ed information on nursing books, visit our website www.ejaypee.com, for detailed information on nursing books, visit our website www.ejaypee.com



NURSING

Solved Question Papers for BSc Nursing

2025–2021

Semester V

As Per Revised INC Syllabus

I Clement

JAYPEE

Contents

SECTION I: Community Health Nursing-I (Including Environmental Science and Epidemiology)

Community Health Nursing-I: 2025 1
Community Health Nursing-I: 2024 16
Community Health Nursing-I: 2023 36
Community Health Nursing-I: 2022 52
Community Health Nursing-I: 2021 69

SECTION II: Education Technology/Nursing Education

Education Technology/Nursing Education: 2025 87
Education Technology/Nursing Education: 2024 103
Education Technology/Nursing Education: 2023 122
Education Technology/Nursing Education: 2022 142
Education Technology/Nursing Education: 2021 156

COMMUNITY HEALTH NURSING-I

2024

LONG ESSAYS

1. Define epidemiology and explain in detail about methods of epidemiology.
2. a. Discuss in detail about causes, transmission, clinical manifestations, prevention and control of HIV/AIDS.
   b. Role of community health nurse in prevention of HIV/AIDS.

SHORT ESSAYS

3. Prevention and control of anemia.
4. Demographic rates and ratio.
5. Emergency contraception.
6. Housing.
7. Prevention and control of hook worm infestation.
8. Describe the various methods of presentation of data.
9. Explain oral contraceptive pills.

SHORT ANSWERS

10. Mention the types of vaccines with examples.
11. Ill effects of deforestation.
12. Mention any four first line anti tuberculosis drugs.
13. List down the dimensions of health.
14. Mode of transmission and Incubation period for chickenpox.
15. Small family norm.
16. Women empowerment measures for control of population.
17. List down any four health effects of radiation.
18. Mention the types of ventilations with example.
19. List out any four noise control measures.

JAYPEE BROTHERS

LONG ESSAYS

1. Define epidemiology and explain in detail about methods of epidemiology.

A Epidemiology is the study of the distribution and determinants of health-related states or events (including disease), and the application of this study to the control of diseases and other health problems **(Fig. 1)**. In simpler terms, it's the science of public health detectives, investigating patterns and causes of health issues in populations.

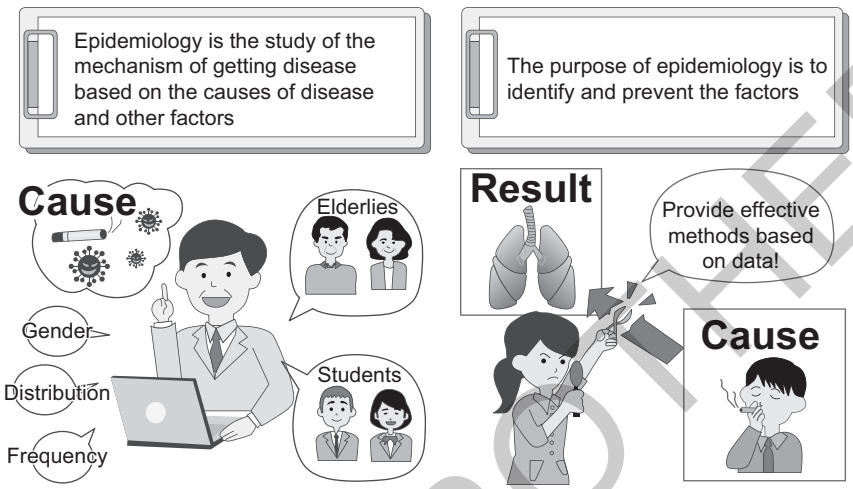


Fig. 1: Epidemiology.

Methods of Epidemiology

Epidemiologists use various methods to investigate health-related events. These methods can be broadly categorized into descriptive and analytic epidemiology **(Figs. 2 and 3)**.

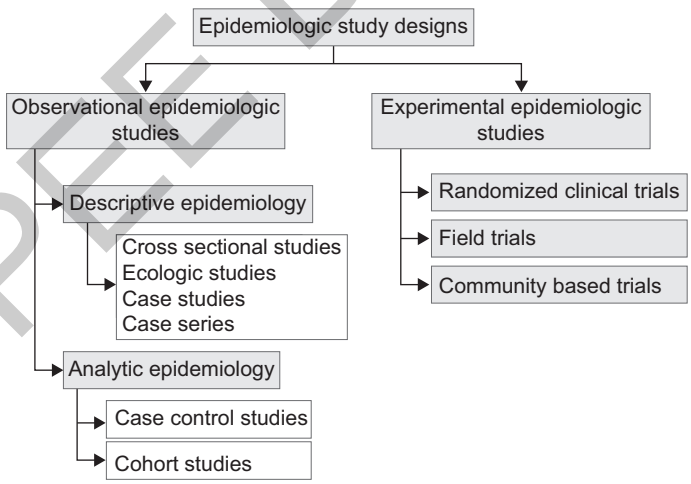


Fig. 2: Epidemiologic study designs.

Descriptive Epidemiology

Focuses on describing the distribution of health-related states or events in terms of person, place, and time. It aims to generate hypotheses about potential causes of disease.

Case Reports/Case Series

- Detailed descriptions of individual cases or a small group of cases with unusual or interesting features.
- Useful for generating hypotheses but not for establishing causality.

JAYPEE BROTHERS



Fig. 3: Types of information collected during biosurveillance.

Cross-sectional Studies (Prevalence Studies)

- Examine the prevalence of a disease or health condition at a single point in time.
- Provide a snapshot of the population's health status.
- Useful for assessing the burden of disease but not for determining causality.

Ecological Studies

- Examine the relationship between exposure and disease at the population level.
- Useful for generating hypotheses about environmental or social factors.
- Susceptible to ecological fallacy (drawing conclusions about individuals based on group data).

Analytic Epidemiology

Focuses on testing hypotheses about the association between exposures and health outcomes. Aims to identify causal relationships.

Key methods include:

- **Case-control studies:**
  - Compare individuals with a disease (cases) to individuals without the disease (controls) to identify potential exposures.
  - Useful for studying rare diseases.
  - Can calculate odds ratios to estimate the association between exposure and disease.
- **Cohort studies:**
  - Follow a group of individuals (cohort) over time to assess the incidence of disease in relation to exposure.
  - Can calculate relative risks to estimate the association between exposure and disease.
  - Stronger evidence for causality than case-control studies.
- **Interventional studies (experimental studies):**
  - Involve manipulating an exposure (e.g., a treatment or intervention) and observing its effect on a health outcome.
  - Randomized controlled trials (RCTs) are the gold standard for establishing causality.
  - Ethical considerations are paramount.

Key Epidemiological Measures

- **Incidence:** The number of new cases of a disease in a population during a specific period.
- **Prevalence:** The total number of cases of a disease in a population at a specific point in time or during a specific period.
- **Mortality rate:** The number of deaths due to a specific disease in a population during a specific period.
- **Morbidity rate:** The number of cases of a disease in a population during a specific period.
- **Risk Ratio/relative risk (RR):** Used in cohort studies to compare the risk of disease in exposed and unexposed groups.
- **Odds ratio (OR):** Used in case-control studies to estimate the association between exposure and disease.

JAYPEE BROTHERS

Applications of Epidemiology

- Disease surveillance and control.
- Identifying risk factors for disease.
- Evaluating the effectiveness of public health interventions.
- Conducting clinical trials.
- Investigating disease outbreaks.
- Providing evidence-based recommendations for health policy.

2a. Discuss in detail about causes, transmission, clinical manifestations, prevention and control of HIV/AIDS.

A HIV (Human Immunodeficiency Virus) and AIDS (acquired immunodeficiency syndrome) are critical global health concerns. Understanding their causes, transmission, manifestations, and prevention is vital.

Causes

- HIV is caused by a retrovirus that attacks the body's immune system, specifically CD4+ T cells, which are crucial for fighting off infections.
- As HIV progresses, it weakens the immune system, making individuals susceptible to opportunistic infections and certain cancers.
- AIDS is the advanced stage of HIV infection, characterized by a severely compromised immune system.

Transmission (Fig. 4)

HIV is transmitted through specific bodily fluids:

- **Sexual transmission:** Having unprotected vaginal, anal, or oral sex with an infected person.
- **Blood transmission:**
  - Sharing needles or syringes with an infected person.
  - Receiving contaminated blood transfusions (less common in developed countries due to screening).
  - Needle-stick injuries (primarily in healthcare settings).
- **Mother-to-child transmission (perinatal transmission):** During pregnancy, childbirth, or breastfeeding.
  Important note: HIV is not transmitted through casual contact, such as hugging, shaking hands, sharing food, or using public facilities.

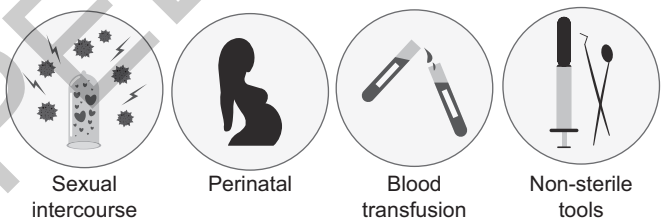


Fig. 4: HIV transmission.

Clinical Manifestations (Fig. 5)

- **Acute HIV infection (primary infection):** Flu-like symptoms (fever, fatigue, sore throat, rash) may occur within a few weeks of infection. Some people may be asymptomatic.
- **Chronic HIV infection (clinical latency):**
  - The virus continues to replicate, but at lower levels.
  - Individuals may be asymptomatic for many years.
- **AIDS (advanced HIV infection):**
  - Severe weakening of the immune system.
  - Opportunistic infections (e.g., Pneumocystis pneumonia, candidiasis, tuberculosis).
  - Certain cancers (e.g., Kaposi's sarcoma, lymphoma).
  - Weight loss, chronic diarrhea, and neurological complications.

JAYPEE BROTHERS

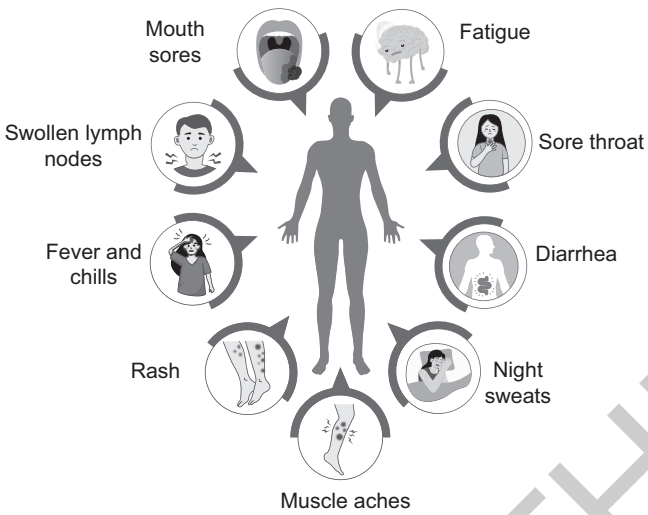


Fig. 5: Clinical manifestations of HIV.

Prevention and Control (Fig. 6)

- **Safe sexual practices:**
  - Consistent and correct use of condoms.
  - Limiting the number of sexual partners.
- **Prevention of blood transmission:**
  - Avoiding sharing needles or syringes.
  - Ensuring safe blood transfusions through screening.
  - Following universal precautions in healthcare settings.
- **Prevention of mother-to-child transmission:** Antiretroviral therapy (ART) for pregnant women with HIV. Avoiding breastfeeding if HIV-positive.
- **Pre-exposure prophylaxis (PrEP):** Taking antiretroviral medication daily to prevent HIV infection in high-risk individuals.
- **Post-exposure prophylaxis (PEP):** Taking antiretroviral medication after potential exposure to HIV to prevent infection.
- **Treatment as prevention (TasP):** People with HIV who take ART and achieve and maintain an undetectable viral load have effectively no risk of sexually transmitting HIV.
- **HIV testing and counseling:** Regular testing to identify HIV-positive individuals. Counseling to provide support and information.
- **Education and awareness:** Public health campaigns to educate people about HIV/AIDS prevention.
- **Access to treatment:** Providing access to antiretroviral therapy for those infected.

It is important to remember that with proper medical care, and adherence to antiretroviral therapy, those infected with HIV can live long healthy lives.

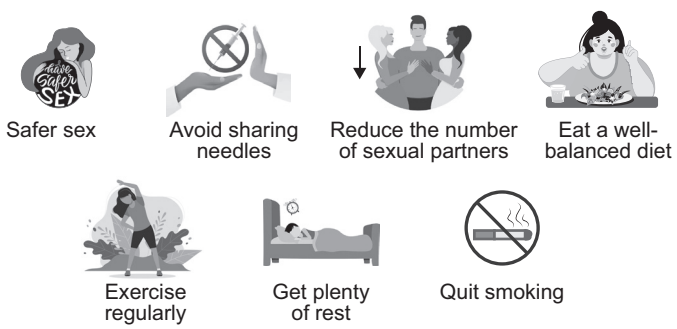


Fig. 6: Prevention of HIV.

JAYPEE BROTHERS

b. Role of community health nurse in prevention of HIV/AIDS.

Ⓐ Community health nurses (CHNs) play a pivotal role in HIV/AIDS prevention and control, working directly within communities to provide education, support, and access to services.

Education and Awareness

- **Disseminating information:**
  - Providing accurate and culturally sensitive information about HIV/AIDS transmission, prevention, and treatment.
  - Addressing misconceptions and stigma surrounding HIV/AIDS.
- **Promoting safe practices:**
  - Educating individuals and groups about safe sexual practices, including condom use and risk reduction strategies.
  - Providing education on harm reduction for injection drug users.
- **Community outreach:** Conducting outreach programs to reach high-risk populations, such as sex workers, injection drug users, and youth.

HIV Testing and Counseling

Providing Testing Services

- Offering confidential HIV testing in community settings.
- Ensuring access to testing for underserved populations.

Pre- and Post-test Counseling

- Providing pre-test counseling to explain the testing process and address concerns.
- Delivering post-test counseling to provide results, offer support, and link individuals to care if needed.

Prevention of Mother-to-child Transmission (PMTCT)

Prenatal Care and Education

- Providing prenatal care and education to pregnant women about HIV transmission.
- Promoting HIV testing during pregnancy.

Supporting Adherence to ART

- Supporting pregnant women with HIV in adhering to antiretroviral therapy (ART) to prevent transmission to their infants.
- Educating on safe infant feeding practices.

Linkage to Care and Support

Referral to Services

- Connecting individuals with HIV/AIDS to healthcare providers, support groups, and other community resources.
- Facilitating access to ART and other essential services.

Adherence Support

- Providing ongoing support to individuals on ART to ensure adherence and improve treatment outcomes.
- Monitoring for side effects.

Emotional and Social Support

- Providing emotional and social support to individuals and families affected by HIV/AIDS.
- Addressing stigma and discrimination.

Community Mobilization and Advocacy

Building Community Partnerships

Collaborating with community leaders, organizations, and stakeholders to address HIV/AIDS-related issues.

Advocating for Policies

- Advocating for policies that promote HIV/AIDS prevention and control.
- Addressing social determinants of health that contribute to HIV/AIDS disparities.

JAYPEE BROTHERS

Reducing Stigma

Working to reduce the stigma and discrimination associated with HIV/AIDS.

Disease Surveillance and Data Collection

- **Monitoring trends:** Collecting and analyzing data on HIV/AIDS prevalence and trends within the community.
- **Reporting cases:** Reporting cases of HIV/AIDS to public health authorities.
- Contributing to research.

SHORT ESSAYS

3. Prevention and control of anemia.

A Anemia, a condition characterized by a deficiency of red blood cells or hemoglobin in the blood, can lead to fatigue, weakness, and other health issues **(Fig. 7)**. Effective prevention and control strategies are essential **(Fig. 8)**.

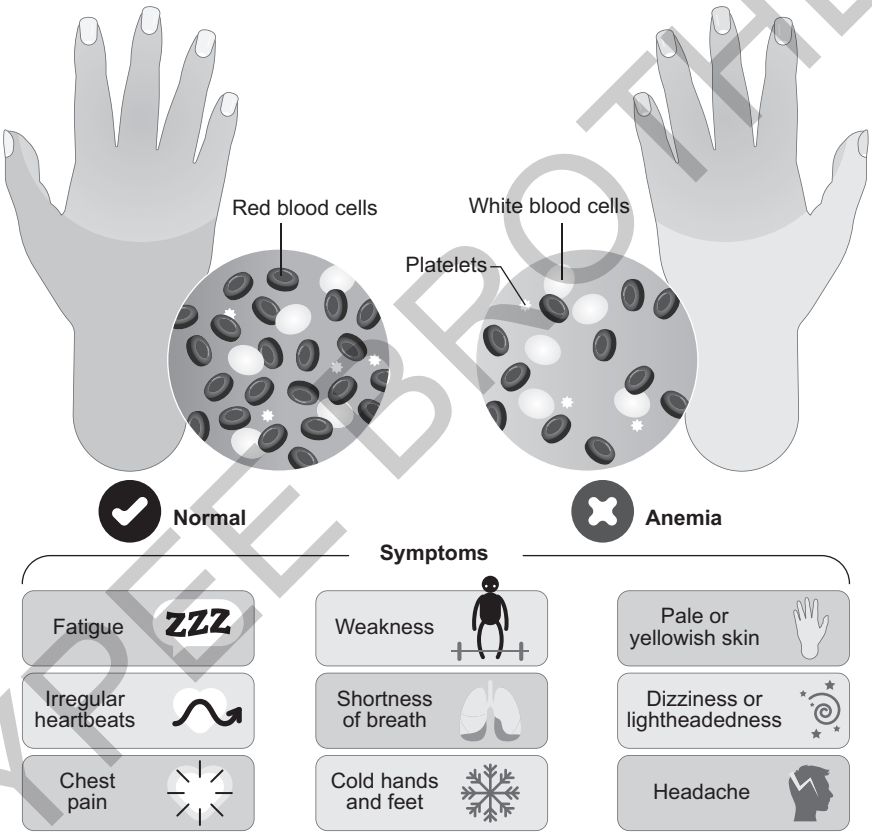


Fig. 7: Anemia.

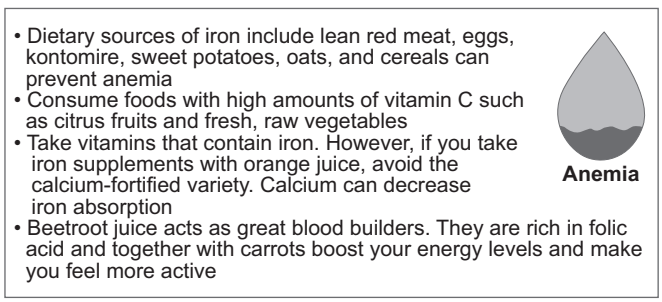


Fig. 8: Prevention of anemia.

JAYPEE BROTHERS

Dietary Measures

Iron-rich Foods

Consume foods high in iron, such as:

- Red meat, poultry, and seafood.
- Dark leafy green vegetables (spinach, kale).
- Beans, lentils, and peas.
- Iron-fortified cereals and bread.
- Dried fruits (raisins, apricots).

Vitamin C

Enhance iron absorption by consuming foods rich in vitamin C alongside iron-rich foods.
Examples: Citrus fruits, strawberries, bell peppers.

Vitamin B_{12} and Folate

- Ensure adequate intake of vitamin B_{12} and folate, which are crucial for red blood cell production.
- **Sources of B_{12}:** Meat, poultry, fish, eggs, and dairy products.
- **Sources of folate:** Leafy green vegetables, citrus fruits, and fortified grains.

Dietary Considerations

Avoid consuming foods that inhibit iron absorption, such as tea, coffee, and foods high in calcium, at the same time as iron rich foods.

Supplementation

Iron Supplements

- Iron supplements may be necessary, especially for individuals with iron deficiency anemia.
- These should be taken under the guidance of a healthcare professional.

Vitamin B_{12} and Folate Supplements

Supplementation may be required for individuals with deficiencies in these vitamins.

Addressing Underlying Causes

- **Treating blood loss:** Address underlying causes of blood loss, such as heavy menstrual bleeding, gastrointestinal bleeding, or injuries.
- **Managing chronic diseases:** Effectively manage chronic diseases that can contribute to anemia, such as kidney disease, inflammatory diseases, and certain cancers.
- **Parasitic infections:** Treat parasitic infections such as hookworm, that can lead to blood loss.

Preventive Measures for Specific Groups

Pregnant Women

- Pregnant women have increased iron needs, so iron supplementation is often recommended.
- Regular prenatal care is essential.

Infants and Children

- Infants should be fed breast milk or iron-fortified formula.
- After 6 months, introduce iron-rich foods.

Individuals with Chronic Conditions

Individuals with chronic conditions should receive regular monitoring and appropriate medical management.

Public Health Initiatives

- **Food fortification:** Fortifying staple foods with iron, folate, and vitamin B_{12}.
- **Parasite control:** Implementing programs to control parasitic infections.
- **Education and awareness:** Raising awareness about anemia prevention and control through public health campaigns.

JAYPEE BROTHERS

4. Demographic rates and ratio.

A Demographic rates and ratios are essential tools in demography, the statistical study of human populations. They provide valuable insights into population characteristics and changes over time.

Demographic Rates

- Demographic rates measure the frequency of demographic events in a population during a specific period.
- They express the number of occurrences of an event relative to the population at risk of that event.

Common demographic rates include (Fig. 9):

- **Birth rate (crude birth rate):** The number of live births per 1,000 people in a population per year.
- **Death rate (crude death rate):** The number of deaths per 1,000 people in a population per year.
- **Fertility rate:** The average number of children born per woman of reproductive age.
- **Infant mortality rate:** The number of deaths of infants under one year old per 1,000 live births.
- **Mortality rate:** The number of deaths within a population. This can be expressed in many ways, and can be general, or very specific.

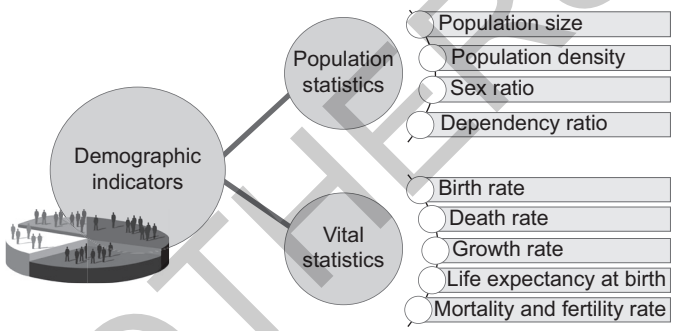


Fig. 9: Demographic indicators.

- **Growth rate:** The rate at which a population is increasing or decreasing in a given period due to natural increase and net migration, expressed as a percentage.
- **Demographic ratios:** Demographic ratios express the relationship between two population subgroups. They provide information about the composition of a population.

Common demographic ratios include:

- **Sex ratio:** The number of males per 100 females in a population.
- **Dependency ratio:** The ratio of dependents (those typically under age 15 and over age 64) to the working-age population (those typically aged 15–64). This ratio indicates the burden on the working population to support dependents.
- **Child-woman ratio:** This ratio, the ratio of children under 5 per 1,000 women of reproductive age.

Key Differences

- Rates measure the occurrence of events over time, while ratios compare the sizes of different population subgroups.
- Rates are often expressed per 1,000 people, while ratios can be expressed in various ways (e.g., males per 100 females).

Importance

Demographic rates and ratios are essential for:

- Understanding population dynamics.
- Planning public health services.
- Developing economic and social policies.
- Analyzing population trends.
- Predicting future population changes.

5. Emergency contraception.

A Emergency contraception refers to methods that can be used to prevent pregnancy after unprotected sex or contraceptive failure. It's important to understand that it's intended for emergency situations and not for regular birth control.

Types of Emergency Contraception (Fig. 10)

Emergency Contraceptive Pills (ECPs)

These pills contain hormones that can prevent pregnancy by delaying or preventing ovulation (the release of an egg), or by preventing fertilization.

JAYPEE BROTHERS

There are two main types of ECPs:

1. **Levonorgestrel:** This type is available over-the-counter in many places. It's most effective when taken within 72 hours (3 days) of unprotected sex.
2. **Ulipristal acetate:** This type requires a prescription in some locations. It can be taken up to 120 hours (5 days) after unprotected sex and may be more effective than levonorgestrel, especially when taken later.

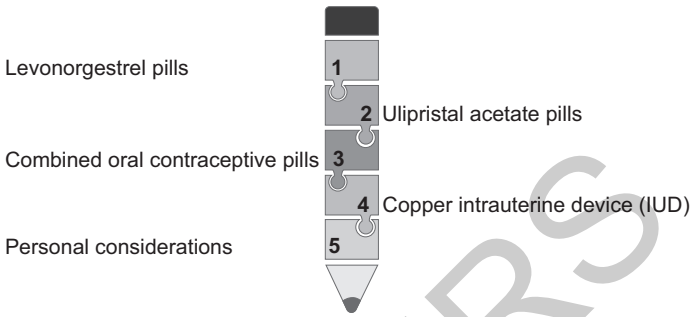


Fig. 10: Types of ECP.

Copper Intrauterine Device (IUD)

- A copper IUD can be inserted by a healthcare professional as emergency contraception within 5 days of unprotected sex.
- It's the most effective form of emergency contraception.
- It also provides ongoing contraception if desired.

Important Considerations

- **Timing:** Emergency contraception is most effective when used as soon as possible after unprotected sex.
- **Effectiveness:** No emergency contraception method is 100% effective.
- Not an Abortion Pill: Emergency contraception prevents pregnancy; it does not terminate an existing pregnancy.
- **No STI protection:** Emergency contraception does not protect against sexually transmitted infections (STIs).
- **Side effects:** ECPs can cause temporary side effects, such as nausea, vomiting, changes in menstrual bleeding, and headaches.
- **Healthcare provider:** It's always best to consult with a healthcare provider for accurate information and guidance on emergency contraception.

6. Housing.

A Housing is a fundamental human need, encompassing the provision of shelter and living spaces. However, it's much more than just physical structures.

Core Aspects

Shelter and Accommodation

At its most basic, housing provides protection from the elements, offering a safe and secure place to live. This includes houses, apartments, and other dwellings.

A Social and Economic Factor

- Housing plays a crucial role in individual and community well-being.
- It influences access to education, employment, healthcare, and social networks.
- The availability and affordability of housing significantly impact economic stability.

A Human Right

- The right to adequate housing is recognized in international human rights law.
- This right goes beyond simply having a roof over one's head; it includes:
  - Security of tenure.
  - Access to essential services (water, sanitation, energy).
  - Habitability (safe and healthy living conditions).
  - Affordability

A Complex Sector

The housing sector involves various stakeholders, including:

- Governments (policy and regulation).
- Developers and builders.

JAYPEE BROTHERS

- Financial institutions.
- Individuals and families.

Key Considerations

- **Affordability:** A major challenge globally is ensuring access to affordable housing, especially for low-income individuals and families.
- **Quality:** Housing must be safe, healthy, and provide adequate living conditions.
- **Availability:** The supply of housing must meet the demand of the population.
- **Sustainability:** Sustainable housing practices are essential to minimize environmental impact.

7. Prevention and control of hook worm infestation.

A Hookworm infestation is a parasitic infection that affects millions worldwide, particularly in areas with poor sanitation **(Fig. 11)**. Effective prevention and control strategies are crucial to minimize its impact **(Fig. 12)**.

Improved Sanitation and Hygiene

Proper Disposal of Human Waste

- This is the most critical step. Hookworm larvae thrive in soil contaminated with human feces.
- Promote the use of sanitary latrines and toilets.
- Ensure proper sewage treatment and disposal.

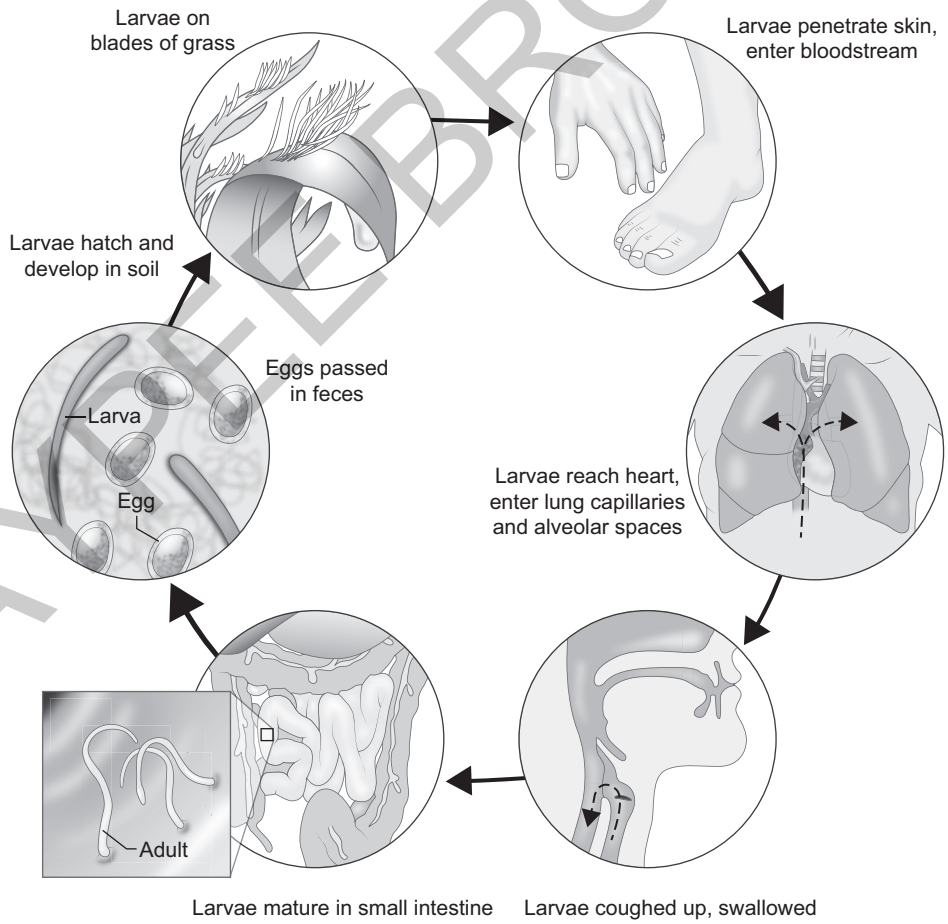


Fig. 11: Hookworm infestation.

JAYPEE BROTHERS

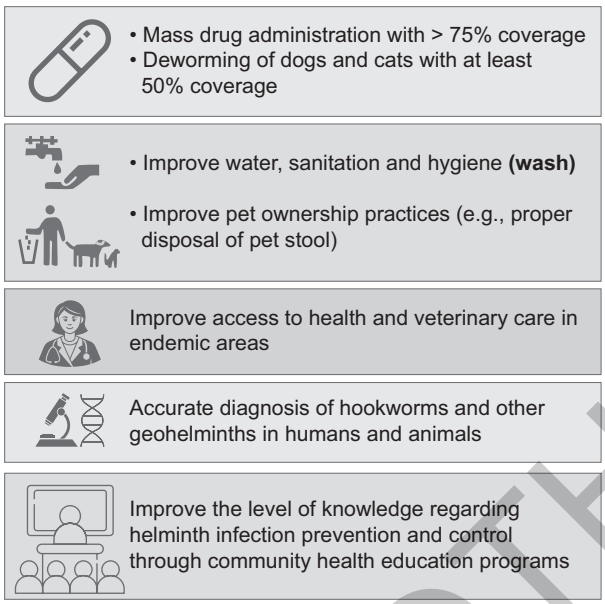


Fig. 12: Prevention and control strategies for hookworm infestation.

Handwashing

- Regular handwashing with soap and water, especially before eating and after using the toilet, is essential.
- This prevents the ingestion of hookworm eggs.

Safe Water Supply

Ensure access to clean and safe drinking water to prevent contamination.

Personal Protective Measures

Wearing Shoes

- Hookworm larvae penetrate the skin, usually through the feet.
- Wearing shoes, especially in areas with poor sanitation, is crucial.

Avoiding Contact with Contaminated Soil

- Avoid walking barefoot or sitting directly on soil that may be contaminated with human feces.
- This is particularly important for children who often play in soil.

Good Hygiene Practices

Maintaining good personal hygiene, including regular bathing and nail trimming, reduces the risk of infection.

Deworming Programs

Mass Drug Administration (MDA)

- Regular deworming with anthelmintic drugs (such as albendazole or mebendazole) is effective in reducing hookworm burden.
- MDA programs target high-risk populations, such as school-age children and pregnant women.

Targeted Treatment

- Treating individuals who are symptomatic or have confirmed hookworm infection.
- Regular screening for hookworm infection in high-risk populations.

JAYPEE BROTHERS

Education and Awareness

Community Education

- Educate communities about the causes, transmission, and prevention of hookworm infection.
- Promote hygiene practices and sanitation.

School-based Programs

Implement school-based programs to teach children about hygiene and sanitation. Provide deworming treatment in schools.

Environmental Control

- **Soil treatment:** In areas with high levels of soil contamination, soil treatment with lime or other chemicals may be necessary.
- **Improved drainage:** Improve drainage in areas where stagnant water can accumulate, as this can create favorable conditions for hookworm larvae.

Monitoring and Surveillance

Regular monitoring: Monitor hookworm prevalence and intensity in high-risk populations. Evaluate the effectiveness of control programs.

Surveillance Systems

Establish surveillance systems to track hookworm cases and identify areas with high transmission rates.

Healthcare Access

- Providing access to healthcare for diagnosis and treatment of infected individuals.
- Educating healthcare professionals on proper diagnosis and treatment protocols.
- By implementing these comprehensive strategies, we can significantly reduce the burden of hookworm infestation and improve the health and well-being of affected populations.

8. Describe the various methods of presentation of data.

A Data presentation is crucial for conveying information effectively. Choosing the right method depends on the type of data and the message you want to communicate **(Fig. 13)**.

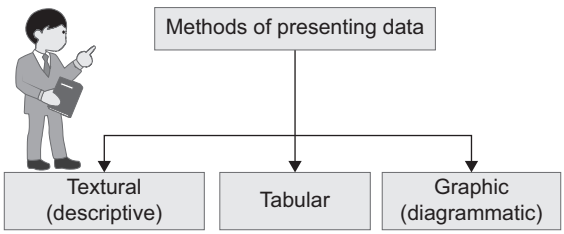


Fig. 13: Methods of presenting data.

Textual Presentation

Description

- Data is presented in written form, using paragraphs and sentences.
- Suitable for small datasets or when detailed explanations are needed.

Advantages

- Provides detailed explanations and context.
- Useful for qualitative data or when highlighting specific points.

Disadvantages

- Can be overwhelming for large datasets.
- Difficult to identify patterns or trends.

Tabular Presentation

Description

- Data is organized into rows and columns in a table.
- Suitable for presenting numerical data and comparisons.

JAYPEE BROTHERS

Advantages

- Clear and organized presentation.
- Facilitates comparisons and analysis.
- Easy to locate specific data points.

Disadvantages

- Can be difficult to visualize trends or patterns.
- May be overwhelming for very large tables.

Graphical Presentation

Description

- Data is presented visually using charts and graphs.
- Suitable for highlighting trends, patterns, and relationships.

Types

- **Bar charts:**
  - Used for comparing categorical data.
  - Bars represent values, and their lengths are proportional to the magnitudes.
- **Line charts:**
  - Used for showing trends over time or continuous variables.
  - Lines connect data points, illustrating changes and patterns.
- **Pie charts:**
  - Used for showing proportions of a whole.
  - Slices represent percentages of the total.
- **Scatter plots:**
  - Used for showing the relationship between two variables.
  - Dots represent data points, illustrating correlations.
- **Histograms:** Used to show the distribution of numerical data.
- **Box plots:** Used to display the distribution of data based on a five number summary.

Advantages

- Visually appealing and easy to understand.
- Highlights trends and patterns effectively.
- Facilitates comparisons and analysis.

Disadvantages

- Can be misleading if not designed properly.
- May not be suitable for very detailed data.

Pictorial Presentation (Pictographs)

Description

- Data is represented using pictures or symbols.
- Suitable for simple data and general audiences.

Advantages

- Visually engaging and easy to understand.
- Effective for conveying simple messages.

Disadvantages

- Limited in the amount of data it can represent.
- Not suitable for complex data or precise comparisons.

JAYPEE BROTHERS

Statistical Maps (Choropleth Maps)

Description

- Data is presented on a map using colors or patterns to represent different values.
- Suitable for geographical data.

Advantages

- Provides spatial context for data.
- Highlights regional variations and patterns.

Disadvantages

- Can be difficult to interpret if there are many categories.
- May not be suitable for very precise data.

9. Explain oral contraceptive pills.

A Oral contraceptive pills, commonly known as "the pill," are a form of hormonal contraception taken by mouth to prevent pregnancy **(Figs. 14 and 15)**.

Types of Oral Contraceptive Pills

Combined Oral Contraceptives (COCs)

- These contain both estrogen and progestin.
- They work primarily by preventing ovulation (the release of an egg from the ovary).
- They also thicken cervical mucus, making it difficult for sperm to reach an egg, and thin the lining of the uterus (endometrium), making it less receptive to a fertilized egg.

Progestin-Only Pills (POPs or "mini-pills"):

- These contain only progestin.
- They primarily work by thickening cervical mucus and thinning the endometrium.
- They may also sometimes prevent ovulation, but not as consistently as COCs.

How They Work

- The hormones in oral contraceptive pills prevent pregnancy by interfering with the normal hormonal cycle that controls ovulation.
- By preventing ovulation, there is no egg available for sperm to fertilize.
- The changes to the cervical mucus and uterine lining also contribute to preventing pregnancy.

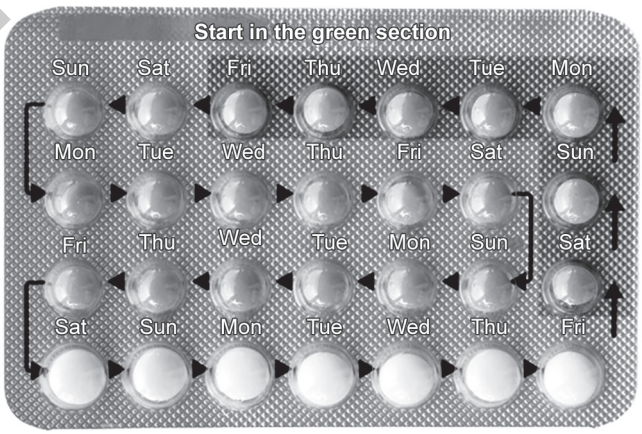


Fig. 14: Oral contraceptive pills.

JAYPEE BROTHERS

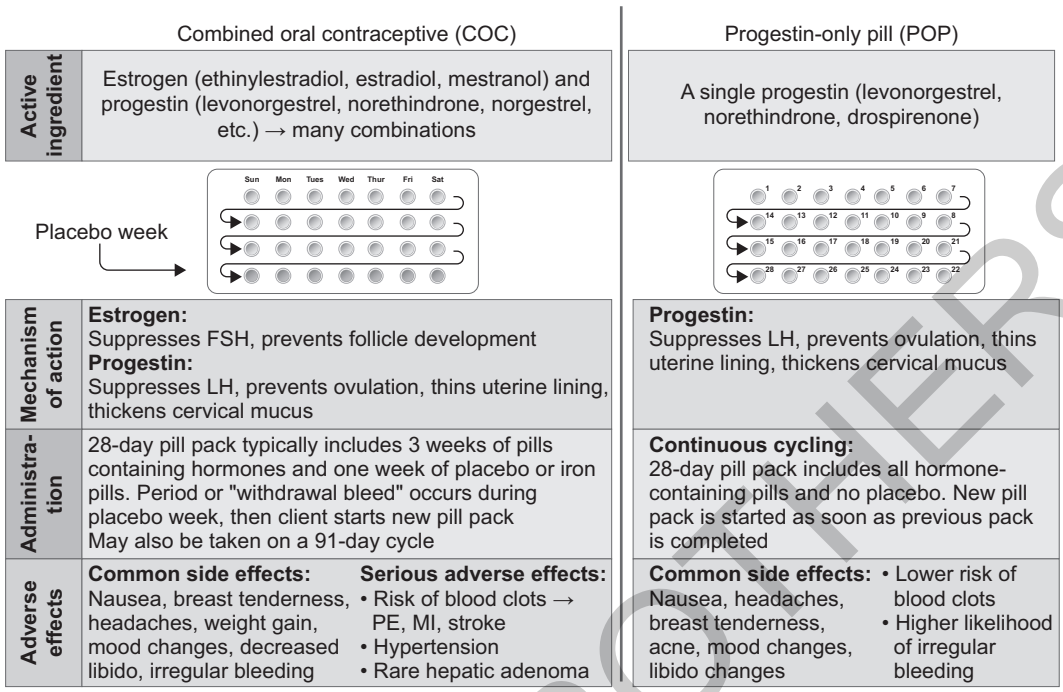


Fig. 15: Oral Contraceptive management.

Usage

- Oral contraceptive pills are typically taken daily, at the same time each day, to maintain their effectiveness.
- Combined pills often come in packs of 21 or 28 pills. The 28-day packs include 7 inactive (placebo) pills, which are taken during the last week of the cycle to maintain the daily habit.
- Progestin only pills are taken every day of the month.
- It is very important to follow the directions given by the doctor or the instructions that come with the pills.

Benefits

- Highly effective when taken correctly.
- Can regulate menstrual cycles and reduce menstrual cramps.
- May reduce the risk of certain cancers, such as ovarian and endometrial cancer.
- Can help with acne.

Potential Side Effects

- Nausea, headaches, and breast tenderness.
- Changes in menstrual bleeding.
- Mood changes.
- Increased risk of blood clots (especially with COCs, and particularly in women who smoke).
- It is important to speak with a doctor about potential side effects.

Important Considerations

- Oral contraceptive pills do not protect against sexually transmitted infections (STIs).
- They require a prescription in many countries.
- It's essential to consult with a healthcare professional to determine if oral contraceptive pills are the right choice and to discuss any potential risks or side effects.
- It is very important to get information regarding oral contraceptive pills from a trusted medical professional.

JAYPEE BROTHERS

SHORT ANSWERS

10. Mention the types of vaccines with examples.

A Vaccines are crucial tools in preventing infectious diseases, and they work by stimulating the body's immune system to recognize and fight off harmful pathogens. Here's a breakdown of the main types **(Fig. 16)**:

- **Live-attenuated vaccines:**
  - These vaccines contain a weakened version of the live virus or bacteria.
  - They produce a strong and long-lasting immune response.
  - *Examples:* Measles, mumps, rubella (MMR) vaccine, chickenpox (varicella) vaccine, and rotavirus vaccine.
- **Inactivated vaccines:**
  - These vaccines use a killed version of the pathogen.
  - They often require multiple doses (booster shots) for ongoing immunity.
  - *Examples:* Influenza (flu) shot, hepatitis A vaccine, and polio (inactivated poliovirus vaccine).
- **Subunit, recombinant, polysaccharide, and conjugate vaccines:**
  - These vaccines use specific parts of the pathogen, such as proteins or sugars, to trigger an immune response.
  - *Examples:*
    - Hepatitis B vaccine (recombinant).
    - HPV (human papillomavirus) vaccine (subunit).
    - Pneumococcal vaccines (conjugate and polysaccharide).
- **Toxoid vaccines:**
  - These vaccines use toxins produced by bacteria that have been inactivated.
  - They protect against the harmful effects of the toxins.
  - *Examples:* Tetanus and diphtheria vaccines.
- **Messenger RNA (mRNA) vaccines:**
  - These vaccines use mRNA to instruct cells to produce a protein that triggers an immune response.
  - *Example:* Some COVID-19 vaccines.
- **Viral vector vaccines:**
  - These vaccines use a modified version of a harmless virus (the vector) to deliver genetic material that triggers an immune response.
  - *Example:*
    - Some COVID-19 vaccines.
    - It's important to note that vaccine technology is constantly evolving, and researchers are continuing to develop new and improved vaccines.

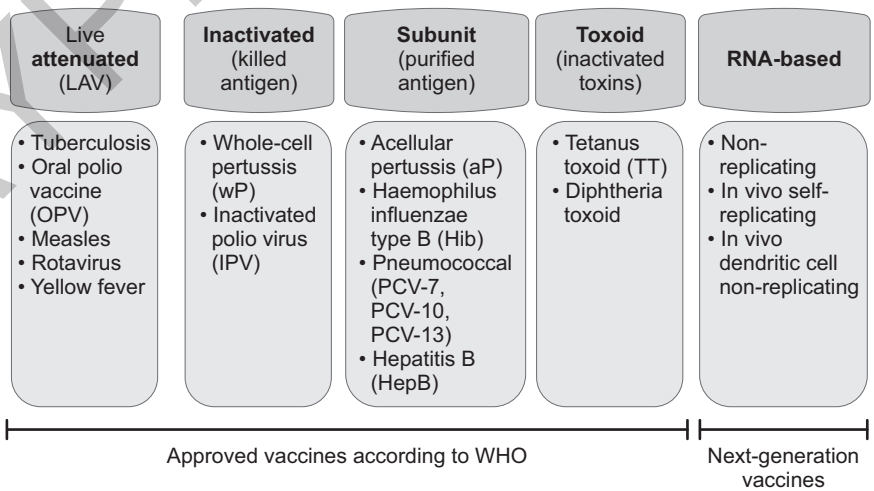


Fig. 16: Types of vaccines.

JAYPEE BROTHERS

11. Ill effects of deforestation.

A

- **Climate change:** Increased greenhouse gases.
- **Biodiversity loss:** Habitat destruction.
- **Soil erosion:** Loss of fertile topsoil.
- **Water cycle disruption:** Changes in rainfall, increased flooding.
- **Loss of livelihoods:** Impacts on communities reliant on forests.

12. Mention any four first line anti-tuberculosis drugs.

A The standard first-line anti-tuberculosis drugs commonly used in the initial phase of treatment are:

- Isoniazid (INH)
- Rifampin (RIF)
- Pyrazinamide (PZA)
- Ethambutol (EMB)

13. List down the dimensions of health.

A The dimensions of health are typically categorized as:

- **Physical:** Body's overall condition.
- **Mental:** Cognitive and emotional well-being.
- **Social:** Relationships and community connections.
- **Emotional:** Ability to manage and express feelings.
- **Spiritual:** Sense of purpose and meaning.
- **Environmental:** Impact of surroundings on health.

14. Mode of transmission and Incubation period for chickenpox.

A

- **Mode of transmission:** Highly contagious. Spreads through:
  - Airborne respiratory droplets (coughing, sneezing).
  - Direct contact with fluid from chickenpox blisters.
- **Incubation period:** Typically, 10 to 21 days after exposure.

15. Small family norm.

A The "small family norm" refers to the social ideal or practice of couples having a limited number of children, typically two or fewer. It's often associated with factors like:

- Improved access to contraception.
- Increased female education and workforce participation.
- Economic considerations and the rising cost of raising children.
- Shifting societal values.

16. Women empowerment measures for control of population.

A

- **Education:** Increased access to education delays marriage and childbearing.
- **Economic opportunities:** Financial independence gives women more control over reproductive choices.
- **Access to healthcare:** Contraceptives and reproductive health services enable informed decisions.
- **Legal rights:** Ensuring equal rights and protection against discrimination.
- **Social empowerment:** Challenging traditional gender roles and promoting women's participation in decision-making.

17. List down any four health effects of radiation.

A Radiation exposure can have various health effects, depending on the dose and duration of exposure **(Fig. 17)**.

1. **Cancer:** Ionizing radiation can damage DNA, increasing the risk of developing various cancers, such as leukemia, thyroid cancer, and lung cancer.

JAYPEE BROTHERS

2. **Acute radiation syndrome (ARS):** High doses of radiation delivered over a short period can cause ARS, also known as radiation sickness. Symptoms can include nausea, vomiting, fatigue, hair loss, and damage to internal organs.
3. **Genetic mutations:** Radiation can cause mutations in genes, which may lead to genetic disorders in future generations.
4. **Damage to developing fetuses:** Exposure to radiation during pregnancy can cause severe birth defects and developmental problems in the fetus.

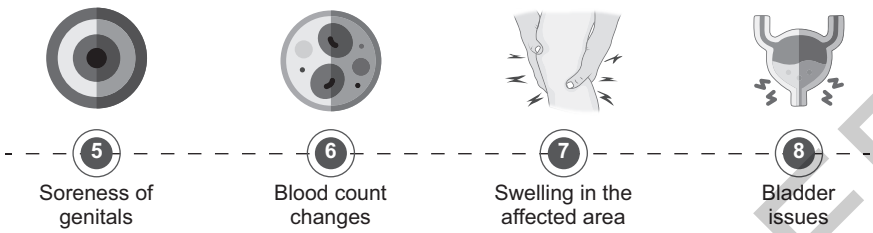


Fig. 17: Side effects of radiation therapy.

18. Mention the types of ventilations with example.

A In community health, ventilation often refers to improving air quality to prevent disease spread, particularly respiratory infections. Here are some types and examples:

- **Natural ventilation:**
  - Utilizing natural forces like wind and temperature differences to circulate air.
  - *Examples:* Opening windows and doors in homes, schools, and public buildings; designing buildings with cross-ventilation.
- **Mechanical ventilation:**
  - Using fans and air handling systems to move air.
  - *Examples:* Exhaust fans in kitchens and bathrooms, HVAC (heating, ventilation, and air conditioning) systems in hospitals and clinics, portable air purifiers in crowded spaces.
- **Localized exhaust ventilation:**
  - Removing contaminated air at its source.
  - *Examples:* Fume hoods in laboratories, exhaust systems in industrial settings, and cooktop vent hoods in homes.

19. List out any four noise control measures.

A

1. **Source control:** Modifying or replacing noisy equipment or processes to reduce noise generation at the source. Examples include using quieter machinery, lubricating moving parts, and redesigning equipment.
2. **Path control:** Interrupting the path of noise transmission. Examples include installing sound barriers, using sound-absorbing materials on walls and ceilings, and creating distance between the noise source and the receiver.
3. **Receiver control:** Protecting individuals from noise exposure. Examples include providing earplugs or earmuffs, and limiting exposure time in noisy environments.
4. **Administrative controls:** Creating and enforcing policies to limit noise exposure. Examples include rotating workers in noisy areas, scheduling noisy activities during less sensitive times, and implementing noise monitoring programs.

MULTIPLE CHOICE QUESTIONS

1. The "Unit of Service" in community health nursing is the:
a. Individual
b. Family
c. Community
d. Hospital

2. The "Epidemiological Triad" consists of:
a. Doctor, patient, hospital
b. Agent, host, environment
c. Bacteria, virus, fungus
d. Source, mode, destination

3. Primary prevention is aimed at:
a. Early diagnosis
b. Treatment
c. Health promotion and specific protection
d. Rehabilitation

JAYPEE BROTHERS

4. Which of the following is an example of "Secondary Prevention"?
a. Immunization
b. Breast self-examination
c. Physical therapy
d. Using a seatbelt

5. The "Health for All by 2000 AD" declaration was made at:
a. Bhore Committee
b. Alma-Ata Conference
c. WHO Headquarters
d. UNICEF Conference

6. The first step in a "Home Visit" is:
a. Introduction
b. Planning
c. Nursing action
d. Recording

7. The constant presence of a disease within a geographic area is called:
a. Epidemic
b. Endemic
c. Pandemic
d. Sporadic

8. The "Bag Technique" in community health is used primarily for:
a. Carrying medicines
b. Prevention of cross-infection
c. Storing records
d. Impressing the family

9. A disease that spreads across several countries or continents is a:
a. Pandemic
b. Endemic
c. Epidemic
d. Exotic

10. The first "Census" in India was conducted in:
a. 1881
b. 1901
c. 1947
d. 1951

11. Incubation period is the time between:
a. Exposure to infection and maximum severity
b. Exposure to infection and appearance of first symptoms
c. Recovery and relapse
d. Entry and exit of an agent

12. The most common source of infection for infants is:
a. Water
b. Soil
c. Family members
d. Air

ANSWERS

1. b	**2. b**	**3. c**	**4. b**	**5. b**	**6. b**
7. b	**8. b**	**9. a**	**10. a**	**11. b**	**12. c**

JAYPEE BROTHERS

detailed information on nursing books, visit our website www.ejaypee.com, for detailed information on nursing books, visit our website www.ejaypee

NURSING

Solved Question Papers for BSc Nursing

Salient Features

- *Third-year subjects such as:* Community Health Nursing including Environmental Science and Epidemiology and Education Technology/Nursing Education.
- *Comprehensive Coverage:* Offers in-depth coverage of subjects for Semester V: Community Health Nursing including Environmental Science and Epidemiology and Education Technology/Nursing Education aligning with Indian Nursing Council (INC) syllabi.
- *Diagrams and Tables:* This book contains many tables and diagrams. The diagrammatic and tabular presentation of the content helps to facilitate quick review and recall of the important concepts.
- *Exam Preparation:* Familiarizes students with exam formats, question types (MCQs, short/long answers), and typical question patterns from previous years (e.g., 2025–2021 papers).
- *Develops Critical Thinking:* Exposure to varied question formats challenges students to apply knowledge, enhancing critical thinking and problem-solving skills.
- *Self-Assessment:* Provides a tool for self-evaluation, helping students gauge their understanding and identify weaknesses before exams.

I Clement MA MSc (N) PhD (N) is currently working as Dean and Professor in St Benedict's Institute of Nursing, Bengaluru, Karnataka, India. He has obtained Doctorate in Nursing from Sri Ramachandra Institute of Higher Education, Chennai, and postgraduation from The Tamil Nadu Dr MGR Medical University, Chennai (Annai JKK Sampoorani Ammal College of Nursing, Erode), Tamil Nadu. He has an experience of 8 years after PhD and 17 years after postgraduation. He has a very long professional journey (36 years), from Axillary Nurse to Doctorate in Nursing (1986–2022). General education is part and parcel of his professional journey—MBA in Education (2019); Madras University (2017); MA in Education, Alagappa University (2015); MSc General Psychology, Madras University (2013); MSc Counseling and Psychotherapy (2022); Master of Social Work (MSW 2020) from The Tamil Nadu Open University, Chennai; MPhil, Education, Alagappa University (2006); MA, Child Care and Education, Alagappa University (2004); and MA, Sociology, Annamalai University (1995). He is PhD-guide, co-guide, examiner, tool validator, and thesis evaluator (MGM University, Aurangabad, Sri Balaji University, Puducherry, Rajiv Gandhi University of Health Sciences, Bengaluru). He has published 70 nursing textbooks for nursing and paramedical courses including solved question papers. He is the Editor and National Editorial Board Member for national and international journals. He has also published 90 scientific and research articles in national and international journals, Publisher (IC Publications). He has presented 60 scientific and research papers in national and international conferences and organized workshops, seminars, symposiums and panel discussions, state- and national-level geriatric health camps, eye camps, blood donation camps, health awareness programs, community development programs, and national health activities. He is a research guide and co-guide for PhD and PG students in various Indian universities. Professional membership includes TNAI, ISPN, CMAI, NRSI, Red Cross, St John's Ambulance, Society of Indian Neuroscience Nurse, and PhD Society of India University.

Scan for more nursing titles...

Buy from ejaypee

JAYPEE BROTHERS

ISBN 978-93-6616-686-5