Research co-ordinator
Administration	District public health nurse School health nurse Community health nurse

9. Primary health care

Definition:

According to who: primary health care is essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the communities through their full participation and at a cost that the community and the country can afford to maintain at every stage of their development in the spirit of self-determinants.

Elements/ components of primary health care:

E	Education
L	Locally endemic diseases
E	Expanded programme for immunization (epi)
M	Maternal & child health including family planning
E	Essential drugs provision
N	Nutrition
T	Treatment
S	Safe drinking water and basic sanitation.

Principles of primary health care

Equitable distribution:

- It is the universal access of the health services to all peoples irrespective pay, gender , rich/ poor and rural/ urban peoples to provide basic medical care to all individuals in the community to prevent social injustice.
- Provision of equal care by moving the health services from higher (cities/ towns) to lower (rural/ slums/tribe) areas to provide continuum of care to them and eliminate factors contributing to ill health.
- Equitable distribution is the key to attain health for all.

Community participation:

- Involvement of individuals, families and communities in promotion of their own health and welfare.
- Meaningful involvement of the community in the planning, implementation and maintenance of health care services.

Inter/ multi sectoral coordination

Health care services cannot be provided by health worker alone. All other health related sectors should co-operate and coordinate to provide integrated primary health care.

Appropriate technology:

It means use the simple technology that can saving the natural resources and economy of the country that contributes to national and social goals by using:

- ✓ Cheaper equipment's/ procedures , avoid costly things.
- ✓ Socially acceptable to users and recipients.

- If machinery or equipment are involved, it should be simple to run and repair. It should be locally produced as far as possible.

11. Expanded programme for immunization (epi)

Introduction: Established in 1976.

Goal:

To reduce the mortality and morbidity among children from the vaccine preventable diseases.

Objectives:

- To deliver the integrated immunization services through primary health centres.
- To achieve 100% coverage for eligible children.
- To reduce the children mortality and morbidity.
- To minimize the cost of treatment.

Strategic interventions:

Vaccine preventable disease surveillance to be strengthened.
Appropriate measures to expand coverage vaccination for eligible population.
Cold chain supplies- maintain and monitor
Community participation to be promoted.
Integrate vaccination sessions with PHC services.
National guidelines for vaccination to be followed.
Adequate supplies such as syringes, needles, vaccines, disposal facilities are to be available in vaccination area.
Training oh health personnel for vaccination.
Education/ health awareness activities
Proper recording and monitoring.
Encourage for continuous monitoring.
Operational research to find out deficiency and difficulties in program and suggest methods for improvement.
Potency of vaccine to be safe by cold chain system.
Logistic supports
Ensure supply of potent vaccine regularly.

Six vaccine preventable diseases:

1. Diphtheria
2. Pertussis/ whooping cough
3. Tetanus
4. Measles
5. Poliomyelitis
6. Tuberculosis (tb)

COMMUNITY HEALTH NURSING – II

MODEL QUESTION PAPER AND ANSWER KEY - 4

1. Components of community health services

1. Health promotion and health protection
2. Prevention of health problems.
3. Treatment for disorders
4. Rehabilitation
5. Evaluation
6. Research.

2.a) vital statistics

- **According to Benjamin:** vital statistics is the data or record regarding marriage, birth, diseases and death on the basis of which community health and development are studied.
- **According to uno:** vital statistics is the numerical description of birth, death, abortion, marriage, divorce , adoption and judicial separation.

1. B) causes of maternal mortality.

Most common cause of maternal mortality is obstetric haemorrhage.

Global	**India**
Haemorrhage- 24% Indirect causes 20% Sepsis- 15% Unsafe abortion-13% Hypertensive disorders-12% Obstructed labour- 8% Other direct causes-8%	Haemorrhage- 38% Other causes 34% Sepsis 11% Abortion-8% Obstructed labor-8% Hypertensive disorders-8%

Direct obstetric causes	**Indirect obstetric causes**
Complications of pregnancy, labour and postpartum. Abortion Ectopic pregnancy Ash, PPH	Conditions that are already present/ occurs during pregnancy or aggravated during pregnancy. Anaemia Diabetes mellitus Hypertension Thyroid disease

2.c) preventive, control & social measures to reduce MMR:

• Medical conditions such as hypertension, diabetes, anaemia, should be treated.
• Antenatal check-up should be regular- at least 4 ANC visit.
• Tetanus-t t immunization and malaria prophylaxis.
• Early registration of pregnancy

• Rx- treatment for infection and haemorrhage during labour.
• Nutritional supplementation- IFA and calcium tablets.
• Abortion services should be safe to prevent from sepsis and bleeding.
• Labour complications- mal-presentation, obstructed labour, ruptured uterus, PPH should be prevented.
• Delivery practices should be clean- 5 c's of labour.
• Every maternal death should be identifying and search for its cause.
• Advice spacing of births and family planning.
• Trained local dais/ village health workers.
• Hospital delivery should be promoted rather than home delivery.

- **Primary prevention:** reduce unwanted pregnancies.
- **Secondary prevention:** reduce obstetric complications.
- **Tertiary prevention:** reduce death after complications.

2. International health agencies

- World health organization – who
- United nations international children emergency fund- UNICEF
- Food and agricultural organization –faro.
- United nations development programme- undo.
- International red cross society- irks.

Functions of faro.

1. Better production of food by improving agriculture, forestry and fisheries more productive and sustainable.
2. Provide better nutrition to eliminate hunger, food insecurity and malnutrition.
3. Making better environment by reducing rural poverty, efficient agricultural and food systems.
4. Promoting better life by increasing the resilience of livelihoods to threats and crises.
5. Maintain better state of nutrition.
6. Maintain sufficient quantity in right proportion.

4. Child abuse

Definition:

❖ **According to who :**

"Violence against children includes all forms of violence against people under 18 years old caused by parents /caregivers, peers, romantic partners, or strangers results in actual/ potential harm to the child's health, survival, development ."

❖ **According to** centres for disease control and prevention **(CDC) in use :**

Child maltreatment refers to both acts of commission (abuse) and acts of omission (neglect),

Acts of commission (abuse) : "words or actions that cause harm".

Acts of omission (neglect): "the failure to provide for a child's basic physical, emotional, or educational needs."

Types & lists of child abuse:

1. **Physical abuse**.

- Includes hitting, beating, kicking (with the hand or with a whip, stick, belt, shoe, wooden things etc,) Shaking, biting, strangling, scalding, burning, poisoning, suffocating, throwing children, scratching, pinching, , pulling hair.

2. **Sexual abuse:**

Child sexual abuse (case) is abusing a child for sexual stimulation aimed towards the physical gratification or the financial profit of the person committing the act regardless of the outcomes .

3. **Emotional/ psychological abuse:**

non-accidental verbal or symbolic acts by a child's parent or caregiver that result or have reasonable potential to results in significant psychological harm to the child.

4. **Child neglect: lack of supervision/ lack of child care awareness.**

Child neglect is the lack of attention for child care or *failure* of a parents or caregivers of the children to provide basic needs such as food, clothing, shelter or supervision of the child's health, safety or well-being may be threatened with harm.

Lists or examples of child abuse :

- Violence against children with superstitious accusations
- Child marriage
- Violence against girl students
- Sexual rites of passage
- Body modification
- Infanticide
- Child harvesting
- Forced adoption
- Childhood labour.

Effects and problems:

Physical effects:

Risk for poor health outcomes in adults: cancer, heart attack, reduced longevity of life.

- Poor growth of child
- Impaired brain development.
- shaken baby syndrome.

- Severe injuries and death
- Chronic pain.

Sexual related problems:

Problems	Reasons
Risk of sexually transmitted diseases (std): Risk of sexually transmitted infections when raped/ sexually abused.	Due to their immature immune systems and high risk for mucosal tears during forced sexual contact.

Social problems:

Problems
Substance abuse: Alcoholism/ other drug abuses. Cigarette smoking in adolescence and adult life.
Sexual promiscuity and sexually transmitted diseases in later life.
Maltreating the adults by the child.

Psychological/ emotional abuse:

80% of abused people had at least one psychiatric disorder at age 21.

- Anxiety disorders &pts.-post traumatic stress disorder:
- Unable to make trustworthy relationships:
- Commit violent actions
- Depression and risk of suicide:
- Poor cognitive development:
- Sleep disturbances:
- Dissociative symptoms.

Assessment of child abuse:

C	Child has excess knowledge about sex. Consistency of injury with the developmental age of the child.
H	Hair growth in various lengths.
I	Inconsistent stories from the child and parents/ caregivers
L	Low self-esteem of child Lack of supervision of child.
D	Depression Delay in seeking care
A	Apathy- no expression of emotions
B	Bruised
U	Unusual injury patterns
S	Serious injuries. Suspicious circumstances
E	Evidence of old injuries. Environmental clues.

Laws against child abuse in India:

- The protection of child from sexual offences (pose)- 2012.
- Adolescent education programmes.
- The integrated child protection scheme.
- The rights of children to free and compulsory education act- 2009.
- The juvenile act (care and protection of the child)- 2000.
- Termination of pregnancy act (abortion for raped victims)- 1971.

5. Components of rich phase- ii.

1. Essential obstetric care
2. Emergency obstetric care
3. Strengthening of referral system

Urban and tribal health
Control and treatment of std/ roti
Adolescent health
Maternal health
Population stabilisation
Newborn care and child health
Monitoring and evaluation
Other priority areas

Other priority areas:

- Targeting of services.
- Strengthening of service delivery, infrastructure and maintenance.
- Supply of drugs and equipment.
- Strengthening of health care providers.

6. Qualities of community health nurse:

Q	Quietness
U	Understanding
A	Alertness Ability to inspire confidence
L	Loyalty Love for the fellow man
I	Intelligent Interested in peoples
T	Technical competence
I	Intelligence and common sense Integrity Interpersonal relationship- good
E	Empathy Endurance and resourcefulness

	Emotional stability
S	Sympathy Sensitive observation listener

7. High risk approach

Definition:

According to who, 1973: a risk factor is defined as any ascertainable characteristics or circumstance of a person or group of persons known to be associated with an abnormal risk of developing or being adversely affected by morbid process**.**

Lists/ situations of high-risk factors:

- Biological situations
- Physiological situations
- Psychological situations
- Socio-cultural situations.

Biological situations:

Age group:

- Infants
- Under 5 children
- Geriatrics- elderly peoples.

Gender:

- Females in reproductive age group.

Physiological state:

- Pregnancy, delivery and postpartum.
- Chronic diseases- hypertension, diabetes, renal failure etc.,

Genetic factors:

- Family hereditary history.
- Other health conditions

Personal habits:

- Dietary habits
- Sleeping and rest activities

Unhealthy behaviours:

- Sedentary life styles.
- Obesity, lack of exercises/ poor physical activities.

Physiological situations:

Areas of living:

- Rural areas
- Urban areas
- Slums, tribes.

Living conditions:

- Overcrowding/ excess population.

Environment:

- Water supply
- Pollution
- Food hygiene & supply

Housing:

- Ventilation, lighting.
- Space for living.
- Relationships between family members.

Psychological situations:

- Living/ staying status
- Support system

Socio-cultural situations:

- Social class
- Ethnic and cultural group.
- Family disruption, education and housing.
- Customs, habits and behaviour.
- Access to health services.
- Lifestyle and attitudes.

Risk approaches in antenatal care (high risk pregnancy)

Definition: high risk pregnancy is defined as one which is complicated by factor or factors that adversely affects the pregnancy outcome- maternal or perinatal or both.

Aim: to identify the high-risk antenatal cases to provide specialised care and appropriate level of care to others.

Assessment & diagnosis of problems:

Subjective data: history collection

Objective data: screening and laboratory investigations.

Danger signs/warning signs of pregnancy:

Signs/symptoms – assessment	**Diagnosis**
Severe, persistent vomiting	Hyperemesis gravidarum
High fever, chills, dysuria	Infection
Abdominal pain, vaginal bleeding	Miscarriages/spontaneous abortion.
Bleeding per vagina.	**In early pregnancy:** abortion/ ectopic pregnancy/ molar pregnancy. **Later pregnancy:** placenta praevia/ abruption placenta.
Fluid drain from vagina	Premature rupture of membranes
Decreased fetal movements	Fetal compromise, anoxia
Swelling, puffiness around face, fingers, over sacrum	Pregnancy induced hypertension/pre-eclampsia
Headache, blurred vision, dizziness, proteinuria.	Pih/eclampsia/pre-eclampsia
Pallor, excess fatigue.	Anemia

Asses for referral during first & second antenatal visit

- Hemoglobin: 7g/dl at first and second visit,
- Bleeding or spotting per vagina
- Evidence of proteinuria, hypertension, eclampsia.
- Suspicion of augur, absence of fetal movements.

Asses for referral during third visit

- Hb: 7 gm/dl.
- Bleeding/ spotting per vagina
- Suspicion of twins, augur, proteinuria, hypertension.

Asses for referral during fourth visit

- Fetal growth restriction,
- Suspicion of twins, malpresentation, malposition.

High risk mother

Wrong foetus – malpresentation, malposition, unstable lie.
Infertility Instrumental delivery
Short statured prime-mother (<130 cm)- causes contracted pelvis &cod
Kidney, heart, brain and other non-communicable diseases.
Ante-partum haemorrhage(ash) Anaemia in adolescent/ pregnancy/ postpartum Adolescent pregnancy. Amniotic fluid- oligohydramnios/ polyhydramnios.
Postpartum haemorrhage (PPH)

Pregnancy induced hypertension- preeclampsia, eclampsia, help syndrome
Prolonged pregnancy/ post-term pregnancy. Prolonged labour, preterm labour Prolapsed cord, hand or feet. Puerperal sepsis.
Removal of placenta manually. Retained placenta more than 30 minutes.
Old age pregnancy- elderly prime age >35 years Obstetric emergencies: refer
Abortion, still birth, intra uterine foetal death (if).
Chronic diseases- diabetes, hypertension, anaemia, thyroid diseases, Caesarean section in previous pregnancy. Chronicity increased- multiple pregnancy.
Hydramnios

Risk approaches in neonates and infants (high risk neonates& infants)

- Low birth weight (lbw).
- Preterm babies.
- Neonatal hypothermia, seizure, hypo glycaemia.
- Jaundice, anaemia, haemorrhage.
- Respiratory tract infections
- Congenital anomalies.
- Early weaning.
- Sexually transmitted infections through match: HIV/aids

Risk approaches in under five age group children:

- Malnutrition
- Food poisoning
- Acute diarrhoeal diseases
- Protein energy malnutrition (poem)
- Infections and parasitosis
- Accidents and poisoning
- Behavioural problems
- Acute respiratory tract infections.
- Sexually transmitted infections through match: HIV/aids

Risk approaches in adolescent and young adults:

- Unsafe sexual practices.
- Substance abusing: alcohol, ghutra/ tobacco chewing, smoking.
- Unhealthy life style.

Risk approaches in geriatrics:

- Risk for infections
- Accidents/ injuries
- Psychological problems
- Risk of diseases and disabilities.
- Need special assistance.

Primordial prevention	Pre geriatric care
Primary prevention	Health education Exercises
Secondary prevention	Annual medical check up Early detection- universal approach, selective approach. Treatment for specific diseases.
Tertiary prevention	Counselling and rehabilitation Welfare activities- Sanjay Niradhara yojana, Vidyadhara) Chiropody services.
Improving quality of life	Cultural programmes Old age club Meals on wheal service Economically support- Ridha pension yojana Old age homes.

8. List of nutritional programmes:

• Balwadi nutritional programmes
• Integrated child development scheme (ices) • Iodine deficiency disorder control programme
• Midday meal programme
• Vitamin a prophylaxis programme to prevent blindness
• Nutritional Anaemia prophylaxis programme • Applied nutritional programme
• Special nutritional programme (snap)

Ministry of rural development:

- Applied nutritional programme

Ministry of social welfare:

- Integrated child development services scheme (ICDS)
- Balwadi nutritional programme
- Special nutritional programme

Ministry of health and family welfare:

- National nutritional anaemia prophylaxis programme
- National prophylaxis programme for control of blindness due to vitamin a deficiency.

- National iodine deficiency disorder control programme

Ministry of education:

- Midday meal programme

9. Explain any two in detail.

Integrated child development services scheme (ICDS) – 1975

Introduction:

- **Programme**: **ICDS** - integrated child development scheme
- **Year of operation**: 2nd October 1975 under 5th five-year plan.
- It is the world's largest program for early childhood development.

Aim of ices:

- Increase the birth weight, reduce malnutrition and increase the immunization coverage.
- Reduce the infant and child mortality rate .

Objectives:

- Improve the nutritional and health status of children in age group of 0 to 6 years.
- Reduce the mortality, morbidity, malnutrition and school dropout.
- Achieve effective co-ordination of policy and implementation among the various departments to promote child development.
- To enhance the capability of the mother to look after the normal health and nutritional needs of the child through proper nutrition and health education.
- To lay the foundation for proper psychological, physical and social development of the children.

ICDS - beneficiary age groups and services:

ICDS benefits/ job for Anganwadi worker (AWW).

• Family planning education. • Family life skills teaching to adolescent.
• Immunization
• Nutrition and vitamin a prophylaxis.
• Growth and development monitoring.
• Education- non formal preschool education
• Referral services.
• Services of health care at basic level- health check-up.

School going children (6 to 12 years age) is not a beneficiary groups of ices

Age groups	Services
Pregnant women	Health check up Tt immunization Supplementary nutrition & health education
Lactating / nursing women	Health check up Supplementary nutrition & health education
Children less than 3 years –infants & toddlers	Health check up Immunization Supplementary nutrition Referral services
Children between 3 to 6 years-pre-schoolers	Health check up Tt immunization Supplementary nutrition Non formal health education Referral services
Adolescent girls 11 to 18 years of age.	Supplementary nutrition & health education

Supplementary nutrition in Anganwadi:

- **Healthy children**: 500 calories + 12 to 15 grams of protein.
- **Malnourished children**: 800 calories + 20 to 25 grams of proteins.
- **Pregnant women**: 600 calories + 15 to 20 grams of protein.

Midday meal programme/ midday meal scheme

Introduction:

- Midday meal programme is also called as school lunch programme.
- **Year of operation in Tamil Nadu**: 1961.
- **Beneficiary age group**: school going children.
- **Services**: provide lunch in schools

Objectives:

To attract more children for admission to schools and retain them so that literacy rate will be improved among children.

Goals:

- Ro-orientation of eating habits.
- Incorporating nutrition education into the curriculum.
- Encouraging the use of local commodities.
- Improving school attendance as well as educational performance.

Principles:

- The meal should be supplement and not a substitute to the home diet.
- The meal should supply at least one-third of total energy requirement and half of total protein needs.
- The cost of the meal should be low.
- The meal should be prepared easily in schools. No complicated process should be involved.
- Locally available food sources should be used.
- The menu should be frequently changed to avoid manometry.
- Every child in every government and government assisted primary schools with a prepared mid-day meal with a minimum content of 300 calories and 8 to 12 grams of protein each day of school for a minimum of 200 days.

Suggestions for preparation of nutritious and economical mid-day meals:

- Proper storage of food grains in air tight containers to avoid infestations and store should be away from moisture.
- Use whole wheat or broken wheat.
- Use of iodized salt and unpolished rice.
- Prefer single dish meals like polao, kichadi and upma etc.,
- Cereal pulses ratio should be 3:1 to 5:1.
- Wash vegetables before using.
- Processes like washing, soaking and cooking reduces the cooking time.
- Rice/ dhal water left after cooking should not be thrown.
- Fermentation improves nutritive value. So, dosa etc. should be encouraged.
- Use of lid to avoid loss of nutrients.
- Avoid overcooking and reheating of previously used oil.
- Leafy tops of carrots etc. should be used in preparation of foods.

9. Employee state insurance (ESI) act

- **Act:** employee state insurance act- ESI.
- **Act passed:** 1948
- **Amended:** 1975.
- **Purpose:** cash & medical benefits to the employees in case of sickness/ maternity/ injury.

Scope of ESI act:

Provision of sic amendment act of 1975 were extended to new classes of establishments:

- Small factories employing 10 or more persons whether power is used in the process of manufacturing or not.
- Shops, hotels and restaurants.
- Cinema theatres
- Road motor transport establishments

- Newspaper establishments.
- Extended to private medical and educational institutions employing 20 or more employee.

Benefits of ESI act:

• Sickness benefits
• Extended and enhanced sickness benefits
• Medical benefits
• Paralysis – disablement benefits & dependant benefits
• Life end - funeral benefits
• Obstetrics/ maternity benefits
• Rehabilitation benefits

Sickness benefits:

Provision of 91 days of leave with payable benefits of 70 % of wages.

Extended sickness benefits:

- Provision of 2 years of leave with 80 % of wage benefits. It is valid for 34 diseases and they must be under medical treatment provided under the sic act.

Enhanced sickness benefits:

- Health care services in OPD, IPD, certain drugs, treatment services and certain lab investigations.
- Provision of 7 days of leave for male who undergone vasectomy (permanent sterilization) with 100% of wages.
- Provision of 14 days of leave for female who undergone tubectomy with 100 % of wages.

Medical benefits:

Providing complete free medical health care services to the employee such as:

- Outpatient services (OPD).
- Emergency and ambulance services.
- Referral of employee if complicated cases even outside their state at sic expenses not from employee salary.
- Laboratory services: radiology, pathological tests.
- Maternity and newborn care- antenatal, postnatal, neonatal.
- Family planning services.
- Immunization services.

Disablement benefits:

- An employee who is categorised under temporary or permanent disablement according to ESI hospital gets benefits up to 90 % of wages.

- **For total permanent disablement**: given pension throughout their life time based on their loss of earning capacity.
- **For partial permanent disablement**: portion of life pension.

Dependent benefits:

Provision of 90% of wages (salary amount) to the family members such as spouse/ children up to 18 months / till marriage in case of death of an employee due to work reasons like accidental injury in work place, poisoning,

Funeral expenses benefits:

Provision of 15,000 rupees to the family of deceased insured person.

Obstetrics/ maternity benefits:

Provision of maternity leave with 100 % wages,

- 4 weeks of leave for any medical conditions (diabetes, hypertension, HIV, hydramnios, anaemia, ash) affecting the pregnancy.
- 6 weeks of leave for miscarriage or abortion.
- 24 weeks (6 months) of leave for delivery.
- The rate of confinement expenses increased from Rs. 2500 to Rs. 5000 per confinement.

Rehabilitation benefits;

Monthly payment of Rs. 10 for the insured person and his family members to continue the medical treatment after retirement or permanent disablement.

A family dispensary unit under Esi act is opened for number of insured family units :

- 1 doctor dispensary in areas with 1000 or more insured person family units.
- 2 doctor dispensaries in areas with 3000 insured person family units.
- 3 doctor dispensaries in areas with 5000 insured person family units.
- 5 doctor dispensaries in areas with 10000 insured person family units.

10. Trauma care

Introduction:

Trauma and its effects are the leading cause of death and disability in prime of life, it is called as neglected disease of the modern society. Excess mortality and disability occur due to traumatic injury in head and spinal cord injuries.

Causes and risk factors:

- First most common cause of death after trauma is severe head injury.
- Second m/c cause of death after trauma is transaction of great vessels.

Regions of trauma:

- Head and brain injury

- Maxillofacial trauma - eye, ear, nose, oral trauma.
- Spinal cord injury.
- Chest trauma
- Abdominal trauma
- Pelvic traumatic fracture
- Limb injury

Management protocols:

Single rescuer/ solo physician	• Primary survey (Abcde). • referral services if injury is severe life threatening. A- Airway B- Breathing C- Circulation D- Disability and drugs E- Exposure& environmental control
6 to 10 bedded PHC	• Primary survey (Abcde). • History collection – ample • Diagnostic testing. • Referral criteria
30 bedded CHC& speciality hospitals.	• Primary survey & assess for other injuries. • Secondary survey is done if Abcde is stable. • Diagnosis and management promptly.

COMMUNITY HEALTH NURSING – II

MODEL QUESTION PAPER AND ANSWER KEY – 5

1. Five-year plan years & detail about current five years plan.

Definition:

- A 5-year plan is a comprehensive outline that details the goals, strategies and actions a person or organisation intends to take over a span of five years, typically involving milestones and objectives and objectives to be achieved in various areas. This approach provides a structured pathway for achieving progress.
- Five-year plan is an orderly process of defining the community, health problems, identifying unmet needs, surveying the resources to meet them, establishing priority goals and projecting actions to accomplish the purpose of the program.

Five Year Plan	Period	Objective
First Five Year Plan	1951-56	Overall development of agriculture
Second Five Year Plan	1956-61	Industrial development
Third Five Year Plan	1961-66	Self sufficiency in food , self sufficiency in economy
Fourth Five Year Plan	1969-74	Self-reliance and sustained growth
Fifth Five Year Plan	1974-79	Removal of poverty
Sixth Five Year Plan	1980-85	Improvement in infrastructure in agriculture and industry.
Seventh Five Year Plan	1985-90	Modernisation and increase in employment opportunities.
Eighth Five Year Plan	1992-97	Human resource development
Ninth Five Year Plan	1997-02	Rural development and decentralized planning.
Tenth Five Year Plan	2002-07	Increase in investment.
Eleventh Five Year Plan	2007-12	Overall development of the people.
Twelfth Five Year Plan	2012-17	Sustainable development

Write detail about current five-year plan- **twelfth five-year plan**

2. School health services and role of nurse

Definition:

According to modern concepts, school health services is an economical and powerful means of raising community health and more important in future generations.

History and organisation:

- School health services first started in India .

- School health services run under primary health centre (PHC).
- It requires all time duty medical officer to cover around 5000 to 6000 children a year.

Health problems of school children:

- Malnutrition
- Infectious diseases
- Intestinal parasite
- Diseases of skin, eye and ear.
- Dental caries.

Objectives:

- Promotion of positive health.
- Prevention of the diseases.
- Early diagnosis, treatment and follow up services.
- Awakening of health consciousness (health education) in children.
- Provision of healthful environment.

Aspects / components of the school health services:

Remedial measures and follow up.
Prevention of communicable diseases.
Healthful school environment
Nutritional services
First aid and emergency care.
Dental health
Eye health
Mental health
Health education
Education of handicapped children.
Proper maintenance and use of school health records.

Role of nurse in school health services:

- Health assessments
- Health care services
- Health care education
- Emergency plans and training staffs.
- School health environment.
- School health promotion activities.
- Health policies and programs.

Health assessments:

- Screen students for care needs, identify and refer students for improving health conditions.

- Assess for visual defects, dental problems, mental problems, nutritional problems, minor ailments.
- Screening of 30 identifies health conditions through Rastriya ball Saathiya Karakoram (risk) mobile health services with referral and treatment.

Health care services:

- Dealing with chronic health conditions, cure the injuries and illness.
- Provide iron and folic acid supplementation, albendazole tablets.
- Provision of sanitary napkins through menstrual hygiene scheme.
- Age-appropriate vaccination.
- Treat all the issues faced by the students and refer immediately if emergency.

School health environment:

The nurse should know the healthful school environment and maintain it as listed below:

Water supply should be safe, portable and continuous. Walls should be heat resistant, thickness should be >10-inch exterior wall White colour wall and it should be whitewashed annually. Windows should be at least 2.5 feet above the floor.
area of primary schools- 5 acres. Area of elementary schools- 10 acres + 1 acre per 100 children.
Toilet : 1 urinal for 60 students and 1 latrine for 100 students.
Enclosed by fence. **Edibles** – canteen should be school approved vendor.
Room for students should be adequate – 40 students/ classroom.
Light naturally should come from left side of the classroom.
Avoid heavy noise near the school. Air/ ventilation should be adequate.
Minus desk should be provided.
Playground facilities.

School health promotion activities:

- Age-appropriate learning for healthy behaviour.
- Delivery through school teachers as health and wellness ambassadors.

Primary school	**Middle school**	**High school**
*Health- growth and development. *Personal safety *Nutrition and physical activity. *Hygiene practices *__Prevention of diseases__: dengue, malaria, tb, HIV, diarrhoea, worms, anaemia, vaccine preventable diseases.	*Puberty changes *Eye care, oral care *Mental health *Nutrition *meditation & yoga *Media literacy *Prevent substance abuses *HIV/ aids-prevention.	*Prevention of substance abuse *Sexual and reproductive health Violence prevention Unintentional injury Road safety Nutrition Meditation and yoga

4. Mukerji and bore committee

Mukerji committee- 1965

- Multipurpose health workers suggested by chadar committee is underperforming due to work over loaded so, easiness of health workers done by respective appointment of separate workers for malaria & family planning services.
- Government approved no link between malaria & family planning services.

bore committee- 1946.

Build social physicians by 3 months training in social and preventive medicine (spa) in medical curriculum.
Health survey and developmental committee.
Organize and integrate both preventive and curative services at all levels of health care delivery.
Rise/ increase the number of PHC – primary health centre **Short term measures** : 1 PHC for 40000 population. **Long term measures** : 1 PHC for 10000 to 20000 population.
Extensive / comprehensive health care.

This committee focuses on development of PHC in two stages:

For short term measures:

One PHC for 40000 population in rural areas and each PHC should have the following health care team members,

For long term measures: called as 3 million plans.

- One PHC hospital for each 10000 to 20000 population.
- Primary health units should have 75 beds.
- Secondary health units should have 650 beds.
- Regional district hospitals should have 2500 beds.

6. Principles of health education

- Participation
- Reinforcement
- Interest
- Known too unknown
- Credibility
- Comprehension
- Initiate motivation
- Feedback
- Learning by doing
- Leadership
- Ensure good human relations
- Setting an example
- Sources- - man, material and money (3 m's)

7. Theories of community health nursing

Definition:

"a nursing theory is a set of concepts, definitions, relationships, and assumptions derived from nursing models or from other disciplines and project a purposive, systematic view of phenomena by designing specific inter-relationships among concepts for the purposes of describing, explaining, predicting, and /or prescribing."

List of theories in nursing:

• Pender's health promotion model • Philosophy and caring model - jean Watson
• Cognitive development theory- jean Piaget's.
• Newman's betty conceptual system model. • Milo's framework for prevention.
• Transcultural nursing - madeleine Leininger
• Henderson's Virginia - need based theory
• Environment theory - Florence nightingale
• Orem's self-care deficit theory. • Orlando - nursing process theory
• Roger's life centred process. • Roy's adaptation model
• Imogene king - goal attainment theory • Ida jean Orlando - nursing process theory
• Erikson's theory of psychosocial development

System orientation :

- Betty Newman's conceptual model.

Developmental orientation:

- Dorothea Orem's self-care deficit theory.

Systems and instructional orientation:

- Roy's adaptation model
- King's interacting systems model

Systems and developmental orientation:

- Roger's life centered process

Others:

- Florence nightingale environmental theory.

Florence nightingale environmental theory

Introduction:

Florence nightingale is considered as first nursing theorist . She believed the environment had a strong influence on patient outcomes .

- **Theory:** environmental theory
- **Founder:** Florence nightingale
- **Birth:** 12th may 1820 at
- **Special day:** her birth day may 12 is celebrating international nurses' day.
- **Special name:**

1. Founder of modern nursing.
2. The first nursing theorist- theory is "what it is, what it is not".
3. "The lady with the lamp"

❖ **Contribution to nursing:**

1. She given care to the injured soldiers during Crimean war (1852- 1854) with carrying of lamp in her hand.
2. She was the first person proposed nursing education & training.

❖ **Died :** 13th august 1910 at

Assumptions of nightingale's theory

- Natural laws.
- Mankind can achieve perfection.
- Nursing is a calling.
- Nursing is an art and a science.
- Nursing is achieved through environmental alteration.
- Nursing requires a specific educational base.
- Nursing is distinct and separate from medicine.

Ten major concepts / key aspects of environmental theory:

1. Patient should have clean air and controlled temperature.
2. Patient should have access to direct sunlight and avoid over noise.
3. Rooms should be kept clean.
4. Hospital facilities should be well constructed.
5. Bedding should be changed and aired frequently.
6. Patients should be kept clean and hands should be washed frequently.
7. Patients should be offered a variety of scenes such as new books, flowers etc. to prevent boredom.
8. Nurses should be positive and do not give negative vibes.
9. Offer a variety of small meals rather than large meals.
10. Consider not only the individual patients but the context of where he or she lives.

Meta paradigms of nursing:

1. Patient
2. Environment
3. Health
4. Nursing

Nursing

Nursing is different from medicine and the goal of nursing is to place the patient in the best possible condition for nature to act. Nursing is the "activities that promote health (as outlined in canons) which occur in any care giving situation. They can be done by anyone."

Person

people are multidimensional, composed of biological, psychological, social and spiritual components.

Health

Health is ―not only to be well, but to be able to use well every power we have. Disease is considered as the absence of comfort.

Environment

Poor or unhealthy environments can cause altered health status and disease. Environment could be altered to improve conditions so that the natural laws would allow healing to occur.

Examples:

Stagnation of water during rainy season can cause malaria & dengue.

Criticisms

1. She emphasized subservience to doctors.

2. She focused more on physical factors than on psychological needs of patient.

Conclusion

Florence nightingale provided a professional model for nursing organization. She was the first to use a theoretical foundation to nursing. Her thoughts have influenced nursing significantly.

8.National std & aids control programme;

National roti/ sit control programme (sit - sexually transmitted infections, roti- reproductive tract infections)

Objectives:

- Enhance service to all, especially women and adolescents.
- Prevention of sit/ roti through condom usage, sex partner management and follow up.
- Quality sit/ roti service provision for high-risk groups such as commercial sex workers.

Strategies:

- Provision of standardized sit/roti management to general population.
- Provision of standardized sit/roti management to high-risk group population.
- Provision of laboratory surveillance of sit/roti.

Components of case management:

1. History collection.
2. Clinical examination
3. Correct/ appropriate diagnosis
4. Early and effective treatment.
5. Counselling, risk reduction and voluntary HIV testing.
6. Provision of condoms.
7. Partner management.
8. Follow up care.

National aids control programme- NACP

India 's response to the HIV/aids was initiated in the form of Eurosurveillance in 1985 and the national aids control programme was launched in 1992 and is being implemented by Naco- national aids control organization as a comprehensive programme for the prevention and control of HIV/ aids in India.

Milestones & phases:

Searching of HIV in different groups, locations & screening- 1985-1991

NACP phase 1: 1992 to 1999.

NACP phase 2 : 1999 to 2006.

NACP phase 3 : 2007 to 2012.

NACP phase 4 : 2012 to 2017.

NACP phase 4 extension : 2017 to 2021- known as national strategic plan.

NACP phase 5: 2021 to 2026.

Objectives:

- To reduce spread of HIV infection in India.
- To reduce the blood born transmission of HIV to less than 1 %.

Suraksha clinics :

Kit no.	Syndrome	Color	Contents
Kit 1	UD (Urethral discharge), ARD (Anorectal discharge), Cervicitis	Gray	Tab. Azithromycin 1 g (1) and Tab. Cefixime 400 mg (1)
Kit 2	Vaginitis	Green	Tab. Secnidazole 2 g (1) and Tab. Fluconazole 150 mg (1)
Kit 3	GUD (Genital ulcer disease) Nonherpetic	White	Inj. Benzathine penicillin 2.4 MU (1) and Tab. Azithromycin 1 g (1) and Disposable syringe 10 mL with 21 gauge needle (1) and Sterile water 10 mL (1)
Kit 4	GUD (Genital ulcer disease) Nonherpetic	Blue	Tab. Doxycycline 100 mg (30) and Tab. Azithromycin 1 g (1)
Kit 5	GUD (Genital ulcer disease) Nonherpetic	Red	Tab. Acyclovir 400 mg (21)
Kit 6	LAP (Lower abdominal pain)	Yellow	Tab. Cefixime 400 mg (1) and Tab. Metronidazole 400 mg (28) and Cap. Doxycycline 100 mg (28)
Kit 7	IB (Inguinal bubo)	Black	Tab. Doxycycline 100 mg (42) and Tab. Azithromycin 1 g (1)

National aids control programme (NACP) - phase- 5

NACP phase-v (2021-26)

Specific objectives of nap- phase 5:

HIV/aids prevention and control : 95%- 95%- 95% strategy

1. 95% of people at risk to get HIV -use comprehensive prevention.
2. 95% of HIV positive know their status, 95% of those who know their status are on treatment and 95% of those who are on treatment have suppressed viral load.
3. 95% of antenatal & lactating females with HIV have suppressed viral load to prevent vertical transmission of HIV to baby.
4. Less than 10% of people living with HIV and key populations experience stigma and discrimination.

B. STI/RTI prevention and control

- Universal access to STI/RTI services to high-risk populations to HIV.
- Eliminate the vertical transmission of syphilis.

Goals:

Goal 1: reduce annual new HIV infections by 80%.

Goal 2: reduce aids-related mortalities by 80%.

Goal 3: eliminate vertical transmission of HIV and syphilis.

Goal 4: promote universal access to quality STI/RTI services to at-risk and vulnerable populations.

Goal 5: eliminate HIV/aids related stigma and discrimination.

Strategic interventions to achieve the goals/ activities of nap:

Ninety-five strategy 95-95-95 95 % of cases to be diagnosed, 95% to be started on art and 95 % should have remission (controlled on treatment).
Adolescent education on safe sexual practices.
Condom promotion
Surveillance program (sentinel surveillance) Safe blood transfusion
Usage of shared needles should be avoided
Red ribbon expresses
Vertical transmission prevention (mother to child transmit)
Education to prevent HIV/ std
ICTC centre –integrated counselling and testing centre
Levels of organization of art at district, sub-district and centre of excellence
Link worker scheme to link services with the community.
Ankara/ aids vaccine- replicons.
Nirankar scheme to enhance diagnosis and art promotion.
Clinics- Suraksha for std management and sera surveillance.
Eastern states (north east) program for behaviour risk reduction.

Goal 1:reduce annual new HIV infections by 80%.

- Interventions for integrated services through referral and linkages for co-morbidities such as viral hepatitis, tuberculosis, sexual and reproductive health, mental health, and non-communicable diseases.
- Interventions for injecting drug users (ide) for harm reduction services of needle-syringe exchange programme (neep) and opioid substitution therapy (Ost) to reduce death / mortality from viral hepatitis.
- More risk of HIV among iv drug users and risk of hepatitis-c virus among prisoners.
- Provide counselling, testing, and treatment services for integrated package of HIV, tb, and hepatitis when inmates are inside the prisons directly or through the referral for the released jail inmates.
- strengthening of HIV prevention efforts and HIV testing among high-risk groups ,at-risk adolescents , youth men, and women with high-risk behaviours.
- Sustain focus on adolescent and youth population to promote safe sexual behaviour practices : nap always gives priority for adolescence education programme (ape), red ribbon clubs (arc) & out of school youth's programme.
- Strengthen the population size estimation and field epidemiological intelligence for coverage expansion and saturation.

Goal 2: reduce aids-related mortalities by 80%.

- HIV counselling and testing services (hits) and expand it.
- Develop the communication campaigns focusing on risk perception and hits uptake.

- Existing hits centres made to be efficient active case findings which promotes early detections.
- Maintain existing care, support, and treatment (cost) services models and expand further through sustainable manner.
- Focus on rapid art initiation and advanced HIV disease management.
- Use of public sector laboratories for viral load measurement.
- Prioritize sexual and reproductive health services for women with HIV risk or living with HIV positive.

goal 3: eliminate vertical transmission of HIV and syphilis.

- Strengthen the primary prevention through coordinated actions.
- Testing of pregnant women for HIV and syphilis while antenatal visits.
- Early diagnosis of infants and all children living with HIV.
- Dual test kits (HIV& syphilis) to dual elimination by benzathine penicillin g (big) to treat pregnant women with syphilis.
- Strengthen the screening / confirmatory centres & treatment centres.
- Prioritize family planning services for people with HIV.
- Action plan towards elimination of vertical transmission**.**

Goal 4: promote universal access to quality sit/roti services to risk and vulnerable populations.

- Dual testing at hits centres - dual test kit (HIV& syphilis) for testing and treatment algorithms in a very cost-efficient manner.
- Nap make collaboration with national health mission.
- update the sit/roti management guidelines periodically .
- Promote active case findings facilitating for early detection of HIV/ aids.
- Strengthening of laboratory capacities for etiological diagnosis of routine & treatment failure cases, strengthening of antimicrobial surveillance and strengthen three-tier lab for better outcome.
- Strengthen the supply chain (**Suraksha clinic)** by providing colour coded drug kits for roti/ sit management.

Goal 5: eliminate HIV/aids related stigma and discrimination.

- ❖ Avoiding the negative view about HIV/ aids infection through medias and health education that contributes to knowledge, attitude and behavioural changes.

Levels of prevention of HIV/ aids:

Primary prevention	➢ Health education to prevent HIV/ std's. ➢ Sterilization practices of syringes and needles. ➢ Blood donor screening for HIV/ aids. ➢ Drug users- prevent syringe /needle exchanges ➢ Antiretroviral therapy (art) for HIV pregnant women to prevent match. ➢ Avoid breastfeeding if HIV positive women. ➢ Safe sexual practices- use condom. ➢ Voluntary medical male circumcision (vim) to reduce the risk of HIV by 60 %.
Secondary prevention	➢ Antiretroviral therapy (art) to prevent opportunistic infections. ➢ Counselling for individuals/ groups/ family.
Tertiary prevention	Treatment for opportunistic infections and HIV related complications such as, ➢ Diarrhoea in HIV- calcium supplements/ loperamide, adjust diet and fluids. ➢ Herpes zoster- antiviral therapy. ➢ Oral fungal candidiasis- fluconazole/ clotrimazole. ➢ Oral herpes simplex (hsv-1)- acyclovir. ➢ Tuberculosis- anti-tubercular drugs. ➢ Kaposi's sarcoma- no specific treatment.

9. Common nutritional problems in under 5 age group children

Nutritional deficiency is any nutrients that are deficient in their food that are vital to sustain the human life. It occurs when an individual's nutrient intake consistently falls below the recommended requirement.

- Protein energy malnutrition (poem)- kwashiorkor and marasmus
- Over nutrition- obesity
- Nutritional anaemia
- Iodine deficiency disorder (Ida)
- Vitamin a deficiency disorder
- Low birth weight (lbw) babies.
- Endemic fluorosis
- Lathyrism
- Market distortion
- Cancer / cardiovascular disorders, etc.,

10. Waste management

Definition:

- **Bio-medical waste (BMW**) means any waste, which is generated during the diagnosis, treatment or immunization of human beings or animals, or in research activities in the production or testing of biological in the healthcare institutions such as nursing homes, hospitals, laboratories,...
- **Bio-medical waste treatment and disposal facility**" means any facility wherein treatment, disposal of bio-medical waste or processes incidental to such treatment and disposal is carried out, and includes common bio-medical waste treatment facilities.

Aim:

- Reduce infectious, hazardous waste to nature**.**
- Reduce volume of waste**.**
- Recycling the waste**.**
- Prevention from misuse of BMW

Sources of bio-medical waste:

Major sources	**Minor sources**
• Hospitals, labs • Research centres • Animal research • Blood banks • Nursing homes • Mortuaries autopsy centres.	• Health care clinics ,dental clinics • Home care • Paramedics • Pharmaceuticals waste • Funeral services institutions • Infectious waste dressing-swabs, • Toxic waste , • Radioactive chemicals • Bio- degradable ,non- bio- degradable

Classification of BMW:

Category 1	Human anatomical waste
Category 2	Animal waste
Category 3	Live vaccine- micro biotech wastes
Category 4	Sharp waste
Category 5	Discarded and cytotoxic drugs
Category 6	Cotton and cloths- soiled waste
Category 7	Plastic and rubber- solid waste
Category 8	Liquid waste
Category 9	Incinerated waste
Category 10	Laboratory – chemical waste

Biomedical waste disposal:

Blue colour	Body implants, glassware, vials, ampoules.
Red colour	Recyclable waste- rubber, plastic bags, tubes, catheters
Yellow	All infected human anatomical waste and clinical wastes.
White	Sharps, needles, blades, metals.

Process of BMW management:

- Waste generation
- Collection of waste
- Segregation
- Transportation to storage place
- Transport to treatment plan
- Treatment of wastes
- Disposal

Waste survey/ generation :

- Differentiate the types of waste.
- Quantity the waste generated.
- Determine the points of generation and types of waste generated at each point.
- Determine the level of generation and disinfection within the hospital.

Segregation & labelling of containers :

- Basic separation of different category of waste generated at source and thereby reducing the risks as well as cost step in BMW management.
- Segregation is the most important step of biomedical waste management, so effective segregation alone can ensure effective BMW management.
- The bins and bags should carry the biohazard symbol and the labels shall be non-washable and prominently visible.

Collection:

- The collection of BMW involves of different types of containers.
- The containers should be placed in such a way that 100% collection is achieved.
- Sharps must always be kept in puncture proof containers to avoid injuries and infection to the waste handlers.
- BMW should be handled properly by using universal precautions to prevent from any kind of infection.

Storage :

- Once collection occurs then biomedical waste is stored in proper place. Segregated waste of different categories needs to be collected in identifiable containers.

- The duration of storage should not exceed 8-10 hours in big hospitals and 24 hours in nursing homes.
- Each container should be clearly labelled to show the ward where it is kept.

transportation:

- Transportation devices- trolleys, wheelbarrows.
- Manual loading should be avoided as far as possible.
- The containers should be tied before transportation.
- Container should be accompanied with a signed document by nurse/doctors mentioning date , shift ,quantity and destination.

Role of nurse in managing BMW:

- Avoid needle stick injuries.
- Avoid spilling and clean them with disinfectant.
- Proper labelling should be done of the bags.
- Make the provision of safe segregation, handling and transport of BMW.
- Use universal precautions to avoid infection.
- Immunize self and others time to time and maintain the records.
- Report major accidents.
- Regular visits of all the wards and high-risk units.

12. World health organisation (who)

- **Organisation name:** world health organisation (who)
- **Type:** United Nations specialised agency
- **Establishment:** 7thApril 1948 by jean scheme.
- **Headquarters**: Geneva, Switzerland.
- **Director general of who :**Tedros Adhanom Ghebreyesus.
- **Branches:**6 regional offices& 150 field offices worldwide.
- Regional office for who in India located in new Delhi.

Objectives :

"Is the attainment by all people of the highest possible level of health" by collaboration with other health care agencies through the following ways:

- Maintaining collaboration with the United Nations, specialized agencies, government health administrations, professional groups and other organizations to contribute the advancement of health.
- To establish and maintain epidemiological and statistical services to eradicate epidemic, endemic and other diseases.
- The prevention of accidental injuries;
- The improvement of nutrition, housing, sanitation, recreation, economic or working conditions and other aspects of environmental hygiene.

World health day celebration: April 07.
Who was established on April 7, so that day is celebrating world health day every year.

Themes :

- **2020 :** support nurses and midwifes (international year of nurses)
- **2021:** together for a fairer world
- **2022:** our planet, our earth
- **2023:health for all** –marking the 75th anniversary year of who.
- **2024:** my health my rights.

Operational policies/ achievements of who:

1947:	The who established an epidemiological information service.
1955:	The malaria eradication programme was launched.
1965:	The 1st report on diabetes mellitus & creation of the international cancer research agency .
1966:	The who changed its headquarters from the Ariana wing to a newly constructed headquarters in Geneva.
1979:	After two decades of fighting smallpox, a global commission declared smallpox – the first disease in world history to be eradicated.
1974:	The expanded programme on immunization (epi).
1977 and **1978**:	"health for all" was declared.
1988:	The global polio eradication initiative was established.
2000:	To stop tb , partnership created with the urn's formulation of the millennium development goals.
2005:	public health emergency of international concern (phenic).
May 2023	Who announced that covid-19 was no longer a world-wide health emergency.

Functions of who:

All communicable diseases prevention and control
Biomedical research
Cooperation and coordination with other health care organisation
Development of comprehensive health services
Environmental health
Family health
General information and health literature
Health statistics.

COMMUNITY HEALTH NURSING – II

MODEL QUESTION PAPER AND ANSWER KEY – 6

FEBRUARY 2023

1. A) **medical measures to prevent occupational diseases:**

• Pre placement examination
• Medical and health care services
• Periodical examination
• Health education and counselling
• Notification
• Supervision of work environment
• Record maintenance and analysis

Pre-placement examination:

- Examine the employee or worker at the time of recruitment.
- It is the most useful benchmark for the future comparison of the health status of the worker**.**

Medical & health care services:

- Esi- employee state insurance services.
- Factory- first aid care.
- Immunizations

Periodical examination:

Health assessment for employee/ workers should be conduct at least once in a year, monthly/ daily assessment can also be done depends upon the risks of exposure.

Health education and counselling:

- Ideally starts before the recruitment of the employee.
- Content of teaching should be: risk factors, measures to prevent harm, immediate first aid management, correct use of pep kits/ protective measures, simple rules of hygiene practices,

Notification:

- Supervise and periodical inspection of the working environment.
- Periodical check up by the physician.

Supervision of working environment:

- Supervise regularly below the following needs:
- Clean water supply and general plant cleanliness.
- Toilet cleanliness
- Proper garbage and waste disposals.

- Adequate lighting and ventilation.
- Protection against hazards.

Record maintenance and analysis:

Worker's health record book and disability record should be maintained properly and periodical update about their health conditions is necessary.

1.b) causes & prevention of accidents in industry:

Causes:

- Technical causes- unsafe working conditions
- Human causes- unsafe employee's actions
- Personal causes
- Unexpected natural causes

Technical causes: problems or defects in the equipment's, material handling system, tools, industry and general working environment.

1. Mechanical causes
2. Environmental causes

Mechanical causes:

• Mechanical designs and constructions are unsafe
• Equipment's, devices, agencies are defective.
• Checking of boilers and pressure vessels are improper.
• Hazardous arrangement- pilling and overloading.
• Acid valve leakage
• Nails protruding
• Improper mechanical guarding
• Caring/ handling of materials improper.
• Safety guards broken.

Environmental causes:

• Very high-speed work due to huge workload.
• Illumination defects/ improper supply causes eye strain, glares and shadows.
• Rest is inadequate/ lack of break time in between the working hours.
• Over work pressure causes fatigue.
• Number of working days and hours are high above the limits.
• Moisture/ humidity are very high causes drowsiness, fatigue.
• Excessive dusts, fumes, smokes and lack of proper environment.
• Noises, bad odour and flash comes from the nearby machinery equipment and process.
• Temperature low- shivering. High temperature- sweating.

Personal causes:

- Age: above 40 years.
- Health statuses: co-morbid conditions are risk of injury.
- Dependents
- Financial position.
- Home environment
- Lack of knowledge and skills
- Improper attitude towards work.
- Incorrect machine habits.
- Carelessness.
- Daydreaming and inattentiveness
- Fatigue
- Emotional instability – jealousy, revengefulness.
- High level of anxiety.
- Unnecessary exposure to risks.
- No use of safety precautions.

Unexpected/ natural causes:

- Inherent hazards
- Collision
- Slip or fall on floors and stair castings.
- Industrial fires

Prevention of accidents/ injuries in industry:

Accident prevention is the process of integrated program, a series of coordinated activities, directed to the control unsafe personal performance and unsafe mechanical conditions.

Measures to prevent accident/ injury: 4 e's

1. Engineering measures to be safety.
2. Education to the employees about safety procedures.
3. Enforcement- safety rules should be properly enforced.
4. Enlisting.

• Selected employees/ workers must be healthy, adaptable to that working environment, timings etc,
• Awareness about safety measures should be promoted to the workers. • Always wear the personal protective equipment's.
• Floors should be clean and dry. Use caution board if wet/spills.
• Equipment's, tools, materials handling safely.
• Industrial plant should be maintained proper and safely.
• No entry/ precaution board for accident prone area. • Never work on live equipment.

• Designing of industry and equipment's should be safe.
• Use proper tool for the job.
• Safe working methods • Safety devices • Safety provision of supplies • Stop work when needed to address hazards.
• Training of the workers safely. • Toxic substances and chemicals should be properly labelled, sealed, stored and disposed.
• Regular inspection of the working area. • Radiation hazards safety board and awareness.

Measures for ensuring industrial safety:

- Safety committee
- Guarding of machines.
- Proper clothing
- Safety campaign.

Safety organization roles and responsibilities:

- Board director/ CEOs.
- Health and safety manager.
- Human resource manager
- Line manager
- Occupational health services
- Safety officer.

2. A)method and media required to educate the public regarding environmental sanitation

Educational methods/ medias:

Awareness campaign:

Printed medias- newspapers, magazines, brochures and pamphlets to disseminate information regard environmental sanitation. These materials can be distributed in public places, community centres and schools.

Electronic media: leverage television, radio and podcasts to reach a wider audience. Collaborate with local media outlets to broadcast educational programs, interviews and documentaries on environmental sanitation.

Social media: harness the power of social media platforms such as WhatsApp, Facebook, twitter, Instagram , google and you tube to share educational content, info graphs, videos, videos and success stories.

workshops and training programs:

Community workshops: organize interactive workshops in collaboration with local authorities, NGO's and community leaders. This method covers education regarding waste management and hygiene practices by hand on demonstration and engage participants in discussion and group activities.

School programs: develop age-appropriate educational modules on environmental sanitation for school children. Conduct interactive sessions, presentations and competitions to raise awareness among students. Encourage students to take up initiatives like waste segregation and tree planting.

Training program: offer specialised training programs for professionals such as health care workers, sanitation workers and government officials. These focus on best practices, regulations and the importance of maintaining a clean environment.

Public events and campaigns:

Public exhibitions: set up exhibition in malls, community centres and public events to showcase sustainable practices, innovative technologies and success stories related to environmental sanitation, provide interactive displays and informational materials.

2.b) roles & responsibilities of community nursing personnel in family health services:

• Family planning and family welfare services. • Food and nutritional services.
• Adolescent services
• Maternal and child health services. • Minor ailments -prevention and treatment.
• Immunization services. • Inability persons/ handicapped care services.
• Young children care.
• Health monitoring • HIV/ aids counselling, education and testing.
• Elderly care services
• Aid- first aid services. • All the diseases screening, treatment, prevention and counselling.
• Teaching- health education • Transfer/ referral services in case of special needs.
• Healthy environmental sanitation services

Inability/ handicapped care services:

- Guide the family members to support the handicapped persons in the family by meeting their physical, psychological needs.
- Proper referral services to get rehabilitative services.

Family welfare services:

- Identifying the eligible couples.
- Encouraging, motivating the eligible couples to adopt family welfare methods.
- Make sure about the availability of various contraceptives.
- Follow up of family welfare adopters.

Adolescent services:

- Provide weekly iron and folic acid supplementation (IFA).
- Encouraging menstrual hygiene practices.
- Sex education.

Food and nutritional services:

- Assess the nutritional status.
- Plan the menu to meet the nutritional requirements of the members of the family.
- Help them to choose proper food items (locally available foods).
- Nutritional education regarding to hygienic practices, preparation of foods, cooking methods, nutrients available in various foods and nutritional deficiencies.

Elderly care services:

- Therapeutic diet plan for chronic disorders like diabetes, hypertension, cardiovascular disorders etc.,
- Guidance and education regarding activities of daily living, dietary habits, avoidance of bad habits – smoking, drinking, tobacco chewing etc.,
- Prevention of injury and accidents.
- Regular and annual check-up.

First aid services:

- Teach the family members and demonstrate the first aid services to be done in case of emergency such as insect bites, snake bites, bleeding, burns etc.,
- Make sure the availability of first aid box in the family.

Healthy environmental sanitation services:

- Safe drinking water.
- Proper disposal of wastes.
- Make the family members understand the various health hazards of improper sanitation.

-

3. A) child adoption act

Introduction:

Child adoption has an increasing trend in India an across the world. Most adoptions are either because the parents are not able to have their own kids or because they want to support and give a new lease of life to a child who has been left alone in the world.

Definition:

- The term 'child adoption' means acceptance of a child of other parents to be the same as one's own child or the choosing and making that to be one's own which originally was not so. In legal terminology, adoption enables a childless person to make somebody else's child as his own.
- Child adoption is a legal and permanent transfer of all parental rights from one person to another person/ couples is called adoption. Adoptive parents have the same responsibilities and legal rights as biological parents.

Purposes:

- To control population.
- To save a life of a child.
- To provide a good family.
- To provide a better future of child.
- To avoid any kind of treatment to those who can't conceive.

Types:

Open adoption	Adoptive parents and the birth parents keep in touch with each other.
Semi-open adoption	It does not involve direct contact between the birth parents and the adoptive parents.
Closed adoption	Absolutely no contact between the birth parents and the adoptive parents.
Intra-family / relative adoption	Adoption happens within the family.
Domestic adoption	Adoption that happens within the country.
International adoption.	Adopting a child from outside the country.

Laws and legislations for adoption:

The Hindu adoptions and maintenance act-1956.

- The legal process of adopting children by Hindu adults.
- Provide maintenance to various family members including their wife, parents and in laws.

The Hindu minority and guardianship act- 1956.

Juvenile justice- care and protection of children act- 2015:

Indian citizens who are Hindus, Jains, Buddhism, Sikh are allow to adopt a child formally and the adoption is as per the Hindu adoption and maintenance act 1956 which pass enacted as part of the code bills.

Conditions to be fulfilled by an adoptive parent:

- Medically fit and financially able to child care.
- Must be at least 21 years old.
- No legal upper age limit for parents.
- Adoption of the older children, age of the parents may be relaxed.
- Adopted child with special needs, the age limit may be relaxed.
- The parents should not have any legal children in their house before.

Process of adoption:

- Registration
- Home study and counselling
- Referral of the child
- Acceptance of the child
- Filing of petition
- Court hearing
- Court order
- Follow up

Registration:

- ❖ The parents who want to adopt they have to register in a genuine adoption coordinating agency, never register with multiple agencies.
- ❖ Prepare the documentation, submit the same to the agency and get registered.

Home study and counselling:

- ❖ Assess the couple's parenting skills- applicant's motivation, preparations, strengths and weakness on the issue of adoption.
- ❖ This step helps to formulate the report and is submitted to the honourable court.

Referral of the child:

The agency will show medical file, physical examination, report and other relevant information of the child.

Once the couple is comfortable about the details given about the child, the agency will show the child physically.

Acceptance of the child:

Once the couple identifies the child, they can sign the documents pertaining to the acceptance of the child.

Filing of petition:

- ❖ Documents made by the couple to the agency and the child's documents are sent to the lawyer for the preparation of the petition.
- ❖ Once the petition is ready the couple will be called at the court and sign the same in presence of the court order.

Court hearing:

- ❖ The couple should attend the court hearing along with the child.
- ❖ The judge may ask simple questions. If satisfied will pass the order and will also mention the amount to be invested in the child's name.

Court order:

Once the amount is invested and the receipt is shown to the judge the order will be issued.

Follow up:

After the final adoption the agency needs to submit follow up reports to the court about the child's wellbeing for 1 to 2 years.

Documents needed for adoption:

- ❖ Birth certificates of adoptive parents.
- ❖ Marriage certificate of adoptive parents.
- ❖ Certificate of good health from registered medical practitioner.
- ❖ Infertility report if available.
- ❖ Letter of recommendation from family and friends.
- ❖ Employment, income and property certificates.

Role of nurse:

- To meet the needs and desires of their parents.
- Nurse should encourage the parents to maintain emotional bonding with children.
- Nurse should encourage the parents for provide effective child care.
- Nurse should educate the parents about legal and ethical importance.

Conclusion:

Adoption is the creation of new, permanent relationship between an adoptive parent and child. Once this happens, there is no legal difference between a child who is adopted and a child who is born into a family.

3. B) causes & prevention of female foeticide:

Female foeticide is the practice of aborting a female foetus after undergoing a sex determination test in prenatal period (pregnant period).

Causes:

Family pressure from husband
Economical backwards
Thought about girls won't provide protection to the parents
Illiteracy and unawareness
Cultural and religious beliefs
Ideas about females are lower status than male in the society.
Discrimination against girl child. Dowry provision

Family pressure:

Generally, family members do not want a girl child because they have to give a big quantum as a dowry. Ignorance, instability and poverty of peoples are major reasons for avoiding the girl child, so family members especially husband gives pressure to the women to abort the female child.

Economical backward:

The peoples residing in the conditions of poverty and backwardness, they think that girl child needs expenses for growth and development, feedings, education, dowry system etc, So the society avoids the girl child and prefers male child.

Thought about girls won't provide protection to the parents:

- Some cultures adopt that sons are expected to take care of their parents in their old age.
- There are many ways to kill the girl child such as foeticide, female infanticide or avoiding the postnatal health care for girls in certain households.

Illiteracy & unawareness:

- Education makes the provision of knowledge to morality; ethics prevent the gender bias. Illiteracy can lead to encouragement of female foeticide and infanticide.

Cultural & religious preference:

- At the time of death of parents, sons are responsible for carrying funeral/ cremation ceremonies, not by the daughters.
- A son is often preferred as an "asset" since he can earn and support the family; a daughter is a "liability" since she will be married off to another family, and so will not contribute financially to her parents.

Ideas about females are lower status than male in the society.

- Male preference is based on the economic benefits of having a son and the costs of having a daughter.
- Indian parents look to their sons to ensure their futures and care for them in old age and daughters are liabilities because they have to leave to another family once, they are married and cannot take care of their parents.

Discrimination against girl child:

- Differences in gender violence/ gender bias and access to healthcare, immunizations , basic sources such as water, food between male and female children can leads to infant and childhood mortality among girls, which causes changes in sex ratio.
- Gender discrimination is strongly linked to socioeconomic status. Poor families are sometimes forced to ration food, with daughters typically receiving less priority than sons.

Dowry system:

- A dowry is a payment from the bride's family to the groom's family at the time of marriage. The bride's family is expected to bear the burden of high expenses for the groom.
- In Indian society, men are allowed to work in "productive" jobs and gain an income for economic growth of family, but many women are not afforded to go for job.

Prevention and control measures:

Role of nurse in prevention:

- Provide information details about laws and legislation related to female foeticide.
- Prevent female foeticide by collaboration with an and local midwife.
- Register all births and deaths under the preview of the panchayat.
- Raise the gender awareness sensitivity through public education programmes.
- Women need increased access to education and economic resources in order to reach that level of gainful employment and change people's perceptions of daughters being financial liabilities.

Measures taken by the government of India:

1. Legislation act named, pre-conception and pre-natal diagnostic techniques act 1994 which was amended in 2003.
2. Steps to stop illegal sex determination.
3. Ministry of information and communications technology to block sex selection advertisements on websites.
4. Inspection of ultrasound diagnostic facilities by national inspection and monitoring committee (nick).

Legislation acts	Year	Goals
Dowry prohibition act	1961	Prohibits families from taking a dowry, punishable with imprisonment
Hindu marriage act	1955	Rules around marriage and divorce for Hindus.
Hindu adoption and maintenance act	1956	Deals with the legal process of adopting children and the legal obligation to provide "maintenance" for other family members.
Immoral traffic prevention act	1986	Stops sex trafficking and exploitation
Equal remuneration act	1976	Prevents monetary discrimination between men and women in the workforce
Female infanticide act	1870	Prevents female infanticide (act passed in British India)
Ban on ultrasound testing	1996	Bans prenatal sex determination.

Central and state government schemes :

Scheme	Year	Goals
Balika Samrddhi yojana	1997	Cash transfer to mother based on child meeting educational conditions and partaking in income generating activities.
Dhan Laxmi scheme	2008	Cash transfers to family after meeting conditions (immunization, education, insurance).
Beti bacha, beti padhao	2015	Cash transfers based on educational attainment.
Cradle baby scheme- Tamil Nadu only	1992	To eradicate female infanticide and to save the girl children from the clutches of death.
Girl child protection scheme-bandha state only	2005	Cash transfer based on age and educational attainment. Family also has to partake in family planning.
Sukanya Samrddhi account	2015	Interest earned on bank account opened for daughter after she turns 21.

No present, no past, no future without girl child.

Womanish or female foeticide is self-murder procedure. So, save the girl child and secure the future.

4. Role of nurse in preventing minor ailments at home

Problem risks	Preventive measures	Outcomes/ goals
Allergies	Control of airborne allergies, pollen grains and dusts. House should be clean regularly. Proper disposal of wastes in home and community. Maintain environmental sanitation.	To control of airborne infections and bronchial allergies.
Bytes, burns & scalds	**Bytes:** No webs, no nests in the house windows, doors. **Burns:** Don't keep stoves and fire related things near the children.	To prevent bite of bees, strings and avoid burns.
Circulatory problems	Avoid cut injury by careful handling of knives and sharp instruments. Avoid sharp instruments near children. Always keep a first aid box in home.	To prevent blood loss and unnecessary injuries.
Diarrhoea & vomiting	Maintain food safety and food hygiene. Clean the fruits and vegetables with salt water before consuming. Close the drinking water- water safety. Nail care and hand hygiene to be maintained. Personal hygiene is necessary.	To prevent dehydration due to diarrhoea and vomiting.
Deworming	Deworming tablets to be supplemented every 6 months 500 mg oral.	To prevent worm infestation in intestines causing iron deficiency anaemia.
dental care	Regular brushing of teeth twice a day. Circular method brushing. Frequent mouth wash after ingestion of spicy foods. Avoid heavy candies intake. Adequate fluoride in their diet.	To prevent dental carries and erosion of tooth.
Elimination of bowel and bladder	Intake of adequate fluids based on body weight. Consume fruits, vegetables and fibre diet in daily foods. Have a regular bowel pattern. Avoid holding of stool and urine.	To prevent constipation and urinary tract problems such as Uta, urolithiasis.
Food & fluids safety	Close the vessels while cooking. Fluids/ water should be boiled and keep in clean container. Avoid refrigerated foods, bottled and pre-prepared/ packed foods. Awareness about food adulteration.	Prevent food-borne diseases.
fluids and electrolytes	Avoid dehydration by adequate water intake. Drink 2 litres of water for 20 kg body weight per day.	To prevent fluids and electrolyte imbalance.

	Intake of one fruit and one vegetable per day is necessary. Green leafy vegetables in daily diet must be consumed.	
good hand and personal hygiene	Always maintain good hand hygiene while, Before cooking, before and after eating. Before give the foods to infants and others. Before and after using toilets. After the hand is soiled.	To prevent contaminate infections.
healthy life style	Life style modification techniques must be allowed. Quiet smoking, avoid substance abuse. Daily physical exercise and walking. Sleep, rest and relaxation are essential. Always think good, do-good things. Spend time in natural parks& sunlight. Spend time with positive peoples and good environment.	To lead a healthy life.
ingestion of nutrient foods	Green leafy vegetables intake daily. Include protein rich diet for muscle growth. **Iron rich content**- dates, meats, liver must be consumed periodically. **Iodine content:** sea foods and adequate salt intake in diet. **Vitamin a content**- milk, eggs and green leaves to be consumed. **Vitamin c content**: amla, guava, gooseberry to be consumed.	To prevent nutrient deficiency disorders and malnutrition.

6. Testicular self-examination (Tse):

A testicular self-exam (Tse) is an inspection of the appearance and feel of the testicles themselves standing in front of a mirror. It can give a greater awareness of the condition of the testicles and help them detect changes.

- Boys can start doing self-exams during their teens
- Do a self-exam each month – it only takes a few minutes
- Do the exam right after a hot bath or shower, when the scrotal skin is most relaxed and the testes can be felt easily.

8. Mother and child tracking system:

Introduction:

The women must have access to appropriate health care during pregnancy, childbirth and immediately after child birth to prevent maternal deaths. When a mother dies, children lose their primary care giver and causes personal tragedy to children, nation, her community and her family.

Ministry of health and family welfare launched application mats in December 2009 to track the mothers and children for health care.

Definition:

- ❖ Mother and child tracking system (mats) is an initiative of ministry of health and family welfare, web-based reporting software under rich- ii programme to ensuring full spectrum of health care and immunization services to pregnant women and children up to 5 years of age.
- ❖ Mats is an innovative, web based, name-based tracking system of mother and children till 5 years of age to access all the health care services.

Goals:

- Tracking of pregnant women for antenatal, delivery and postnatal health services.
- Tracking of children for immunization.

Objectives:

- To facilitate close monitoring of regular check-ups and service delivery to pregnant mothers and immunization of mother and children.
- To follow up drop outs and improve service delivery coverage.
- To promote safe institutional deliveries and immunization of mothers & children.
- To reduce the infant mortality , maternal mortality and total fertility rates.
- To promote and facilitate timely delivery of full services to mothers and children.

Series offered in tracking system:

- Registration of pregnant women
- Antenatal, delivery and postnatal care services
- Registration of children for immunization.
- Immunization services to children.
- Integration with other applications like pumps, mar, mictic, etc.,
- Used technology to update the service live on the mat's portal.
- Allotment of health provider
- SMS alerts to beneficiary and health provider.

Data capture in web:

- Identification details- name, age, phone no, address, aid, religion.
- Location details- district, state, block
- Health provider details- an, Asha, linked facility.
- ANC details- lamp, Edd. Antenatal care.
- Pregnancy outcomes.
- Infant details.
- Immunization details.

Salient features:

Efficient digital data entry to reduce paper work:

The application has encoded antenatal, postnatal, infancy and childhood forms are uploaded in online, so the paper and writing works are minimized.

Identification and referral of high-risk cases with SMS alert system:

The SMS alerts are sent to the concerned health functions and family ensure follow up to complete loop of care.

Access to training videos:

Video guides are uploaded in the application to provide step by step guidance on conducting a variety of examinations and tests during pregnancy and childhood.

Benefits of met:

To the beneficiaries:

- Facilitates timely delivery of services and better interaction with health care provider.
- Information about desired services and government schemes.

Benefits to the health care provider- an/ Asha:

- Auto generation and micro planning of work plan.
- SMS based work plan.
- Readily available services.

Benefits to the states:

- Facilitates identification of poor performing districts, health facilities.
- Graphical record and progress report- real time.
- Better data analysis for preparation of district and state action plans.
- Dedicated helpdesk for feedback and suggestion.

Benefits to the centre:

- Directly monitor the delivery of mother and child health (much) benefits.
- Better assessment of Janani Suraksha yojana(jay), jess and other benefits.
- Ensure tracking of full immunization course of all children.
- Facilitates close monitoring of ANC and pink check-ups of pregnant women and reduce the avoidable complications.
- Facilitates identification of poor much service performing states/ districts.

9.homeopathy system of medicine

Homeopathy is one of the national systems of medicine and plays a vital role in providing health care to large population through the holistic approach towards the sick individual through promotion of inner balance at mental, emotional, spiritual and physical levels.

Definition:

- The word homoeopathy is derived from the Greek word ‘homes’ means similar & ‘pathos’ means suffering. Homoeopathy is the treatment method for treating the sick person by therapeutic agents that have the power to produce similar symptoms in healthy human beings and simulate the natural disease, which is capable of bringing cure in the diseased person.

Treatments:

It also has a positive role in improving the quality of life in incurable chronic diseases like cancer, HIV/aids, terminally ill patients and incapacitating diseases like rheumatoid arthritis, etc.

Advantages:

- These therapies are safe, effective, and these made up of natural substances when compared to other therapies.
- These drugs acts on the human system (self-protective) to fight the disease process rather than acting against microbial agents.
- Method and mode of administration of medicines is easy and no invasive methods, highly palatable, no adverse side effects thereby enhancing their acceptability.
- More cost-effective (low-cost therapy) when compared to other therapeutic systems.

MDWIFERY AND OBSTETRICAL NURSING

MODEL QUESTION PAPER AND ANSWER KEY - I

I) ESSAY QUESTION:

1) a) EXPLAIN THE SCREENING TEST AND ITS INTERPRETATION FOR GESTATIONAL DIABETES (3)

i) Urine should be tested for glucose at every AN visit (glycosuria 1+ or more is detected)

ii) Plasma glucose measurements whenever glycosuria is detected and 24 – 28 weeks for women with average risk is recommended

iii) A 75g 2-hour OGTT should be performed if the random blood glucose concentrations are >140mg. It is considered abnormal, if between 28 and 34 weeks of pregnancy, glucose levels in two out of 4 samples exceeded the following:

- Fasting : 90mg
- 1 hour after ingestion of 75g of glucose: 165mg
- 2 hours after ingestion of 75g of glucose: 145mg
- 3 hours after ingestion of 75g of glucose: 125mg

b) LIST THE RISK FACTORS AND COMPLICATIONS OF GESTATIONALDIABETES (4)

Risk factors of GDM

- Age > 30 years
- Obesity
- Positive family history of diabetes
- History of stillbirth
- History of delivery of a large infant (>4000g)
- Glycosuria
- History of unexplained neonatal death
- History of congenital anomaly
- History of pre-eclampsia in multipara
- Polyhydramnios
- Poor reproductive history (>3 spontaneous abortions in I and II trimesters)
- History of diabetes in previous pregnancy

Complications of GDM

- Maternal complications
- Abortion
- Preterm labor
- Infection
- Increased risk of pre eclampsia
- Maternal distress
- Diabetic retinopathy
- Diabetic nephropathy
- Ketoacidosis
- Prolonged labour

- Shoulder dystocia
- PPH
- Operative interference
- Puerperal sepsis
- Lactation failure
- Fetal complications
- Fetal macrosomia
- Congenital anomalies.

1)c) DEVELOP A NURSING CARE PLAN FOR A WOMAN OF 32 WEEKS GESTATION WITH GDM (8)

1. Establish an initial database, and maintain serial documentation of test results throughout the pregnancy.
2. Provide mother and family teaching.
   - Assess the mother's understanding of GDM and its implications for daily life.
   - As needed, explain the effects of gestational diabetes on the mother and fetus.
   - Point out the need for frequent laboratory testing and follow-up for mother and fetus, for example, to prevent infection and assess other potential complications.
   - Discuss and demonstrate insulin self-injection
   - Demonstrate how to self-monitor blood glucose level.
   - Explain the need to test urine for ketones, which are harmful to the fetus.
   - Point out the importance of keeping daily records of blood glucose values, insulin dose, dietary intake, periods of exercise, periods of hypoglycemia, kind and amount of treatment, and daily urine test results.
   - Discuss potential complications and their management.
   - Diabetic ketoacidosis is a multisystem disorder resulting from hyperglycemia in which plasma glucose levels exceed 350 mg/dL. (Table 3)
   - Hypoglycemia is a disorder caused by too much insulin, insufficient food, excess exercise, diarrhea, or vomiting. Client and Family Teaching Table 4 list signs and symptoms of hypoglycemia and hyperglycemia.
   - Explain the need for continued evaluation during the postpartum period until blood glucose levels are within normal limits.
3. Arrange to consult with a dietitian to discuss the prescribed diabetic diet and to ensure adequate caloric intake

Nursing diagnosis (Should write the care plan for the following nursing diagnosis)

- Risk for Altered Nutrition: Less Than Body Requirements
- Risk For Maternal Injury
- Risk For Fetal Injury
- Deficient Knowledge

2)a) EXPLAIN THE PHYSIOLOGICAL CHANGES THAT OCCUR IN FIRST STAGE OF LABOUR (8)

FIRST STAGE OF LABOUR – It starts from the onset of true labour pain and ends with full dilatation of the cervix

Two main events

i) Dilatation and effacement of the cervix

- Uterine contraction and retraction of the upper segment pushes the fetus, the lower segment and the cervix dilate
- Formation of bag of membranes
    - Hind waters
    - Forewaters

Cervix becomes thin, the muscular fibers of the cervix are pulled upward and merges with the fibers of the lower uterine segment**.**

ii) Lower uterine segment

- Progressive thinning of the lower uterine segment and formation of physiological retraction ring.

2) B) WRITE THE NURSING MANAGEMENT OF A MOTHER WITH PREMATURE LABOUR (7)

1. Assess the mother's condition and evaluate signs of labor.

- ✓ Obtain a thorough obstetric history.
- ✓ Obtain specimens for complete blood count and urinalysis.
- ✓ Determine frequency, duration, and intensity uterine contractions.
- ✓ Determine cervical dilation and effacement.
- ✓ Assess status of membranes and bloody show.

2. Evaluate the fetus for distress, size, and maturity (sonography and lecithin-sphingomyelin ratio)

3. Perform measures to manage or stop preterm labor.

- ✓ Place the client on bed rest in the side-lying position.
- ✓ Prepare for possible ultrasonography, amniocentesis, tocolytic drug therapy, and steroid therapy.
- ✓ Administer tocolytic (contraction-inhibiting) medications as prescribed.
- ✓ Assess for side effects of tocolytic therapy (e.g., decreased maternal blood pressure, dyspnea, chest pain, and FHR exceeding 180 beats/min)
- ✓ Provide physical and emotional support. Provide adequate hydration.
- ✓ Provide client and family education.

Nursing Diagnosis

1. Anxiety
2. Activity Intolerance
3. Risk for [Fetal] Injury
4. Acute Pain
5. Deficient Knowledge

3)a) LIST THE MEASURES FOR CONTROLLING INFECTION IN NEONATAL INTENSIVE CARE UNIT (6)

1)Prevent entry of microbes into the NICU

a. Clean immediate environment:

This can be prevented by following the 6 C's: (1)Clean perineum, (2)Clean delivery surface, (3)Clean cord and (4)Cutting instrument, (5)Clean cord care, and (6)Ensuring that nothing unclean is introduced into vagina. Equipment for resuscitation in well baby area should be cleaned and regularly autoclaved.

b. Standardize the NICU design:

i. Location of NICU:

ii. Airborne infection isolation room:

iii. Hand washing station:

c. Hand hygiene

d. Use of alcohol—base hand rubs (ABHR)

e. Visitors' policy / Mobile restriction

f. Gowning to reduce nosocomial infection

g. Jewellery and fingernails Policy

2)Prevent proliferation of microbes in the NICU

Good housekeeping routines are helpful in reducing the proliferation of microbes. Avoid wet areas inside the NICU. Dry and clean NICU is unlikely to harbour microbes.

3)Preventing infection spread from proliferation sites to baby and from one baby to other
The following steps are important in this regard.

a. Nurse to patient ratio:

b. Use Disposables:

c. Laminar flow system for drugs, fluids and TPN preparation:

4)Prevent entry of microbes into the infant

a. Cord care

b. Skin care

c. Precautions during procedures

d. Precautions during CVC / PICC / Umbilical catheter / Handling of catheter

e. Precautions during endotracheal intubation and suction

5)Breastmilk/Breastfeeding and Correct preparation of Formula Milk (when indicated)

6)Kangaroo Mother Care/Early discharge

7)Infection Control protocols

3)b)EXPLAIN THE MEDICAL AND NURSING MANGEMENT OF NEWBORN WITH RESPIRATORY DISTRESS SYNDROME: (9)

MEDICAL MANGEMENT

Treat in NICU

- warm incubator
- Endotracheal intubation to relieve hypoxia and acidosis
- correction of hypovolemia with albumin or other colloid solution
- frequent monitoring of arterial PO_2, PCO_2, pH
- IV administration of bicarbonate 1mEq/Kg or 2ml/Kg body weight
- Surfactant replacement therapy
- Mechanical ventilation if respiratory acidosis
- Intragastric feeding. If risk of vomiting IV administration of 10% glucose in amount of 70ml/Kg of body weight

NURSING MANAGEMENT

The main nursing care are aimed at improving NB´s breathing pattern. Along with the physical therapist, perform the posture changes needed to the respiratory baby pattern. Proper positioning of the baby and oxygen supply necessary for the breathing pattern.

- Monitoring oxygen saturation and evaluation of NB´s chest dynamic as the discomfort and tachypnea.
- Encourage the appropriate oxygen therapy route and perform heating, decubitus, aspiration.
- Nursing care directly contributes in controlling the amount of oxygen supplied, observing the parameters of vital signs according to electronic monitors of neonatal ICU.
- The nursing contribution to RDS patients is intense, evaluate the breathing pattern every two hours and respiratory distress and qualify the pattern.
- Nursing care involve actions such as heating, change of position, suction and stimulation of appropriate oxygen pathway because the baby fatigues with an intense discomfort
- To evaluate the baby worsening signs and the level of comfort
- To control pain and temperature.

II WRITE SHORT NOTES (Any two) 2*5=10

4**)PERINATAL MORTALITY RATE**

Definition: It is defined as deaths among foetus weighing 1000g or more at birth (28 weeks gestation) who die before or during delivery or within the 1st 7 days of delivery.

$$\text{PMR} = \frac{\text{No. of resident fetal deaths of 28 or more weeks gestation + No. of Resident Newborn dying under 7 days of age}}{\text{No. of Resident live births + Resident fetal deaths of 28 or more weeks gestation}} * 1000$$

- Reflects both the standards of medical care and effectiveness of social and public health measures

- Perinatal mortality rate of India is 26 per 1000 births

CAUSES

- Infection
- lack of adequate obstetric care
- Chronic hypoxia
- Pregnancy complication
- Congenital malformations
- Unexplained

Predisposing factors:

- Age more than 35 years, teenagers, parity above 5, poor maternal nutritional status
- Medical disorders – Anemia, HT disorders, Diabetes mellitus
- Obstetrics complications
- Labour complications
- Feto-placental factors

-Multiple pregnancy
-Congenital malformations
-IUGR/LBW babies
- Preterm labour/premature rupture of membranes

Prevention:

- Pre-pregnancy health care and counselling
- Genetic counselling
- Regular AN care
- Management of medical disorders
- Screening of high-risk mothers
- Skilled birth attendant

5) EPISIOTOMY

Definition: An episiotomy also known as perineotomy, is a surgical incision of the perineum and the posterior vaginal wall generally done by a midwife or obstetrician during second stage of labour to quickly enlarge the opening for the baby to pass through.

Objectives: - To enlarge the vaginal introitus so as to facilitate easy and safe delivery of the foetus

- To minimize overstretching and rupture of the perineal muscles and fascia

Purpose

 To enlarge the vaginal introitus
 To facilitate easy & safe delivery
 To minimize rupture of the perineal muscles & facia.
 To reduce stress on fetal head.

Indications:

 In rigid perineum
 Anticipating perineal tear
 Big baby
 Face to pubis delivery
 Breech delivery
 Shoulder dystocia

Types:

Medio-lateral: The incision is made downward and outward from the midpoint of the fourchette either to the right or left. It is directed diagonally in a straight line which runs about 2.5 cm (1 in) away from the anus (midpoint between the anus and the ischial tuberosity).

Median: The incision commences from the centre of the fourchette and extends on the posterior side along the midline for 2.5 cm (1 in).

Lateral: The incision starts from about 1 cm (0.4 in) away from the centre of the fourchette and extends laterally. Drawbacks include the chance of injury to the Bartholin's duct; therefore some practitioners have strongly discouraged lateral incisions.

J-shaped: The incision begins in the centre of the fourchette and is directed posteriorly along the midline for about 1.5 centimeters (0.59 in) and then directed downwards and outwards along the 5 or 7 o'clock position to avoid the anal sphincter. This procedure is also not widely practiced.

Advantages: Maternal & Fetal

 Easy to repair

 Minimizes

 Reduction in intracranial duration of labour injuries

 Reduction of premature trauma babies

Timing of episiotomy: Bulging thinned perineum during contraction just prior to crowning

Complications:

- Extension of the incision
- Vulval hematoma
- Infection
- Wound dehiscence
- Injury to anal sphincter

6) FETAL CIRCULATION

The fetus relies on the placenta to carry out its respiratory, nutritional and excretory functions and fetal blood circulates throughout the placenta to meet its needs. The fetal circulation differs from the adult circulation in that blood is oxygenated in the placenta and not in the lungs.

This system requires:

- ✓ larger and more numerous red cells(6-7 million/mm3
- ✓ higher hemoglobin content (20.7 g/dl) to pick up the maximum amount of oxygen
- ✓ a modified form of hemoglobin(HbF) which is active in the slightly more acid blood
- ✓ additional structures
- ✓ o -ductus arteriosus
- ✓ o -ductus venosus
- ✓ o -foramen ovale
- ✓ o -two hypogastric arteries
- ✓ umbilical veins bring oxygenated blood to the primitive heart from the chorionfrondosum;
- ✓ the vitelline veins return blood from the yolk sac; and the cardinal veins return blood from the rest of the body. Blood enters the heart via the sinus venosus and flows through a single atrium and ventricle.
- ✓ When the ventricle contracts, blood is pumped through the bulbus cordis, passes into the dorsal aorta and eventually returns to deliver waste products to the chorion.
- ✓ Oxygenated blood returns from a greatly enlarged placenta, via the umbilical vein. Approximately 50% of this blood enters a hepatic microcirculation and later joins the inferior vena cava via the hepatic veins.

- ✓ The remaining blood passes directly to the inferior vena cava, through a shunt called the ductus venosus.
- ✓ Before entering the heart, the inferior vena cava bifurcates into two channels: the foramen ovale links it to the left atrium and a small inlet links it to the right atrium.
- ✓ From the right ventricle only 10% of blood enters the lungs via pulmonary arteries. The remaining 90% is diverted into the descending aorta via a muscular artery called the ductus arteriosus, which connects the main pulmonary artery with the aorta. As a result of this shunt , most blood leaving the right ventricle is responsible for perfusing the lower body and the placenta.
- ✓ From the left atrium, blood passes into the left ventricle. A small amount of this blood supplies the heart, two-thirds leaves via the ascending aorta to perfuse the upper part of the body with highly oxygenated blood, while the remaining one-third flows through the aortic isthmus to the descending aorta and then to the lower body and placenta.

III) ESSAY QUESTION (ANSWER ANY ONE) 1*15 =15

7) a) LIST THE TYPES AND CAUSES OF POST PARTUM HEMORRHAGE (6)

TYPES

1) Primary – occurs within 24 hours following birth of the baby
   i) Third stage haemorrhage – Bleeding before expulsion of placenta
   ii) True PPH – bleeding subsequent to expulsion of placenta
2) Secondary PPH – Hemorrhage beyond 24 hours and within puerperium

CAUSES

1) Atonic uterus
   - Grand multipara
   - Over distension of the uterus
   - Malnutrition and anemia
   - APH
   - Prolonged labour
   - Anesthesia
   - Augmentation of labour by oxytocin
   - Malformation of uterus
   - Uterine fibroid
   - Precipitate labour
2) Traumatic
3) Retained tissues
4) Blood coagulopathy

7) b) DISCUSS THE OBSTETRICAL AND NURSING MANAGEMENT OF A WOMAN WITH PPH (9)

OBSTETRICAL MANAGEMENT:

Atonic uterus – Massage the uterus

- Methergin 0.2mg IV
- Inj. Oxytocin drip (10 units in 500 ml Normal saline) at 40 – 60 drops/ minute
- Catheterize the bladder
- Examine expelled placenta and membranes
- Exploration of the uterus under general anesthesia

If uterine massage and bimanual compression fails

- uterine tamponade
  - i) tight intrauterine packing
  - ii) balloon tamponade
- Surgical methods
  - i) Ligation of the uterine arteries
  - ii) Ligation of ovarian and uterine artery anastomosis
  - iii) Ligation of anterior division of internal iliac artery
  - - Uterine arterial embolization
  - Hysterectomy

NURSING MANAGEMENT

Assess the amount of bleeding.
Assess maternal vital signs to establish baseline data.
Assess for signs of shock.
Measure hemodynamic parameters
Start 1 or 2 IV infusion(s) of isotonic or electrolyte fluids
Administer fresh whole blood or other blood products
Assess the condition of the uterus.

Nursing Diagnosis

Deficient fluid volume related to excessive bleeding after birth.

Risk for ineffective tissue perfusion related to hemorrhage

Risk For Infection

Risk For Pain

Risk for Altered Parent-Infant Attachment

Anxiety

Deficient Knowledge

(Note: Should write the plan for at least 2 nursing diagnosis)

8) A) DISCUSS THE ROLE OF ULTRASOUND IN OBSTETRICS (5)

- confirmation of pregnancy and multiple gestation,
- estimation of gestational age,
- localisation of placenta and monitoring of foetal wellbeing.

- evaluation of caesarean section scar integrity and post-partum haemorrhage.
- Ultrasound is also useful in prenatal diagnosis and foetal therapy.
- Ultrasound is safe and there is no known adverse effect for now on mother, foetus or operator at the intensity used for present obstetric examination.

b) LIST THE RISK FACTORS FOR PREECLAMPSIA (3)

- Primigravida
- Advanced maternal >40 years
- Family history of hypertension, pre-eclampsia
- Placental abnormalities
- Obesity
- Pre-existing vascular disease
- Autoimmune disease
- New paternity
- Thrombophilias

c) DISCUSS THE NURSING MANAGEMENT OF WOMEN WITH SEVERE PREECLAMPSIA (7)

Warning signs of preeclampsia can occur during the second half of pregnancy include severe headache, right upper quadrant epigastric pain, nausea, visual changes (such as loss of visual fields or seeing spots), difficulty breathing, and swelling in areas such as the face or hands. Nurses play a key role in teaching pregnant women about these subtle, subjective warning signs.

Accurate blood pressure measurement is crucial.
Changes in body weight may indicate fluid imbalance associated with generalized edema. A weight gain of more than three to five pounds in one-week, reduced urine output, or the presence of edema, including pulmonary edema, suggest preeclampsia-associated fluid imbalance, especially during the second half of pregnancy.

Preeclampsia diagnosis and surveillance. Blood and urine tests may provide objective evidence of preeclampsia during pregnancy and in the postpartum period.
Maternal assessment includes evaluation of subjective symptoms, serial blood pressure measurement, physical assessment, and laboratory analyses to guide intervention.
Fetal surveillance includes serial nonstress testing, Umbilical artery Doppler velocimetry, which measures blood flow in the umbilical cord or between the uterus and the placenta, may be indicated as a follow-up if there are concerns related to reduced placental perfusion.
Determining optimal timing of delivery. Gestational age at diagnosis and severity of preeclampsia are major factors in determining optimal timing of delivery, which is the only way to reverse preeclampsia that occurs during pregnancy.
To stabilize blood pressure at 140-150/90-100 mmHg . If blood pressure is reduced to below established goals, perfusion to maternal organs and the fetus may be insufficient. Nursing management includes assessment of maternal response to antihypertensive therapy.
Magnesium sulfate may be used for seizure prophylaxis and control in women who have preeclampsia with severe features, or eclampsia. Typical administration includes a loading dose of 4 to 6 g iv infused over a period of 15 to 20 minutes, followed by a maintenance dose of 1 to 3 g iv per hour.

Nursing management includes assessment for magnesium toxicity, evidenced by loss of consciousness, absent deep tendon reflex activity, and a respiratory rate below 12 breaths per minute. As magnesium sulfate is excreted by the kidneys, urine output below 30 mL per hour increases the risk of toxicity. Fluid replacement should be judicious, even with oliguria, as preeclampsia predisposes women to fluid imbalance.

Nursing Diagnosis for preeclampsia

Deficient Fluid Volume

Decreased Cardiac Output

Altered Tissue Perfusion (Uteroplacental)

Risk for Maternal Injury

Risk for Imbalanced Nutrition: Less Than Body Requirements

Deficient Knowledge

IV WRITE SHORT NOTES:

9. INTRAUTERINE CONTRACEPTIVE DEVICES:

1) Non – medicated – Lippes loop

2) Medicated by incorporating a metal copper like Cu T-200, Cu T – 380 A, Multiload – 250, Multiload – 375

3) hormone containing IUD either releasing progesterone or levonorgesterol

- Cu T 200
- Multiload 250
- Multiload 375
- Cu T 380 A
- LNG (Levonorgesterol intrauterine system)
- Gynefix

(Note : Should explain each)

10. OCCIPITO POSTERIOR PRESENTATION:

It is an abnormal position of the vertex rather than an abnormal presentation

CAUSE

- Shape of the pelvic inlet – anthropoid or android pelvis
- Fetal factors – deflexion of the fetal head
- Uterine factors – abnormal uterine contraction

Abdominal examination

Inspection: Abdomen looks flat below the umbilicus
Umbilical grips – fetal limbs are more easily felt near the midline

- Fetal back felt far away from midline

Pelvic grips – Head is not engaged
Cephalic prominence (sinciput) is not felt so prominent

Vaginal examination

- Elongated bag of membranes
- Anterior fontanelle is felt more easily

Mechanism

- Flexion
- Internal rotation of the head
- Further descent
- Restitution
- External rotation
- Birth of the shoulder and trunk

11) MISSED ABORTION

Definition of abortion: It is the expulsion or extraction from its mother of an embryo or fetus weighing 500g or less when it is not capable if individual survival

Missed abortion: When the fetus is dead and retained inside the uterus for a variable period.

PATHOLOGY:

Retained feus becomes macerated or mummified
Liquor amnii gets absorbed
Placenta becomes pale, thin

CLINICAL FEATURES

Persistence of brownish vaginal discharge
Subsidence of pregnancy symptoms
Retrogression of breast changes
Cessation of uterine growth
FHS not heard
Cervix feels firm
Ultrasound findings shows empty sac/absence of fetal cardiac movements

MANAGEMENT:

Medical management:

If uterus < 12 weeks - Prostoglandins E_1 (Misoprostol) 800 mg vaginally

- Repeated after 24 hours
- Expulsion occurs within 48 hours
- Suction evacuation or dilatation

If uterus > 12 weeks – Induction by

a) Prostaglandin E_1 analogue
b) Oxytocin – 10 to 20 units in 500ml of normal saline at 30 drops/ minute
c) Many times surgical evacuation is followed
d) Dilatation and evacuation, once the cervix becomes soft with use of prostaglandin

12) ESSENTIAL NEWBORN CARE

To explain on the four elements

i) Immediate and thorough drying
ii) Skin to skin contact
iii) Delayed cord clamping
iv) Early initiation of breastfeeding

13) ANESTHETICS IN OBSTETRICS:

- Epidural anesthesia
- Regional anesthesia
- Spinal anesthesia
- Perineal infiltration
- General anesthesia

(Should explain each type)

Commonly used local anesthetics:

1) Lignocaine 7mg/kg 60 – 90 minutes
2) Bupivacaine 3mg/kg 90 – 150 minutes

Maternal risk factors for anesthesia:

- Short stature
- Short neck
- Marked obesity
- Severe pre- eclampsia bleeding disorder
- Placenta previa
- Medical disorders

MDWIFERY AND OBSTETRICAL NURSING

MODEL QUESTION PAPER AND ANSWER KEY - II

SECTION – A

I) ESSAY QUESTION:(Answer any two questions only) (2*15 = 30)

1) a) What is accidental haemorrhage and enumerate the causes of accidental haemorrhage (7)

DEFINITION: It is one form of antepartum haemorrhage where the bleeding occurs due to premature separation of normally situated placenta.

Varieties:

1. **Revealed**: Following separation of the placenta, the blood insinuates downwards between the membranes and the deciduas. Ultimately, the blood comes out of the cervical canal to be visible externally. This is the commonest type.
2. **Concealed**: The blood collects behind the separated placenta or collected in between the membranes and the decidua. The collected blood is prevented from coming out of the cervix by the presenting part which presses on the lower segment. At times, the blood may percolate into the amniotic sac after rupturing the membranes. In any of the circumstances blood is not visible outside. This type is rare.

Mixed: In this type, some part of the blood collects inside (concealed) and a part is expelled out (revealed).

CAUSES OF ACCIDENTAL HEMORRHAGE

The exact cause of separation of normally situated placenta remains obscure in majority of cases.

- The prevalence is more with (a) high birth order pregnancies with gravid 5 and above – three times more common than in first birth, (b) advancing age of the mother, (c) poor socio-economic condition, (d) malnutrition, and smoking and (e) a tendency of recurrence in subsequent pregnancies is tenfold.
- **Race**: It is more common among African- American and Caucasian women.
- **Hypertension in pregnancy** is the most important predisposing factor.
- **The mechanism of placental separation in pre-eclampsia is**: Spasm of the vessels of the vessels in the utero placental blood (decidual spiral artery)anoxic endothelial damage rupture of vessels or extravasation of blood in the decidua basalis (retro placental hematoma).
- **Trauma**: The trauma may be due to: (i) Attempted external cephalic version specially under anesthesia using great force, (ii) Road traffic accidents or blow on the abdomen, (iii) Needle puncture at amniocentesis
- **Sudden uterine decompression**: due to diminished surface area of the uterus adjacent to the placental attachment and results in separation of the placenta. This may occur following- (a) delivery of the first baby of twins (b) sudden escape of liquor amnii in hydramnios and (c) premature rupture of membranes
- **Short cord**, either relative or absolute, can bring about placental separation during labour by mechanical pull.
- **Supine hypotension syndrome**: there is passive engorgement of the uterine and placental vessels resulting in rupture and extravasation of the blood

- **Sick placenta**: poor placentation, evidenced by abnormal uterine activity Doppler waveforms is associated with placental abruption.
- **Folic acid deficiency**:
- **Torsion of the uterus**: leads to increased venous pressure and rupture of the veins with separation of placenta
- **Cocaine abuse** is associated with increased risk of transient hypertension and placental abruption. **Thrombophilia**s inherited or acquired have been associated with increased risk of placental infarcts or abruption.

b) Describe the treatment of accidental haemorrhage (8)

Treatment of abruptio placentae depends on the severity of blood loss, fetal maturity and fetal wellbeing..

TREATMENT

Revealed type: Assessment of Amount of blood loss, Maturity of the fetus and Whether the patient is in labour or not.

Definitive treatment:

If the patient is in labor, the labor is accelerated by low rupture of the membranes. Oxytocin drip may be started to accelerate labor.

The patient is not in labor: Pregnancy 37 weeks or more: induction of labor is to be done by low rupture of the membranes with or without oxytocin.

Indications of caesarean section are

- Appearance of fetal distress
- Amniotomy could not be done or amniotomy fails to control bleeding and
- Associated complicating factors.

Pregnancy less than 37 weeks:

- ❖ Bleeding, moderate to severe and continuing low rupture of the membrane is quite effective. Oxytocin drip may be added. Labor usually starts soon. Caesarean section is rarely indicated
- ❖ Bleeding slight or has stopped .Close observation of the mother and careful fetal monitoring is essential.

Mixed or concealed type: Principles in the management of concealed type are:

- ❖ To correct hypovolaemia and to restore the blood loss.
- ❖ To bring about effective uterine contraction and termination of the abruption process.
- ❖ To observe blood coagulation profiles at two hourly intervals.
- ❖ Artificial rupture of the membranes is to be done
- ❖ Oxytocin drip should be started, if not contraindicated.

Definitive treatment: Blood sample is taken

- **To correct hypovolaemia**
- **Artificial rupture of the membranes** is to be done at the earliest moment if the membranes are found intact. Oxytocin drip should be started, if not contraindicated. The advantages of amniotomy are:

1) To expedite delivery and
2) To minimize two other grave complications – renal cortical necrosis and blood coagulation disorders.

Vaginal delivery: Following rupture of the membranes with or without oxytocin, labour is usually completed quickly (usually within 6 hrs.). Placenta with varying amount of retroplacental clot is expelled most often simultaneously with the delivery of the baby. Intravenous methergin 0.2 mg should be given with the delivery of the anterior shoulder to minimize postpartum blood loss.

Caesarean section: Place of Caesarean section in concealed abruptio placenta is difficult to define unlike that of placenta praevia. Baby is invariably dead in severe cases and/or premature and for the mother vaginal delivery is safer than caesarean section. It is indicated in two extreme groups of cases.

Early – In early cases with unfavorable cervix where speedy vaginal delivery is not possible and there is good prospect of fetal survival.

Late – If, in spite of amniotomy and oxytocin, the progress of labour is delayed (6-8 hrs.) and instead, the general condition gradually deteriorates with appearance of complicating factors like oliguria or falling fibrinogen level or there is evidence of fetal distress.

2) a) Mention the causes of multiple pregnancy

Definition: The presence of more than one fetus in the gravid uterus is called multiple pregnancy
Two fetuses (twins)
Three fetuses (triplets)
Four fetuses (quadruplets)
Five fetuses (quintuplets)
Six fetuses (sextuplets)
Causes:
The cause of twinning is not known. The frequency of monozygotic twins remains constant throughout the globe and is probably related to maternal environment factors.
Prevalence of dizygotic twins is related to:
Race, hereditary, Influence of parity, advancing age of the mother, Iatrogenic.

Other causes include
- Age: Increased maternal age
- Parity: more common in multipara
- Heredity - family history of multifetal gestation
- ART - ovulation induction with clomiphene citrate, gonadotrophins and IVF
- Conception after stopping OCP
- Pregnancies following treatment of an ovular infertility with ovulation induction drugs like clomiphene citrate or gonadotropins
- About 75% of twins are biovular resulting from the fertilization of two separate ova liberated during the same menstrual cycle, resulting in two fraternal twins.
- The incidence of occurrence of such twins is influenced by heredity, race (African races), maternal age (<35 years) and parity.
- Each twin has its own separate placenta and membranes. They may be of the same or different sexes. Each fetus has a separate independent circu-lation and genetic constitution.

3)b) Explain the management of multiple pregnancy during labour

First stage

The woman should be kept in bed and the enema withheld to prevent early rupture of membranes. Use of analgesics is limited as the babies are small and rapid delivery may occur. Careful fetal monitoring of both babies should be done; continuous monitoring using electronic fetal monitor is better. Vaginal examination should be done soon after the rupture of membranes to exclude cord prolapsed. An intravenous line with Ringer's solution should be set up for any urgent intravenous therapy, if required. Neonatologist should be present at the time of delivery. If fetal distress occurs during labor, delivery will need to be expedited, usually by cesarean section. Throughout labor, the mother will require emotional as well as physical support from the midwife.

- Surgical rupture of the fore waters after correction of the lie.
- Await spontaneous delivery. This occurs in most cases without ill effects. Other factors being equal, the mortality rates rises rapidly if the baby is not delivered by 10 minutes after the first twin.
- A syntocinon drip may be started if uterine inertia is causing delay.
- In selected cases a vacuum extractor (for vertex) or breech extraction may be carried out. Again gentleness and judicious intervention are important in reducing foetal mortality and morbidity.
- If at any stage there is evidence of foetal distress or intrapartum bleeding or if the cord prolapses delivery should be effected at once by assistance as noted above, or by caesarean section.

Management of Delivery:

The onset of second stage of labour should be confirmed by vaginal examination. The possibility of emergency caesarean section is always present and the operating room should be ready to receive the mother at a short notice.

Monitoring of both foetal hearts should continue until delivery. The delivery of the first twin should be conducted in the same manner as in normal labour if it presents in vertex. Liberal episiotomy is given to prevent intracranial damage to the fore coming or after coming head of the premature baby.

When the first twin is born, the time of delivery and sex are noted. The baby must be labelled as twin One immediately.

After delivery of the first twin, abdominal palpation must be done to ascertain the lie, presentation and position of the second twin and to auscultate the foetal heart. A vaginal examination should be done to exclude cord prolapsed, if any, and to note the status of the membranes.

If the lie is not longitudinal, an attempt may be made to correct it by external cephalic version. If the presenting part is not engaged it should be pushed into the pelvis by fundal pressure before the second sac of membranes are ruptured. If uterine activity does not recommence, intravenous oxytocin may be used to stimulate it.

Delivery of the second twin must be completed within 45 minutes of the first twin as long as there are no signs of foetal distress. If there is delay, the baby is delivered by ventouse or low forceps. If the baby presents by breech, breech extraction is done.

Methergin 0.2 mg is given intravenously with delivery of the anterior shoulder of the second baby. The baby is labelled as twin two and the time of delivery and sex of the baby are noted.

MANAGEMENT OF THE THIRD STAGE

The placenta is to be delivered by cord traction applied to both cords simultaneously. It is important to deliver the placenta immediately as emptying the uterus enables bleeding to be controlled and postpartum haemorrhage prevented. Oxytocin drip is continued for at least one hour, following the delivery of the second baby.

II Write short notes: (Answer any two questions only) (2 *5 = 10)

3. Legal and ethical issues of abortion

- ❖ Abortion laws generally fall into five categories, from most to least restrictive:

• To save the life of the pregnant woman.
• To preserve her physical health.
• To protect her mental health.
• On socioeconomic grounds.
• For any reason.

In addition, many countries allow abortion in cases of rape, incest, and fetal impairment.
Countries also may:

• Limit the length of a pregnancy during which an abortion can be performed.
• Require the husband's or parent's approval.
• Specify the types of medical facilities where abortions can be performed and health care personnel who can perform them.
• Require counseling before an abortion can be performed.

• Abortion is generally more restricted in developing countries than in developed countries.
• Abortion is permitted in nearly every country at least to save the life of the pregnant woman.
• A majority of countries also allow abortion to preserve the physical health of the pregnant woman, though countries may define "physical health" differently. Many countries also allow abortion to preserve the mental health of the woman, And the definition of this term may also vary.
• Many of the same countries permit abortion in cases of fetal impairment, in addition to other grounds; some countries specify the extent of impairment necessary in these cases.
• More than one-third of all countries allow abortion on economic or social grounds, such as income level, age, marital status, and number of children.
• More than 50 countries, with nearly 40 percent of the world's population, permit abortion for any reason, though most limit the period during which women can readily access the procedure.

5.**Write the management of women during puerperium**

The principles in management of postpartum clients are:

1. To restore the health of the mother

2. To prevent infection

3. To take care of the breast.

4. To motivate the mother for contraceptive acceptance.

Immediate Attention

Immediately following delivery, the mother should be closely observed as outline in the management of the fourth stage of labor. She may be given a drink or something to eat if she is hungry. Measures to promote sleep must be instituted.

Rest and Ambulation

A woman who has had spinal or epidural anesthesia may be ordered 6-8 hours flat in bed to prevent spinal headache. For most women 8-10 hours of rest is sufficient

Diet:

Foods for Breast-Feeding

Perineal Care: An elaborate washing of the perineum using sterile equipment 2-3 times is practiced in some settings. Washing her hands before and after giving herself, perineal care.

Care of the Bladder The woman is encouraged to pass urine 6-8 hours following delivery and thereafter at 4-6 hours interval. Catheterization is also indicated in case of incomplete emptying of the bladder evidenced by the presence of residual urine of more than 60ml.

Care of the Bowel: The problem of constipation is much less because of early ambulation and liberalization of dietary intake. A diet containing sufficient roughage and fluids is enough to move the bowel. If necessary, mild laxatives such as milk of magnesia can be given.

Sleep: The postpartum woman is in need of rest both physical and mental. If she has discomfort due to after pains, painful piles or engorged breast, they should be dealt with adequate analgesics such as aspirin with codeine orally (30-60mg) 4-6 hours as necessary.

Care of the Breast: The breast should be examined daily, regardless of the chosen feeding method. The midwives should inspect the breast for areas of redness. Then proceed to gently palpate the breast to exclude areas of heat, redness or pains. The nipples should be washed before each feeding, cleansed and dried after the feeding is over. A nursing Brassiere provides comfortable support.

Uterus and Involution: The uterine fundus should be carefully palpated during each postnatal day to ensure adequate involution. Specific daily measurements of fundal descend; either by tape measure or manual palpation is done.

1. List out the difference between constriction ring and retraction ring

	CONSTRICTION RING	**RETRACTION RING**
Nature	It is a manifestation of localized in-coordinated uterine contraction	It is an end result of tonic uterine contraction and retraction
Cause	Undue irritability of the uterus	Following obstructed labour

Situation	Usually at the junction of upper and lower segment but may occur in other places. The position does not alter	At the junction of upper and lower segment. The position progressively moves upwards
Uterus	Upper segment contracts and retracts with relaxation in between lower segment remains thick and loose	Upper segment is tonically contracted with no relaxation. The wall becomes thicker, lower segment becomes distended and thinned out
Maternal condition	Almost unaffected unless the labour is prolonged	Maternal exhaustion, sepsis appear early
Abdominal examination	◆ Uterus feels normal and not tender ◆ Foetal parts are easily felt ◆ FHS is usually felt	◆ Uterus is tense and tender ◆ Not easily felt ◆ Ring is felt as a groove placed obliquely
Vaginal examination	◆ The lower segment is not pressed by the presenting part ◆ Ring is felt usually above the head ◆ Features of obstructed labour are absent	◆ Lower segment is very much pressed by the forcibly driven presenting part ◆ Ring cannot be felt vaginally ◆ Features are present
End result	◆ Maternal exhaustion is a late feature ◆ Foetal anoxia usually appear late ◆ Chance of uterine rupture is absent	◆ Maternal exhaustion and sepsis appear early ◆ Foetal anoxia and even death are usually early ◆ Rupture uterus in multi gravidae is common

SECTION - B (35 Marks)

III Essay question: (Answer any one question only) (1 * 15 = 15)

7) a) Write the causes of pregnancy induced hypertension

Risk factors:

Primigravida: young or elderly

Family history: hypertension, pre-eclampsia

Placental abnormalities: hyperplacetosis: excessive exposure to chorionic villi, molar pregnancy twins, diabetes, placental ischaemia

Obesity: BMI >35 kg/M2, insulin resistance.

Pre-existing vascular disease

New paternity

Thrombophilias

Etiopathological factors:

Failure of trophoblast invasion, abnormal placentation, vascular endothelial damage, inflammatory mediators, immunological intolerance between maternal and foetal tissues.
Coagulation abnormalities
Increased oxygen free radicals.
Genetic predisposition, dietary deficiency or excess

b) Write the nursing care plan for an antenatal mother with pregnancy induced hypertension

1. Blood Pressure Monitoring: Regularly monitor to identify any sudden spikes. Record accurate blood pressure readings in the patient's chart to facilitate timely interventions.

2. Foetal Assessment: Perform regular foetal assessments, including monitoring foetal heart rate (FHR) and foetal movements to detect any signs of distress.

3. Activity Restriction and Bed Rest: Advise the patient to avoid strenuous activities and to rest in the left lateral position to enhance blood flow to the placenta**.**

4. Medication Management: Administer prescribed anti-hypertensive medications as per the physician's orders and monitor for any adverse reactions. Educate the patient about the importance of medication compliance and potential side effects.

5. Nutritional Counselling: Provide dietary education, emphasizing a well-balanced diet with reduced sodium intake to manage hypertension. Encourage the patient to consume foods rich in potassium, calcium, and magnesium.

6. Fluid Intake Management: Monitor and regulate the patient's fluid intake to prevent excessive fluid retention and associated complications. Educate the patient on the importance of proper hydration while maintaining a balance to avoid fluid overload.

7. Monitoring for Proteinuria: Regularly assess urine samples for proteinuria to identify any worsening of gestational hypertension. Perform a 24-hour urine collection if indicated.

8. Emotional Support and Counselling: **O**ffer emotional support and provide opportunities for the patient to express feelings and concerns related to the diagnosis and management of gestational hypertension. Refer the patient to a counsellor or support group if needed.

9. Education on Warning Signs: Educate the patient about warning signs of worsening gestational hypertension, such as severe headaches, visual disturbances, epigastric pain, or sudden swelling. Instruct the patient to seek immediate medical attention if these signs occur.

10. Regular Prenatal Visits: Emphasize the importance of attending scheduled prenatal visits to monitor the progression of gestational hypertension, assess foetal well-being, and adjust the care plan as needed.

Nursing diagnosis and interventions

Risk for Altered Foetal Perfusion:

- Gestational hypertension can lead to reduced blood flow to the placenta and requires close monitoring and timely interventions to prevent fetal distress or growth restriction.

2. Risk for Maternal Injury related to Hypertensive Crisis:

- vigilant monitoring and prompt management of hypertension is done to prevent maternal injury from serious maternal complications.

3. Anxiety related to Pregnancy Complications and Uncertainty:

- Nursing interventions should focus on providing emotional support, education, and coping strategies to reduce anxiety of potential adverse outcomes.

4. Deficient Knowledge regarding Gestational Hypertension Self-Management:

- Education and counseling to be provided to empower the patient with essential information for self-management and promoting positive outcomes.

5. Excess Fluid Volume related to Sodium and Water Retention:

- This requires monitoring and interventions to prevent complications such as pulmonary edema from fluid retention and edema due to sodium and water imbalances.

6. Impaired Tissue Perfusion (Cerebral, Renal, Hepatic) related to Hypertension:

- Hypertension can compromise blood flow to vital organs, including the brain, kidneys, and liver. This highlights the need for close assessment and intervention to prevent organ damage and dysfunction.

7. Risk for Ineffective Health Maintenance related to Non-compliance with Medical Regimen:

- This emphasizes the importance of adherence to medical recommendations like anti-hypertensive medications, prenatal care appointments, or lifestyle modifications

8. Readiness for Enhanced Knowledge regarding Gestational Hypertension:

- This focuses on identifying opportunities to enhance the patient's knowledge and self-care abilities, promoting better outcomes for both the mother and the baby.

8) a) Enumerate the diagnosis of pregnancy

DIAGNOSIS IN THE FIRST TRIMESTER (FIRST 12 WEEKS)

Symptoms:

1- Cessation of menstruation :(missed period):
2- Morning sickness: 50% cases - usually appears soon following the missed period.
3- Frequency of micturition:
4- Breast symptoms: Enlargement , heaviness , discomfort and pricking sensation 6th – 8th week specially in primigravidae.
5- Appetite changes: Craving for certain types of food and refusal of other types.
6- Fatigue: frequent symptom that may occur in pregnancy and tendency to sleep
1. Breast signs : (evident in a primigravida).

– 6 - 8 weeks, iincreased size and vascularityy, – Increased pigmentation of the nipple and primary areola. Appearance of secondary areola. – Appearance of Montgomery tubercles in the areola (dilated sebaceous glands). – Expression of colostrum (thick yellowish secretion) – as early as 12th week

• **Per abdomen:**

– Uterus remains a pelvic organ until 12th week, it may be just felt per abdomen as a suprapubic bulge.

•**Pelvic changes:**

– jacquemier's or Chadwick's sign
– osiander's sign
– goodell's sign

Uterine sign ; felt by bimanual examination:

– **Size** : enlarged, **consistency** : soft, **Shape** : globular, **Hegar sign** : (elicited between 6-10 weeks),
Palmer sign: Uterine contractions felt on bi-manual examination

Blood tests for hCG

Ultrasound: Intra decidual gestational sac is identified as early as 29 – 35 days of gestation
• Gestational sac & yolk sac -5 menstrual weeks
• Fetal pole and cardiac activity – 6 weeks; Embryonic movements -7 weeks

DIAGNOSIS IN THE SECOND TRIMESTER (13-28 WEEKS)

Symptoms:

1. **Amenorrhea**.
2. **Morning sickness** and urinary symptoms gradually decrease .
3. "**Quickening "** : perception of fetal movements by the pregnant woman:

a. 18-20 weeks in primigravida. b. 16–18-week s in multipara.

4. **Abdominal enlargement**.

ABDOMINAL EXAMINATION…

• INSPECTION: – Linea nigra -20th week. Striae -visible on the lower abdomen more towards the flanks

PALPATION: – Fundal height – increased with progressive enlargement of the uterus

1. The uterus is abdominally felt (ovoid). The uterus feels soft and elastic
2. Palpation of the fetal parts and fetal movements by the obstetrician at 20 weeks.

Auscultation: Auscultation of FHS as early as 20-24 weeks by Pinard stethoscope

INVESTIGATIONS:

• **SONOGRAPHY:** Routine sonography at 18 – 20 weeks permits a detailed survey of fetal anatomy, placental localization and the integrity of the cervical canal.

• **RADIOLOGIC:** 16th week – fetal skeletal shadow.

DIAGNOSIS IN THE THIRD TRIMESTER (29 - 40WEEKS)

• SYMPTOMS:

– Amenorrhoea persists
– Enlargement of the abdomen leading to discomfort to the patient (palpitation or dyspnoea following exertion)

– **LIGHTENING:** 38th week – Frequency of micturition reappears
– Fetal movements are more pronounced.
SIGNS:

– Cutaneous changes are more prominent with increased pigmentation and striae.
– Uterine shape – from cylindrical to spherical beyond 36th week
– FUNDAL HEIGHT • Level of ensiform cartilage at 36th week
• Comes down to 32-week level at 40th week because of the engagement of the presenting part.
• **SYMPHYSIS FUNDAL HEIGHT:** After 24 weeks, the SFH in cm corresponds to the number of weeks up to 36 weeks.

• Braxon-Hicks contraction – more evident

• Fetal movements – easily felt• Palpation of the fetal parts and their identification become much easier. F.H.S – heard distinctly

• **SONOGRAPHY:**

– Fetal growth assessment can be made more accurate.
• Amniotic fluid volume assessment – for oligo / polyhydramnios.

b) Explain the physiological changes during pregnancy

CHANGES IN GENITAL ORGANS

Vulva
Vagina
Uterus
Isthmus
Cervix
Fallopian Tube
Ovary

BREAST CHANGES

Increased size of the breasts
Vascularity is increased
Montgomery's tubercles

secondary areola

Secretion (colostrum) can be squeezed out of the breast at about 12th week

Cutaneous changes -Face (cholasma gravidarum or pregnancy mask)

ABDOMEN

• **Linea nigra** :

• **Straie graviderum** :

HEMATOLOGICAL CHANGES

Blood volume: Due to increased vascularity starts to increase from about 6th week, expends rapidly thereafter to **maximum 40-50% above the nonpregnant level at 30-32 weeks.**

Plasma Volume-Starts to increase by 6 weeks, increases to the extent of 1.25 litters

RBC And Haemoglobin - Disproportionate increase in plasma and RBC volume produces state of haemodilution (fall in haemocrit)

Leucocytes And Immune System

Total plasma protein increases from the normal 180 gm (non-pregnant) to 230 gm

Blood Coagulation Factor -Plasma fibrinogen (factor increases from the third month of pregnancy)

METABOLIC CHANGES

General Metabolic Changes -Total metabolism is increased due to the needs

Protein Metabolism -Positive nitrogenous balance throughout pregnancy

Carbohydrate Metabolism -Insulin secretion is increased in response to glucose and amino acids. Increased insulin level favours **lipogenesis**

Fat Metabolism -An average of 3-4 kg of fat is stored during pregnancy mostly in the abdominal wall, breasts, hips and thighs.

Iron Metabolism

10 percent of ingested iron is absorbed

Total iron requirement during pregnancy is estimated approximately 1000mg

Weight Gain -The total weight gain during the course of a singleton pregnancy for a healthy woman averages 11 kg -Distributed to 1 kg in first trimester and 5 kg each in second and third trimester

Calcium metabolism and locomotor system - Increased lumbar lordosis during later months of the pregnancy due to enlarged uterus backache and wadding gait.

SYSTEMIC CHANGES

Respiratory System -A state of hyperventilation occurs during pregnancy leading to **increase tidal volume.** The woman feels shortness of breath. Pregnancy is a state of respiratory alkalosis.

CARDIOVASCULAR CHANGES

The Heart : the heart rate and stroke volume (the amount of the blood pumped by heart with each beat) increases due to the increase blood volume and oxygen requirement of the maternal tissues and growing fetus.
Cardiac Output : increases markedly by the end of the first trimester.
Blood Pressure -Cardiac output is reduced by 25-30 percent and the blood pressure may fall by 10-15 percent

Regional Distribution Of The Blood Flow

Uterine blood flow is increased from 50 ml per minute in non-pregnant state about 750 mlnear term.
Pulmonary blood flow (normal 6000ml/min) is increased by 2500 ml per minute
Renal blood flow (normal 800 ml) increases by 400 ml per minute at 16th week r
Heat sensation, sweating or stuffy nose

URINARY SYSTEM

• **kidney -**Dilatation of the ureter, renal pelvis and calyces. The kidneys enlarge in length by 1 cm.
Renal plasma flow is increased by 50-75%, maximum by the 16 weeks
§ **Glomerular filtration rate (GFR)** is increased by 50% all throughout the pregnancy
• **Ureter -Dilatation of the ureter** above the pelvic brim with stasis is marked on the right side specially in primigravidae.
• **Bladder -**Increased frequency of micturition is noticed at 6-8 weeks of pregnancy which subside after 12 weeks and In late pregnancy
Stress incontinence may observe in late pregnancy due to urethral sphincter weakness

ALIMENTARY SYSTEM- Atonicity of the gut leads to constipation

• **Liver and gall bladder -**Liver functions are depressed

NERVOUS SYSTEM -Temperamental changes are found during pregnancy

§ Postpartum blues, depression or psychosis may develop in a susceptible individual.

CHANGES IN THE ENDOCRINE SYSTEM

Placental Hormones

§ The high levels of estrogen and progesterone produced by the placenta

§ Chorinonic gonadotrophin is the basis for the immunologic pregnancy tests

§ Human placental lactogen stimulates the growth of the breasts

Pituitary Hormones

§ The secretion of prolactin, adrenocorticotrophic hormone, thyrotrophic hormone and melanocyte-stimulating hormone increases

§ Posterior pituitary gland releases oxytocin in

low-frequency pulses throughout pregnancy.

Thyroid Function -Gland increases in size by about 13 percent due to hyperplasia of glandular tissue and increased vascularity

IV) Write short notes (Any four questions only) (4 * 5 = 20)

9) Antenatal counselling

Counseling the pregnant woman is a process of two-way interpersonal communication in which you help her to know about possible problems that she may encounter during pregnancy, and make her own decisions about how to respond.

The counseling is mainly focusing on the following:

Registration of Pregnant Women
Antenatal Visits and Antenatal Care
Immunization Against Tetanus
Iron and Folic Acid and Vitamin A and D Supplementation
Health education / prenatal advice during Pregnancy

Counseling on warning signs such as Vaginal bleeding, Convulsions, Severe headache, Severe abdominal pain, Fast or difficult breathing, Fever or burning urination.

Antenatal exercise

Objectives:

- Ease or prevent minor discomfort of pregnancy
- Maintain a stable body position
- Prepare for labour
- Prepare for immediate Postnatal period
- Cardiovascular and respiratory fitness
- General body muscle tone and relieve tension

Diet during pregnancy

- Every pregnant woman needs to understand that she is NOT eating for two people.

- She only requires 300 more calories than her normal diet. Should Eat lots of leafy greens.

Drug use

The mother should be advised not to take any medicine unless it is prescribed by the doctor.

Education for child birth

Role of husband and family

Pamper Her Cravings
Proper Communications
Psychological support
Give a hand
Spend time together
Feel the baby
Show interest

Preparation of safe confinement: The preparation for safe delivery is very important. It should be done well in advance to avoid any type of difficulty or emergency which might occur at the time of delivery.

Prevention from radiation: Thousands of pregnant women are exposed to ionizing radiation each year. Lack of knowledge is responsible for great anxiety and probably unnecessary termination of pregnancies. Higher doses such as those from therapeutic procedures can result in significant foetal effects.

The psycho-cultural aspect of the pregnancy and its adjustment: The expectant mother, especially the primary Para mother has fear and anxiety about child birth, its outcome, and complications etc.

10) Polyhydramnios

Definition: An amount of amniotic fluid more than 2000 ml. Increased production or decreased consumption of amniotic fluid will result in polyhydramnios.

Incidence: About 1:200.

Foetal causes:

1) Congenital anomalies: i) Anencephaly ii) Atresia of the oesophagus or duodenum enables the foetus to swallow the liquor.

2) Uniovular twins:

3) Increased placental mass: a. Oedema of the placenta due to: 1) Hydrops foetalis 2) True knot of the cord causes obstruction of venous return with placental congestion. 3) Foetal liver cirrhosis

b. Chorio-angioma and large placenta.

Maternal causes:

Diabetes mellitus
Pregnancy induced hypertension
Severe generalised oedema

Clinical Picture

a. Abdominal discomfort and pain in acute hydramnios.
b. Pressure symptoms: dyspnoea, palpitation, indigestion, haemorrhoids, oedema and varicosities of the lower limbs.

Signs
a. General examination: may reveal pregnancy-induced hypertension.
b. Abdominal examination:
Inspection: overdistended abdomen.
Palpation:
1.The fundal level is higher than gestational age.
2.The uterus is tense cystic.
3.The foetal parts are felt with difficulty by dipping.
4.Fluid thrill can be elicited.
5.Malpresentation and nonengagement are common.

Management>Acute hydramnios
Termination of pregnancy by high artificial rupture of membranes. This allows gradual escape of liquor thus shock and separation of the placenta are avoided.
Management>Chronic hydramnios
During pregnancy:
a. Termination of pregnancy by high artificial rupture of membranes if the foetus is dead or malformed.
b. Expectant treatment if the foetus is healthy.
> rest,
>sedative,
>salt restriction,
> treatment of the underlying cause as diabetes and toxoplasmosis.
> Termination of pregnancy if the condition is not improved or get worse.
Repeated amniocentesis may be indicated in premature foetus with marked pressure symptoms.

During labour:
a. Malpresentation, cord presentation and / or cord prolapse should be detected and the labour is managed according to the condition.

b. When the cervix is half dilated Drew Smythe catheter is passed to rupture the hind water. This will initiate uterine contractions which can be enhanced by oxytocins.

c. Active management of third stage is carried out to guard against postpartum haemorrhage.

12) NEONATAL JAUNDICE

Pathological jaundice can occur in children or adults and is the result of jaundice that presents a health risk because of its degree or cause.

CAUSES OF PATHOLOGICAL JAUNDICE:

Common causes of pathological jaundice include:

1. Hemolysis: blood group incompatibility such as those of ABO, Rh and minor groups, enzyme deficiencies such as G6PD deficiency, autoimmune hemolytic anemia
2. Decreased conjugation such as prematurity
3. Increased enterohepatic circulation such as lack of adequate enteral feeding that includes insufficient breastfeeding or the infant not being fed because of illness, GI obstruction
4. Extravasated blood: cephalhematoma, extensive bruising etc.

SYMPTOMS:

Yellowing of the skin and the whites of the eyes is a sign of infant jaundice that usually appears between the second and fourth day after birth.

CLINICAL ASSESSMENT OF JAUNDICE:

 Visual inspection of jaundice is believed to be unreliable, but if it is performed properly (i.e. examining a naked baby in bright natural light and in absence of yellow background), it has reasonable accuracy particularly when TSB is less than 12 to 14 mg/dL or so. Absence of jaundice on visual inspection reliably excludes the jaundice. At higher TSBs, visual inspection is unreliable and, therefore, TSB should be measured to ascertain the level of jaundice.

DIAGNOSIS:

Clinical Assessment

This method is less accurate and more subjective in estimating jaundice.

Ingram icterometer:

Transcutaneous bilirubinometer:

TREATMENT: The bilirubin levels for initiative of phototherapy vary depends on the age and health status of the newborn. However, any newborn with a total serum bilirubin greater than 359 μmol/l (21 mg/dL) should receive phototherapy

1. Phototherapy

Phototherapy (PTx) remains the mainstay of treating hyperbilirubinemia in neonates. It acts by converting insoluble bilirubin (unconjugated) into soluble isomers that can be excreted in urine and feces. The bilirubin molecule isomerizes to harmless forms under blue-green light (460 to 490 nm).

2. Exchange transfusion

Double volume exchange transfusion (DVET) should be performed if the TSB levels reach to age specific cut-off for exchange transfusion or the infant shows signs of bilirubin encephalopathy irrespective of TSB levels.

Indications for DVET at birth in infants with Rh isoimmunization include:

1. Cord bilirubin is 5 mg/dL or more
2. Cord Hb is 10 g/dL or less

3. Intravenous immunoglobulin's (IVIG)

IVIG reduces hemolysis and production of jaundice in isoimmune hemolytic anemia (Rh isoimmunization and ABO incompatibility) and thereby reduces the need for phototherapy and exchange transfusion.

Give IVIG (0.5 to 1 gm/kg) in all cases of Rh isoimmunization and selected case of ABO incompatibility with severe hemolysis.

4. IV hydration

Infants with severe hyperbilirubinemia and evidence of dehydration (e.g. excessive weight loss) should be given IV hydration. An extra fluid of 50 mL/kg of N/3 saline over 8 hr. decreases the need for exchange transfusion.

LIFESTYLE AND HOME REMEDIES:

The following steps may lessen jaundice:

More-frequent feedings. Breast-fed infants should have eight to 12 feedings a day for the first several days of life. Formula-fed infants usually should have 1 to 2 ounces (about 30 to 60 milliliters) of formula every two to three hours for the first week.

Supplemental feedings. If your baby is having trouble breast-feeding, is losing weight or is dehydrated, your doctor may suggest giving your baby formula or expressed milk to supplement breast-feeding.

PREVENTION:

The best prevention of infant jaundice is adequate feeding.

MDWIFERY AND OBSTETRICAL NURSING

MODEL QUESTION PAPER AND ANSWER KEY - III

SECTION – A (40 MARKS)

I) ESSAY QUESTION: (Answer any two questions only) 2*15 = 30

2)b)List the objectives of antenatal care (2)

i) To ensure a normal pregnancy with delivery of a healthy baby from a healthy mother
ii) To reduce maternal and perinatal mortality and morbidity rates.
iii) To improve the physical and mental health of women and children.
iv) To prepare the woman for labour, lactation, and care of her infant.
v) To detect early and treat properly complicated conditions that could endanger the life or impair the health of the mother or the foetus

c)Write the nursing management of primi mother in the third trimester of pregnancy. (7)

The third trimester goes from week 28 through week 40.

It is important that the women should

- Eat well -- including protein rich foods and vegetables frequently and in small amounts
- Rest as needed
- Get exercise or get a walk in on most days
- have a prenatal visit every 2 weeks until week 36. After that, every week.

The Nurse should

- Monitor the Weight, measure abdomen, Check the blood pressure at every visit
- Take a urine sample to test for protein, perform a pelvic exam to see if the cervix is dilating,should tell what changes to expect before the next visit.
- Check the foetal Movement
- Explain the warning signs of when to call the doctor

Nursing Diagnosis:

1) Discomfort
2) Knowledge deficit regarding preparing for labour, infant care
3) Sleep pattern disturbance related to changes in level of activity, psychological stress, inability to maintain comfort
4) Impaired urinary elimination related to uterine enlargement, fluctuation in glomerular filtration rate

3)a) List the indications and contraindications for induction of labour(3)

Indications **for induction of labor:**

- ✓ Preeclampsia, eclampsia
- ✓ Maternal medication complications – diabetes mellitus, chronic renal disease, cholestasis of pregnancy

- ✓ Post maturity
- ✓ Abruption placenta
- ✓ Intrauterine growth restriction
- ✓ Rh-isoimmunization
- ✓ Premature rupture of membranes
- ✓ Fetus with a major congenital anomaly
- ✓ Intrauterine death of the fetus
- ✓ Oligohydramnios, polyhydramnios
- ✓ Unstable lie-after correction into longitudinal lie

Contraindications of induction of labor:

- ✓ Contracted pelvis and cephalopelvic disproportion
- ✓ Malpresentation – breech, transverse, or oblique lie
- ✓ Previous classical cesarean section or hysterotomy
- ✓ Uteroplacental factors: unexplained vaginal bleeding, vasa previa, placenta previa
- ✓ Active genital herpes infection
- ✓ High risk pregnancy with fetal compromise
- ✓ Heart disease
- ✓ Pelvic tumour
- ✓ Elderly primigravida with obstetric or medical complications
- ✓ Umbilical cord prolapse
- ✓ Cervical carcinoma

b)Detail on medical induction of labour (5)

MEDICAL INDUCTION

INDICATIONS:

- Intrauterine fetal death
- Premature rupture of membranes
- In combination with surgical induction

Medical induction is done by

- Prostaglandins PGE_2, PGE_1
- Oxytocin
- Mifepristone

Prostaglandins: Act locally (autocrine and paracrine hormones) on the contiguous cells. PGE2 and PGF2α for myometrial contraction. But PGE2 is primarily important for cervical ripening where as PGF2 for myometrial contraction.

Misoprostol PGE1

It is currently used either transvaginally or orally for induction of labors . Oral use of misoprostol is less effective than vaginal administration. A dose of 25 µg vaginally every 4 hours is found either superior or similarly effective to that of PGE2 for cervical ripening and labour induction.

Oxytocin:

It is an endogenous uterotonic that stimulates uterine contractions. Oxytocin acts by

a) Receptor medications
b) Voltage mediated calcium channels
c) Prostaglandin production

Miferpristone: progesterone receptor antagonists found to ripen the cervix and induce labour.

C) Nurses role in medical induction of labour (7)

- Nurse should know about the administration of drugs
- Nurse should administer PGE2 gel 0.5mg before the cervical ripening
- Nurse should observe about the cervical ripening
- Nurse should monitor for 30min after she should be given drugs 3 or 4 doses after 6hrs.
- Nurse should know about the dose and route of misoprostol drugs
- Nurse should administer 25g vaginally every 4hours
- Nurse should know about the preparation of Oxytocin solution
- Oxytocin should be started in low dose with interval of 20- 30minutes
- Oxytocin should be administered 2units in 500ml ringer solution with drop rate of 60/minutes

II) Short Notes: (Answer any two questions only) 2*5 = 10

4) Maternal mortality rate

Maternal mortality rate measures the risk of women dying from 'puerperal causes' and is defined as :

Total number of female deaths due to complications of pregnancy, childbirth or within 42 days of delivery from puerperal causes in an area during a given year
---------- X 1, 000
Total number of live births in the same area and year

Classification of Maternal Deaths

Direct maternal deaths (75%): This is defined as deaths from complications of pregnancy, delivery or puerperium.

Indirect Maternal Deaths (25 %) : Indirect deaths often represent underlying medical conditions aggravated, but not caused, by the pregnancy.

Non-obstetric Or Unrelated Deaths : This rate measures deaths of pregnant or Postpartum women that were neither caused by nor aggravated by the pregnancy and include those due to motor vehicle accidents, homicides, and infectious diseases such as malaria and typhoid.

Factors Associated with Maternal Mortality :

- Age
- Parity : The risk is slightly higher in primigravida and it is three times greater in Para 5 or above
- Socio-economic strata: Mortality rates are higher in women of low socio-economic level
- Antenatal care:
- Social factors: Presence of social evils such as illiteracy, ignorance, prejudice inadequate maternity services and under-utilization of existing facilities, are responsible for increased number of avoidable maternal deaths.

5) Placenta

The human placenta is discoid and is attached to the uterine wall and establishes connection between the mother and foetus through umbilical cord.
The placenta is an organ that connects the developing foetus and the mother through the uterine wall

Placental development begins at 6 weeks and is completed by 12th week

Human placenta develops from two sources
Fatal component- Chorionic frondosum
Maternal component- decidua basalis
Placenta at term:
Almost a circular disc
Diameter of 15-20cm
Thickness of 3cm at its center
It thins off toward the edge.
Feels spongy and weighs about 500gm,
Occupies about 30% of the uterine wall.
It presents two surface foetal and maternal, a peripheral margin.

foetal surface of placenta
The foetal surface is covered by the smooth and glistening amnion with the umbilical cord attached at or near its center. Branches of the umbilical vessels are visible beneath the amnion as they radiate from the insertion of the cord.

Maternal surface of placenta
The maternal surface is rough and spongy.
Maternal blood gives it a dull red colour. A thin greyish, somewhat shaggy layer which is the remnant of the decidua. The maternal surface has 15-20 convex polygonal areas known as lobes or cotyledons. Numerous small greyish spots are visible. These are due to deposition of calcium in the degenerated areas and are of no clinical significance.

Functions of the Placenta

- Respiratory function
- Excretory function
- Nutritive function
- Enzymatic function
- Barrier function
- Immunological function

6) Non-stress test

- The nonstress test (NST) is an indirect measurement of uteroplacental function. Unlike the fetal movement counting done by the mother alone, this procedure requires specialized equipment and trained personnel.
- The basis for the nonstress test is that the normal fetus produces characteristic fetal heart rate patterns in response to fetal movements. In the healthy fetus there is an acceleration of the fetal heart rate with fetal movement.

- Currently, an NST is recommended twice weekly (after 28 weeks of gestation) for clients with diabetes and other high-risk conditions, such as IUGR, preeclampsia, post term pregnancy, renal disease, and multifetal pregnancies.
- NST is a noninvasive test that requires no initiation of contractions. It is quick to perform and there are no known side effects. However, it is not as sensitive to fetal oxygen reserves as the contraction stress test, and there is a high false-positive rate.

NURSING MANAGEMENT

- Prior to the NST, explain the testing procedure and have the woman empty her bladder. Position her in a semi- Fowler's position and apply the two external monitor belts.
- Document the date and time the test is started, patient information, the reason for the test, and the maternal vital signs. Obtain a baseline fetal monitor strip over 15 to 30 minutes.
- During the test, observe for signs of fetal activity with a concurrent acceleration of the fetal heart rate. Interpret the NST as reactive or nonreactive.
- A "reactive" NST includes at least two fetal heart rate accelerations from the baseline of at least 15 bpm for at least 15 seconds within the 20-minute recording period. If the test does not meet these criteria after 40 minutes, it is considered nonreactive.
- A "nonreactive" NST is characterized by the absence of two fetal heart rate accelerations using the 15-by-15 criterion in a 20-minute time frame.
- A nonreactive test has been correlated with a higher incidence of fetal distress during labor, fetal mortality, and IUGR. Additional testing, such as a contraction stress test or biophysical profile, should be considered .
- After the NST procedure, assist the woman off the table, provide her with fluids, and allow her to use the restroom.

SECTION - B (35 MARKS)

III) ESSAY QUESTION: (Answer any ONE question only) 1*15 = 15

7) A) Define respiratory distress syndrome (RDS) (2)

Infant respiratory distress syndrome(IRDS), also called neonatal respiratory distress syndrome, respiratory distress syndrome of newborn, or increasingly surfactant deficiency disorder (SDD),and previously called hyaline membrane disease (HMD), is a syndrome in premature infants caused by developmental insufficiency of surfactant production and structural immaturity in the lungs. It can also result from a genetic problem with the production of surfactant associated proteins.

B) Discuss the causes, pathogenesis and clinical features of RDS (5)

Deficiency of pulmonary surfactant is the basic underlying cause. In addition, the lungs of preterm infants have developmental anatomical problems, (smaller alveoli and cylindrical terminal bronchiole which leads to alveolar instability).

Pulmonary surfactant is synthesized in type II cells lining the alveoli. The major constituent is lecithin. Surfactant associated proteins A, B, C are integral to the function of surfactant. Synthesis of surfactant starts at 20 weeks of fetal life, when about five percent of the phospholipids is produced through methyl transferes pathway. Over 90 percent of surfactant is produced after 35 weeks of gestation through phosphocholine transferase pathway.

Pathogenesis:

The alveoli can be compared to air bubbles. As their alveolar radius decreases during expiratory phase, their surface tension increases causing them to collapse. The presence of surfactant lining of the alveoli diminishes the surface tension, thus, preventing the alveoli from collapse at the end of expiration. Although the collapsed portions are perfused, no exchange of gases occurs leading to hypoxemia. Hypoxemia, in turn causes severe pulmonary vasoconstriction shunting the blood from right to left. This cycle unless broken leads to continued hypoxemia and subsequent metabolic and respiratory acidosis.

Ischemia of the alveoli results in transudation of proteins into the alveoli and the terminal bronchiole. The material forms a membrane lining the alveoli, which is seen in microscopic examination at autopsy hence the name HMD.

The major clinical features are:

1. Increased respiratory rate
2. Expiratory grunt
3. Chest wall retraction
4. Cyanosis
5. Decreased breath sounds on auscultation
6. Signs of difficulty in breathing such as flaring of alae nasi and other signs of hypoxemia and shock.

IV) Short Notes: (Answer any four questions only) (4*5 = 20)

8) Emergency contraception

ECP was introduced under Family Welfare Programme during 2002-03.The emergency contraceptive is the method that can be used to prevent unwanted pregnancy after an unprotected act of sexual intercourse (including sexual assault, rape or sexual coercion) or in contraceptive failure. Emergency Contraceptive is to be taken on prescription of Medical Practitioners. If taken within 72 hours. ECPs are safe for all women. It comes in pack of two pills. The first pills should be taken as soon as possible but certainly before 72 h. The 2nd pill should be taken 12h after the first pill is taken.

9) Physiology of lactation

Milk secretion involves both intracellular synthesis of milk and subsequent passage of milk from the cytoplasm of the epithelial cells into the alveolar lumen. The term lactation refers to the combined processes of milk secretion and removal. Mammogenesis describes the development of the mammary gland. Lactogenesis refers to the initiation of milk secretion, and the term galactopoiesis is used in a general sense to refer to the maintenance of milk secretion and/or the enhancement of established lactation.

Mammogenesis

Mammary development during foetal and pre-pubertal stages is not necessarily under hormonal control. During puberty, pregnancy, and lactation, however, growth and development are largely under the influence of hormonal changes. Most structural development of the mammary gland takes place during pregnancy. Near the time of parturition, milk secretion is initiated (lactogenesis). Milk secretion is maintained (galactopoesis) until the young no longer need milk, or milk is no longer removed from the gland. The mammary gland then regresses as lactation as lactation progresses (involution). This cycle repeats itself with each pregnancy and lactation.

Lactogenesis

Lactogenesis (induction of milk synthesis) is a process of differentiation whereby the mammary gland alveolar cells acquire the ability to secrete milk; it is conveniently defined as a two-stage mechanism. The first stage of lactogenesis consists of partial enzymatic and cytological differentiation of the alveolar cells and coincides with limited milk secretion before parturition. The second stage begins with the copious secretion of all milk components shortly before parturition and extends throughout several days postpartum in most species.

Galactokinesis:

Discharge of milk from the mammary glands depends not only on the suction exerted by the baby during suckling but also on the contractile mechanism which expresses the milk from the alveoli from the ducts .

Hormonal regulation

Stimulation of the mammary gland by multiple hormones is required for lactogenesis. The development in lactogenesis of the rough endoplasmic reticulum, smooth endoplasmatic reticulum, and the Golgi apparatus results in mammary synthesis of protein, fat and lactose, respectively.

Prolactin is secreted from the anterior pituitary gland beginning at parturition and directly stimulates the transcription of casein genes and other protein genes. Progesterone plays a major role in lactogenesis. Withdrawal of progesterone triggers lactogenesis in the presence of prolactin and glucocorticoids.

Galactopoiesis

Galactopoiesis (maintenance of lactation) requires of alveolar cell number, synthetic activity per cell and efficacy of the milk-ejection reflex. The pituitary gland and its hormones are important integrators of the endocrine control of milk secretion. Administration of parathyroid hormone stimulates milk yield and increases the concentration of plasma calcium. ACTH plays a direct role in lactation by exerting its effect on mammary cell numbers and metabolic activity

10) Hyperemesis gravidarum

Hyperemesis gravidarum: is a complication of pregnancy characterized by persistent uncontrollable nausea and vomiting that persists beyond the 20th week of pregnancy .

Risk factors

Previous pregnancies with HEG
Greater body weight
Multiple gestations
hydatidiform mole
Nulliparity
Familial history

Etiology

1)Hormonal

One factor is an adverse reaction to the hormonal changes of pregnancy, in particular, elevated levels of beta human chorionic gonadotropin.
2) Psychological – Emotional stress, excess perception of sensations by the mother
3)Dietetic deficiency: Low carbohydrate reserve, deficiency of vitamin B6, Vitamin B1 and proteins
4) Allergic or Immunological basis
5)Other (H. Pylori infection)

Signs and symptoms

Loss of 5% or more of pre-pregnancy body weight
Dehydration, causing ketosis, and constipation
Metabolic imbalances such as metabolic ketoacidosis or thyrotoxicosis
Diminished urine quantity
Electrolyte imbalances (Hypokalemia)

Physical and emotional stress of pregnancy on the body
Difficulty with activities of daily living

Management

- Promoting Fluid & Nutrition balance
- promoting comfort
- providing support and education
  - reassurance
  - provide information
  - listen
  - teach
  - avoid noxious stimuli
  - Eat small frequent meals (6 meals)
  - Separate fluid from solid by consuming fluid In between meals
  - Use high protein supplement
  - Avoid lying down for at least 2 hours after eating
  - Avoid food high in fat ,drink herbal tea

- Antiemetic drugs:
- cyclizine
- prochlorperazine
- promethazine
- doxylamine - metachlopromide Hydrocortisone Ondansetron.

11) Vacuum extraction

It is an instrumental device designed to assist delivery by creating a vacuum between it and the foetal scalp

In the United states the device is referred to as the vacuum extractor whereas in Europe it is called as Ventouse- from the French word literally meaning soft cup.

Description:

Vacuum extractor is composed of:

A specially designed cup with a diameter of 3, 4, 5 or 6 cm.

A rubber tube attaching the cup to a glass bottle with a screw in between to release the negative pressure.

A manometer fitted in the mouth of the glass bottle to declare the negative pressure.

Another rubber tube connecting the bottle to a suction piece which may be manual or electronic creating a negative pressure that should not exceed - 0.8 kg per cm2.

Types:

Vacuum extractors are divided on the basis of the type of cup- metal or plastic

1.Metal cup vacuum extractors

2.Soft cup vacuum extractors

Indications:

Generally vacuum extraction is reserved for foetuses who have attained a gestational age of 34 weeks.

12) Tocolytic agents

Preterm labour and delivery can be delayed by drugs in order to improve the potential outcome. Short term delay of 48 hours allows the use of corticosteroids that can reduce the perinatal mortality and serious morbidity significantly. The commonly used drugs are:

Indomethacin (Cyclo- oxygenase inhibitor): Reduces synthesis of PGs, thereby reduces intracellular free Ca++, activation of MLCK and uterine contractions. PGs cause in free intracellular Ca++ and activation of MLCK. Dose: Loading dose 50mg PO or PR followed by 25mg every 6hrs for 48hrs. Side effect: Maternal- Heart burn, asthma, GI bleeding, thrombocytopenia, renal injury. Contraindication: Hepatic disease, active peptic ulcer, coagulation disorders. Fetal and neonatal side effects: Constriction of the ductus arteriosus (due to inhibition of synthesis of PGI2 and PGE2), Oligohydromnios, Neonatal pulmonary hypertension, IUGR. (**Sulindac** another NSAID is also used as it has less placental transfer)

Betamimetics: Terbutaline, Ritodrine, Isoxsuprine - effective for 48 hrs. to allow time for steroids and antibiotics to work. Activation of the intracellular enzymes (adenylate cyclase, cAMP, protein kinase), reduces intracellular free calcium (Ca++) and inhibits activation of MLCK. Reduced interaction of actin and myosin, smooth muscle relaxation, Beta 2 receptor stimulation causes smooth muscle relaxation.

Dose: Ritodrine is given by IV infusion, 50µg/min and is increased by 50µg every 10 min until contractions cease. Infusion is continued for about 12 hours after the contractions cease. Terbutaline has longer half-life and has fewer side effects. Subcutaneous injection of 0.25mg every 3 to 4 hours is given. Side effects are more when used parenterally. Maternal- headache, palpitation, tachycardia, pulmonary edema, hypotension, cardiac failure, hyperglycemia, ARDS, hperinsulinaemia, lactic acidaemia, hypokalaemia and even death. Fetal: Tachycardia, heart failure, IUFD. Neonatal: Hypo glycaemia and intraventricular haemorrhage.

Oxytocin Antagonists (Atosiban): Oxytocin analogue that blocks myometrial oxytocin receptors. It inhibits intracellular calcium release. Release of PGs and thereby inhibits myometrial contractions. Dose: IV infusion 300µg/min initial bolus may be needed. Side effect: Nausea, Vomiting, chest pain (rarely).

Nitric oxide (NO): Glyceryl trinitrate (GTN) - smooth muscle relaxant. Dose: patches, Side effect: May cause cervical ripening, headache.

Calcium channel blockers :

Nifedipine

Nicardipine

Verapamil

Nifedipine blocks the entry of calcium inside the cell it is equally effective to mgso4. The dose is 10 to 20 mg every 3 to 6 hours.

Magnesium sulphate:

It acts by competitive inhibition to calcium ion at the motor in plate reducing calcium influx. Increase cerebral perfusion. Loading dose is 426 g IV over 20- 30 minutes followed by an infusion of 1-2 g/hr.