NUTRITION AND HEALTH EDUCATION

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Definition O Health Education, Principles, Health Promotion, Approaches of health promotions, Difference between health education and health promotion, Health Advocacy, Elements of Communication, Elements of a Message Design, Models of Communication, Types of Communication, Approaches of Communication – Individual, Group, Mass methods of communication, Criteria for Selecting Methods, Tools & Materials, Diffusion of Innovation, Edar Dale's Cone of Experience, Evaluation – types, steps, Short Notes

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HEALTH EDUCATION

- Health education is a social science that draws from the biological, environmental, psychological, physical and medical sciences to promote health and prevent disease, disability and premature death through education driven voluntary behavior change activities

- It is the development of individual, group, institutional, community and systemic strategies to improve health knowledge, attitudes, skills and behavior

- The purpose of health education is to positively influence the health behavior of individuals and communities as well as the living and working conditions that influence their health

NUTRITION EDUCATION

"According to WHO, the focus of health and nutrition education is on people and action. In general. its ainns are to persuade people to adopt and sustain improved desirable nutrition and health practices and to take their own decisions, both individually and collectively to improve their nutritional and health status, and environment."

"Nutrition education is also described as the process by which beliefs, attitudes, environmental influences. and understandings about food lead to practices that are scientifically sound, practical, and consistent with individual needs and available food Sources.

Importance

- Nutrition education reinforces knowledge and corrects faulty concepts about nutrition.
- It allows the individual to evaluate the nutrition information he or she receives.
- It promotes the best use of an individual's limited economic resources.
- It promotes the concept of health as a values community asset.

Components of Nutrition Education

Nutrition education programmes should have at least three components which should be directed at the various social groups.

a) Increasing the nutrition knowledge and awareness of the public and of policy-makers- This can be achieved by providing information on the relationship between diet and health; the relationship between nutritional and health status and individual productivity and national development; the nutritional needs of the population and of individuals; the importance of ensuring the quality and safety of the food supply; the causes and consequences of nutritional disorders; and the benefits of food labelling and legislation.

b) Promoting desirable food behaviour and nutritional practices- This can be achieved by providing information on the nutritional value of foods; the components of an adequate diet; making appropriate food choices and purchases from available resources; hygienic food preparation and handling of food; storage, processing and preservation of food; and equitable intra household food distribution according to the nutritional needs of family members.

c) Increasing the diversity and quantity of family food supplies- This can be achieved by providing information on methods of improving food production; crop selection and diversification; proper storage, preservation and processing; conservation of nutrients during food preparation; and the prevention of food waste.

Each of these components makes a special contribution to nutritional improvement. All three are important and need to form part of nutrition education and training programmes for personnel in agriculture, education and health in African countries. At the community level the people affected by nutritional problems should participate in determining which components should receive most emphasis to bring about lasting improvements in local food and nutrition conditions

PRINCIPLES OF NUTRITION AND HEALTH EDUCATION

1. Credibility

- It is the degree to which the message to be communicated is perceived as trustworthy by the receiver
- Good health education must be consistent and compatible with scientific knowledge and also with the local culture, educational system and social goals

2. Interest

- Health teaching should be related to the interests of the people
- Health programme should be based on the “FELT NEEDS”, so that it becomes “people’s programme

- Felt needs are the real health needs of the people, that is needs the people feel about themselves

3. Participation

- A high degree of participation tends to create a sense of involvement, personal acceptance and decision –making
- It provides maximum feedback
- The Alma- Ata Declaration states “The people have a right and duty to participate individually and collectively in the planning and implementation of their health care”
- Health programmers are unlikely to succeed if community participation is not an integral part

4. Motivation

- In every person, there is a fundamental desire to learn. Awakening this desire is called motivation
- Two types of motives
  - primary motives-are driving forces initiating people into action
  - secondary motives –are created by outside forces or incentives
- Need for incentives is a first step in learning to change
- Incentives may be positive or negative
- Main aim of motivation is to change behavior
- Motivation is contagious: one motivated person may spread motivation throughout a group

5. Comprehension

- Health educator must know the level of understanding, education and literacy of people to whom the teaching is directed
- Always communicate in the language people understand .
- Teaching should be within the mental capacity of the audience.

6. Reinforcement

- Repetition of message at intervals is necessary
- If the message is repeated in different ways, people are more likely to remember it.

7. Learning by doing

- The importance of learning by doing can be best illustrated by the Chinese proverb “if I hear, I forget; if I see, I remember; if I do, I know”

8. Known to unknown

- We must proceed
  - “from the concrete to the abstract”
  - “from the particular to the general”
  - “from the simple to the more complicated”
  - “from the easy to more difficult”
  - “from the known to unknown”

- Here health communicator uses the existing knowledge of the people as pegs on which to hang new knowledge

9. Feedback

- The health educator can modify the elements of the system (e.g., message, channels) in the light of feedback from his audience

- For effective communication, feedback is of paramount importance.

10. Leaders

- Leaders are agents of change and they can be made use of in health education work.

- The attributes of a leader are;
  - He understands the needs and demands of the community
  - Provides proper guidance, takes the initiative, is receptive to the views and suggestions of the people;
  - Identifies himself with the community;
  - Selfless, honest, impartial, considerate and sincere;
  - Easily accessible to the people;
  - Able to control and compromise the various factors in the community;
  - Possesses the requisite skill and knowledge of eliciting cooperation and achieving coordination of the various official and non-official organizations.

HEALTH PROMOTION

The most well-known definition of health promotion is that of the World Health Organization’s Ottawa Charter (1986): “Health promotion is the process of enabling people to increase control over, and to improve their health” and identified some categories of strategy to guide the health sector in the process of engaging in health promotion. These are as follows

- Create supportive environments: Ensure physical and social environments support people’s abilities to live healthy lives. Make healthy choices the easy choices.
- Strengthen community action: Support activities that increase groups’ abilities to organize around and act upon those things in their physical and social environments that affect health.

- Develop personal skills: Enable people to learn throughout life and prepare themselves for all its stages. Skill areas may encompass personal/familial or group dynamics, organizing, political action and social analysis.
- Build healthy public policy: Most health determinants lie outside the medical/illness sector (income, housing, environmental protection, work, agriculture). These sectors must begin to take conscious accounting of the health impacts of their policies. Health must be on the agenda of all policy-makers.

Approaches of health promotions

1. Medical approach

The medical approach aims to enable people to be free from medically defined disease and disability, such as infectious diseases, cancer and heart disease. The approach involves medical interventions to prevent or ameliorate ill health.

2. Behavioral change approach

The behavioral change approach is based upon changing people's individual attitudes and behaviors so that they adopt a "healthy lifestyle". Examples include teaching people how to stop smoking, look after their teeth, eat the "right food", and so on.

3. Educational approach

The aim of the education approach is to provide individuals with information, ensure knowledge and understanding of health issues, and to enable well-informed decisions to be made. Information about health is presented, and people are helped to explore their values and attitudes and to make their own decisions.

4. Client centered approach

Within the client centered approach the health professional works with clients to help them identify what they want to know about and take action on, and make their own decisions and choices according to their own interests and values.

5. Societal change approach

Rather than changing the behavior of individuals, the societal change approach modifies the physical and social environment in order to make it more conducive to good health.

Difference between health education and health promotion

Health education involves teaching individuals and giving information to the public to achieve better health. Health promotion motivates individuals to accept behavioral change by directly influencing beliefs, values, and attitudes. The two concepts, health promotion, and education share symbiotic strategies. Mainly health promotion is a sub topic of health education. Health education is a old concept while other one is new.

HEALTH ADVOCACY

Advocacy is an activity by an individual or group that aims to influence decisions within political, economic, and social institutions.

It involves promoting the interests or cause of someone or a group of people.

Advocacy is a key health promotion activity for overcoming major barriers to public health and occupational health.

There are 3 types of advocacy-

1. **Self-Advocacy**

Self-advocacy refers to an individual's ability to effectively communicate, convey, negotiate or assert his or her own interests, desires, needs, and rights.

Self-advocacy means understanding your strengths and needs, identifying your personal goals, knowing your legal rights and responsibilities, and communicating these to others.

2. **Individual Advocacy**

In individual advocacy a person or group of people concentrate their efforts on just one or two individuals.

There are two common forms of individual advocacy - informal and formal advocacy. When people like parents, friends, family members or agencies speak out and advocate for vulnerable people this is termed informal advocacy. Formal advocacy more frequently involves organizations that pay their staff to advocate for someone or for a group of individuals.

3. **Systems Advocacy**

Systems advocacy is about changing policies, laws or rules that impact how someone lives their life. These efforts can be targeted at a local, state, or national agency.

ELEMENTS OF COMMUNICATION

Source → Sender → Encode → Message → Channel → Decode → Receiver

Guidelines for well-designed messages

- In designing a message, the following points should be kept in mind:
- Keep them short and simple; include only a few key ideas.
- Give reliable, complete information.
- Repeat the idea many times.
- Recommend precise behaviour change.
- Show the relation between the nutritional problem and the recommended behaviour.

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- Make use of a slogan or theme.
- Ensure that the message is presented by a credible source (as perceived by the target group).
- Present the facts in a direct manner.
- Make use of positive expressions, not negative ones.
- Use humour without being offensive to anyone.

Essential Elements of a Message Design

For a message to be coherent, persuasive and effective, the essential elements include.

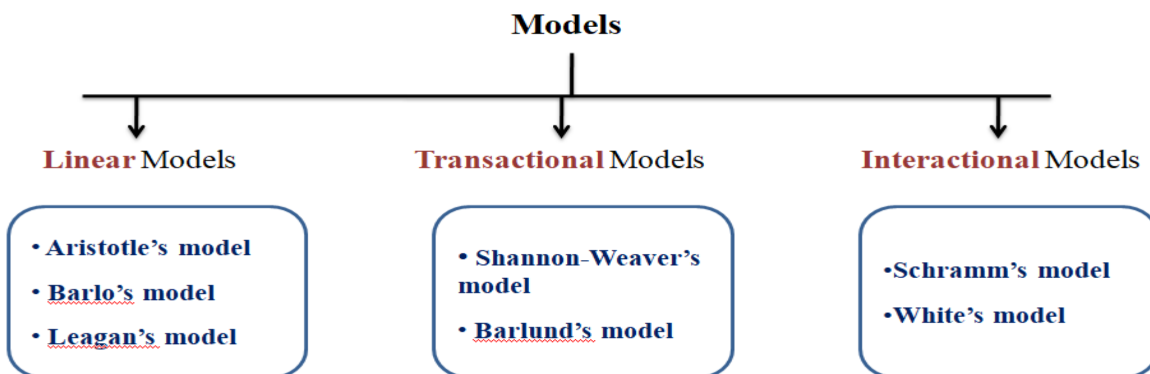
1. **Content -** this includes the problem identification, target audience, resistance pointe solutions and required action.

2. **Design -** the design factors such as use of single ideas, using language that is relevant. portrayal of characters with which the target audience can identify or relate themselves.

3. **Persuasion -** that is dispelling doubts and reducing the chances of the doubts acting as a barrier to action.

4. **Memorability -** that is, idea reinforcement, minimizing distraction and using repetition as a strategy.

MODELS OF COMMUNICATION



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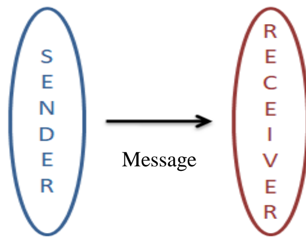
1. Linear model



- One way of communication
- Used for mass communication
- Sender send the message and receiver only receive
- No feedback

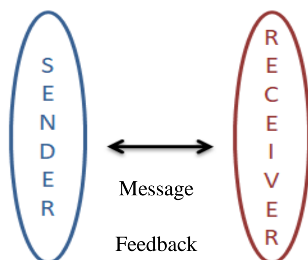
Pros

- ✓ Good way at audience persuasion and propaganda
- ✓ International results

Cons

- Communication is not continuous as no concept of feedback
- No way to know if the communication was effective or not

2. Transactional model



- Used for Interpersonal communication
- Sender and receiver interchange their roles
- Simultaneous feedback
- Context of environment and knowledge
- Feedback is taken as a new message

Pros

- ✓ No discrimination between sender and receiver
- ✓ Instant feedback

Cons

- Encourages non-verbal communication
- More noise due to communicators taking part at the same time

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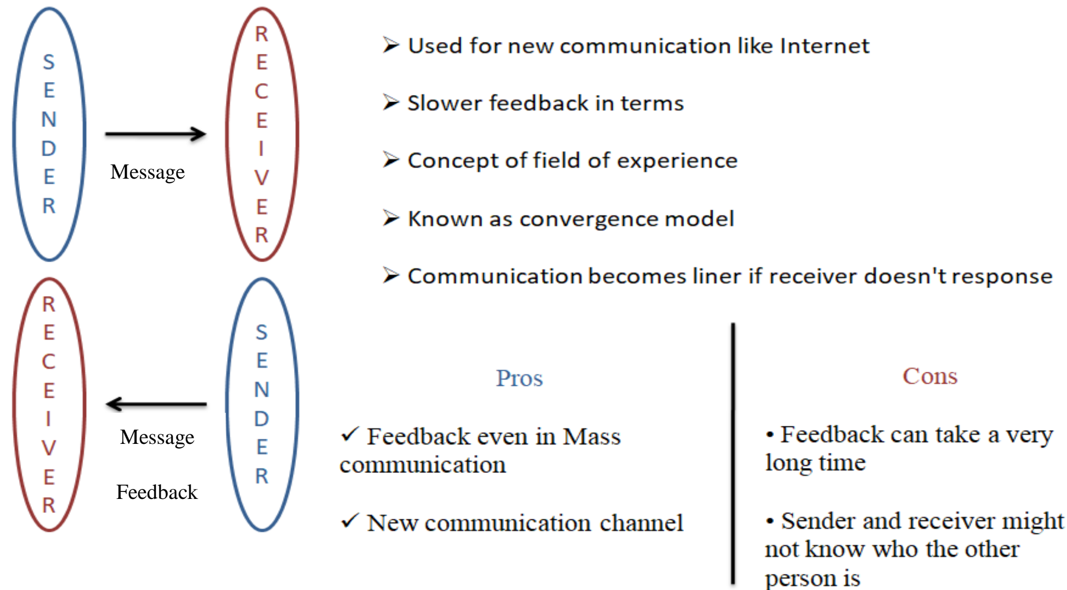
3. Interactional model



❖ Non-linear model of communication

It is a way of communication that is thought to come from the creative side of brain that gets the message across in a round about way.

Ex. - You are talking to someone and they say something and it creates an image in your mind.

TYPES OF COMMUNICATION

1. On the basis of number o participants

a) **Intrapersonal Communication –** When a person communicate with herself / himself.

b) **Interpersonal Communication –** When a person communicate to other person-**'Dyadic Communication'.**

c) **Intragroup Communication –** occur between more than two individuals or within group-**'Multiadic Communication'**.

d) **Intergroup Communication –** The communication which involves two groups-**'Association Communication'**.

e) **Organization Communication –** Communication which is used in business enterprises-**'Institutional Communication'**.

f) **Public Communication –** The form in which public is involved, communicate with public.

g) **Mass Communication –** Communicate with a large group of people or society.

h) **Transpersonal Communication–** Communication with sprite, **spirituals communication**.

2. On the basis of direction of flow

a) **Downward Communication –** Move downward from superior to subordinate (Boss → Clark). To give direction about same job.

b) **Upward Communication –** Move upward from subordinate to the top of organizational hierarchy.

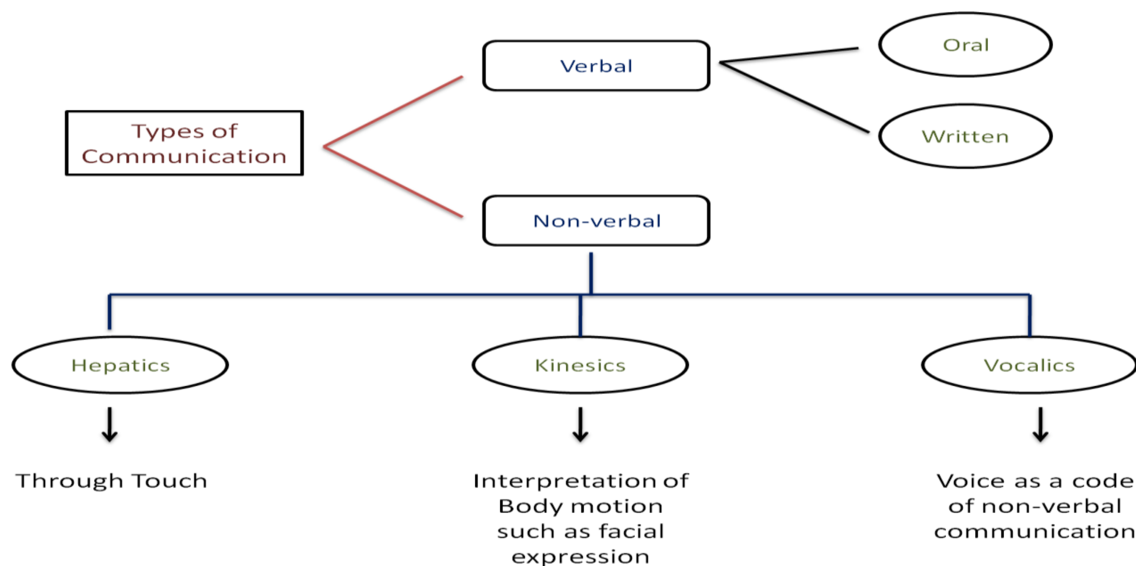
c) **Cross Communication –** Communication that involves different people or the same organizational or different level of the organizational hierarchy-**'Diagonal Communication'**.

3. On the basis on organizational structure

a) **Formal –** Government sectors, NGO, corporate.

b) **Informal – Grapevine Communication**. It arises due to informal relation between person and grows spontaneously from personal and group interest.

4. On the basis of way of expression



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- **Chronomics –** Is the study of the role of time in communication.

- **Proxemics –** It is the study of space and how we use it, how it makes us feel more. The term is coined by Edward hall. Proxemics communication is the how well human use space in communication.

APPROACHES / METHODS OF COMMUNICATION

A. Individual Approaches

Communicate with only one person. An extension worker provides individual approach through the personal **visit, personal letters, and counseling**.

1. **Personal contact or interview –** In personal interview face to face contact takes palce between the interviewer and interviewee.

2. **Home visit –** It is a direct face to face contact by the nutrition educator with the home maker at their home for nutrition education.

3. **Personal letter –** It is written by the nutrition educator to particular person or home maker in connection with nutrition problem.

4. **Counseling –** It is a personal and dynamic relationship between two people who approaches a mutually defined problem for mutual consideration for each other, to the end the younger or less mature or more troubled of the two is aided to self determination solution of his problem.
    - **Principles of counseling**
        - ✓ **Acceptance**
        - ✓ **Purposeful expression of feelings**
        - ✓ **Control emotional involvement**
        - ✓ **Client's self determination**
        - ✓ **Non-judgemental attitude**
        - ✓ **Individualization**
        - ✓ **Confidentiality**

    - **Phases of counseling**
        a) **Relationship building phase – Listen pay attention build relationship**
        b) **Exploring & understanding phase – Give broad opening offer general lead observe carefully focusing seek clarification**
        c) **Problem solving phase**

    - **Characteristics of a good counsellor**

A good counsellor will be one who shares common attributes and is able to offer empathetic support and understanding, in a caring, comforting manner.

1. **Empathy**

Empathy is the ability to understand and share the feelings of others. As a Counsellor, he/she need to be able to put his/herself in the shoes of his/her client and understand the situation from their point of view. Even if he/she don't

agree with their perspective, he/she still need the ability to understand how it feels to them in order to address their issue effectively.

2. Discretion

Confidentiality is of upmost importance when you are a Counsellor. he/she must be able to maintain confidentiality so the client can trust them and so that an effective rapport can be built with your client.

3. Patience

As a Counsellor he/she need to have patience with his/her clients as they process the discussion. It may take them time to accept certain things and to move towards positive changes. It may also take time for them to see large changes.

4. Compassion

It is very important that their clients sense their truly care about them. he/she may not be able to relate to every issue that is shared with them, but he/she need to be able to have compassion for how it feels to be in their shoes.

5. Encouragement

The ability to encourage and instil hope in the client, is important attribute of a Counsellor.

6. Self Awareness

A Counsellor who is aware of their own feelings and does not react defensively to what a client shares, will be more effective in the therapeutic relationship.

7. Open Mindedness

Counsellors hear all kinds of private information and encounter all types of people. It is important that the client understands that they are not personally judging them but working on improving the outcomes of their behaviours.

8. Flexibility

The competent Counsellor understands the need to remain flexible in their approach often using a variety of conversational responses depending on the needs of the client. Sometimes we ask questions. Other times we are silent.

9. Good Listener

Counsellors spend a significant amount of time listening to their clients. he/she will need to be intuitive in discerning what the client is really saying and "read between the lines" to translate their dialogue into goals that the client can work towards, in order to reach resolution.

10. Ability to care for self

Finally, the competent Counsellor recognises personal limits, boundaries and actively seeks to sustain a life of personal care.

B. Group Approaches

Communicate with more than one person or group. Ex.- **demonstration, discussion meeting, group discussion, panel discussion, symposium, group interview, field visit, tour** etc.

1. **Demonstration –**

In demonstration the education agent teaches the group people how to do different kind of work practically. Therefore it is a process of learning by doing.

a) **Method demonstration:** It is given before a group of people to show how to carry out an entirely new practice or an old practice in a better way.

b) **Result demonstration:** It is a method of motivating the people for adaptation of a new practice by showing its distinctly superior result.

2. **Discussion -**

a) **Group discussion:** It is a two way communication people learn by exchanging their views and experiences. Members should not be less than 6 but not more than 12. There should be a group leader who initiates the subjects help the discussion in a proper manner, include every one to participate.

b) **Panel discussion:** In it 4 to 8 persons qualified to talk about the topic sit and discussed on a given problem in front of a audience. The panel comprises a chairman or moderator.

c) **Symposium**: It is a lectures on a selected topic. Each person presents an aspect of the subject briefly. There are no discussion among the symposium members. At the end audience may arise question.

3. **Workshop –**

It consists of a series of meeting with the help of a consultant and resource personnel. It is divided into small group and each group will choose a chairman and recorder. Learning takes place in a friendly and democrative atmosphere under expert's guidance.

4. **Role play or drama –**

Two or more persons are given individuals roles to play they act out a situation leading to discussion.

5. **Field visit & tour –**

C. Mass Approaches

It involves large number of people or community. The mass are approached through films, radio, T.V, circular letters.

TOOLS & MATERIALS

- **Leaflet –** It is a single sheet or paper folded printed matter, containing preliminary information related to a topic.
- **Folder –** It is a single printed sheet or paper of big size folded once or twice givens essential information relating to a particular topic.
- **Bulletin or Pamphlets –** Printed media bound booklet with a number of pages containing comprehensive information about a topic.
- **Newsletter –** It is a miniature newspaper in a good quality paper containing information relating to the activities and achievements of organization published periodically distributed free of cost.
- **Journal or Magazine –** These are periodically published containing information related to various topics, not only for the community people but also for the extension agent.
- **Newspaper –** Asynchronized communication.
- **Poster –** Poster or chart is a visual aid used to inspire the people mainly in 3 divisions. 1st- announces the purpose of project. 2nd- sets our conditions. 3rd- recommended action. Guidelines for making good poster: 1. Promote one point, 2. Support local demonstration, 3. Support local exhibit.

Criteria for Selecting Methods

1. **The learning objective:** Our 'learning' objectives would determinc if we need to convey simple facts, complex information, problem-solving skills, practical manual e.g psycho-motor skills, or simply target for an attitudinal change? For example, if we want to teach mothers to recognize what a malnourished child looks like, we would perhaps use media that include visuals such as posters and chart etc.
2. **Characteristics of the audience:** We will have to know what are the characteristics of the audience that will affect choice of channel? e.g. age, experience in life, education level, previous exposure to media, ownership of radio/TV, listening. watching and reading habits, familiarity with different media, traditional communication methods already in use in community.
3. **Characteristics of different methods:** We will have to know how much will the different methods cost, including initial costs and operating maintenance? How many staff members and what levels of skill are involved in using the method? What field requirements will affect the use of the equipment, e.g. need for electricity, storage and transport needs.
4. **Costs:** We have to ensure availability of funds for initial purchase, spare parts and maintenance, charges for electricity, paying for trained staff for media production, maintenance and implementation.

DIFFUSION OF INNOVATION

Developed by E. M. Rogers in 1962

It originated in communication to explain how over time, an idea or product gains momemtum and diffuses (or spread) through a specific population or social system.

There are five established adopter categories –

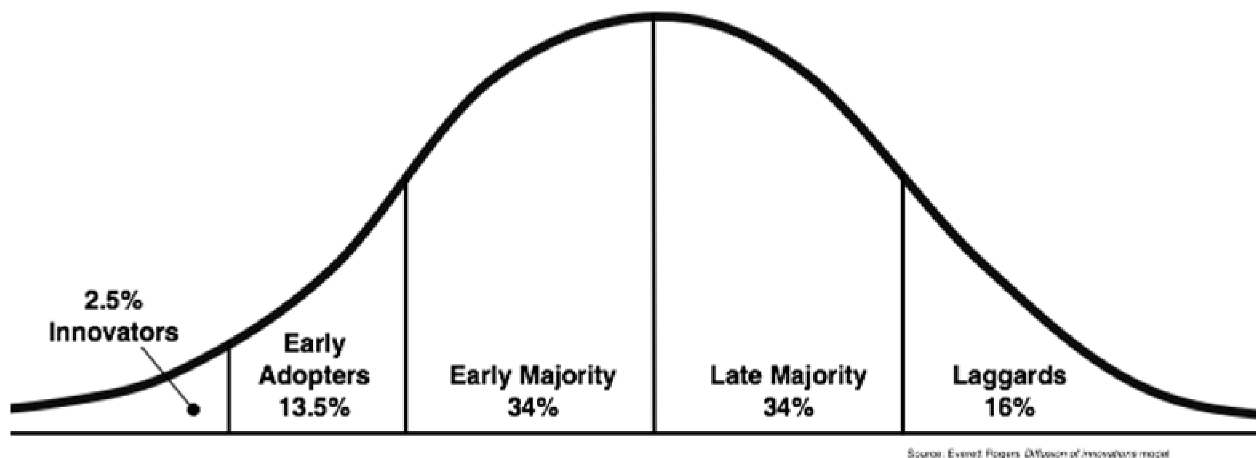
1. **Innovators –** People who want to be the first to try the innovation.

2. **Early Adopters –** People who represents opinion leaders aware of the need to change.

3. **Early Majority –** People are rarely leaders, but they do adopt new ideas before the average person. Need to see evidence that the innovation works before they are willing to adopt it.

4. **Late Majority –** These people are skeptical to change and only adopt on innovation after it has been tried by the majority.

5. **Laggards –** These people are found by tradition and vary conservative.



Source: http://blog.leanmonitor.com/early-adopters-allies-launching-product/

There are five main factors that influence adoption of an innovation

1. **Relative advantage -** The degree to which an innovation is seen as better than the idea, program, or product it replaces

2. **Compatibility -** How consistent the innovation is with the values, experiences, and needs of the potential adopters

3. **Complexity -** How difficult the innovation is to understand and/or use

4. **Triability -** The extent to which the innovation can be tested or experimented with before a commitment to adopt is made

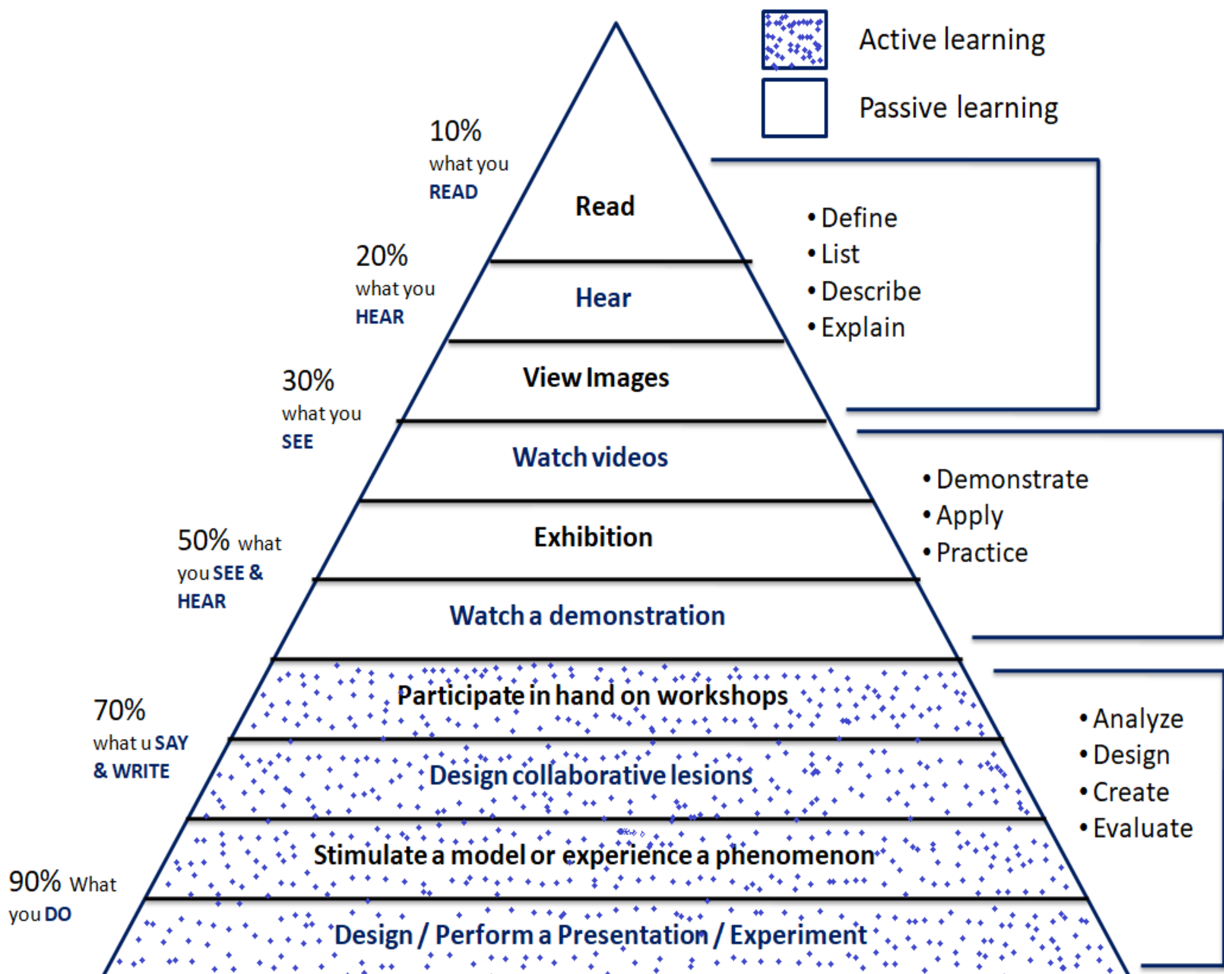
5. **Observability -** The extent to which the innovation provides tangible results

EDAR DALE'S CONC OF EXPERIENCE

It is a model that incorporates several theories related to instructional design and learning process.

During the 1960s, Edar Dale theorized that learners retain more information by what they "do" as opposed to what is "heard", "read" or "observed".

This "learning by doing" has become known as "Experimental learning" or "action learning".



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EVALUATION

Evaluation is the systematic and scientific process, determining the extent to which an action or set of actions were successful in the achievement of pre-determined objectives. It involves measurement of adequacy, effectiveness and efficiency of health services.

Reasons for doing evaluation

Evaluation is done the following reasons:

Firstly, to achieve operational efficiency and to study the effects of nutrition education practice so' that we can feed our findings back into practice and improve it.

Secondly, to obtain data that permit interpretation of programme effectiveness so as to obtain administrative support, community support and donor support. One reason why there is widespread skepticism regarding the cost-effectiveness and impact of NEC is that such programmes have been poorly evaluated.

Thirdly, to strengthen the scientific basis of practice of nutrition education and communication.

The key points are

- Impact or effect,
- How programmes are planned and executed,
- How programme personnel perform,
- How effectiveness can be improved,
- The utility of a programme, and
- To satisfy the programme sponsors

Evaluation should show whether:

- The change took place or not,
- If the change took place, then did it happen as a result of the programme, and
- The amount of effort required to produce the change was worthwhile.

Different types of Evaluation

1. **Formative –**

    - Formative evaluation is done to monitor the implementation. progress during the programme Formative evaluation, as the name suggests, typically involves gatherng information during the early stages of your project or programme, with a focus on finding out whether your efforts are unfolding as planned, uncovering any obstacles, barriers or unexpected opportunities thay may have engaged and identifying mid-course adjustment and corrections which can help insure the success of the work.

    - It is ongoing process that keeps learners and educators informed about learners' process towards objectives.

- In case of a programe it can evaluate a programme during development in order to make early improvements.

2. Summative –

- Summative evaluation is the systematic use of research techniques to measure Outcomes and overall programme effectiveness. For example, it is not enough to Know that radio programmes were broadcasted, products distributed, health workers trained, or even that programmes were listened to, understood and acted upon. The ultimate goal is not people hearing advice but taking it, changing their behaviour and ultimately improving their own and their children's health and nutrition as a result of the advice.

- It occur at the end of the unit of study or at the end of a programme or session.

- The main purpose of this type of evaluation is to evaluate the amount of learning over a period of time and to summerise learners' progress.

- It provides information on a programme effectiveness, conduct after the completion of the programme design, done to decide wheather to continue or end the programme.

3. Diagnostic -

- It refers to the evaluation procedure aims to diagnose the nature and degree of learning difficulties faced by the learner.

- Before beginning with child tutor will conduct a diagnostic evaluation to determine the child's reading strength and challenges.

4. Process –

- Process evaluation, as the name suggests, is a tool for monitoring progress. The major emphasis in process evaluation is on documenting and analyzing the way the programme works in practice, to identify and understand important influences on its operation and achievements. The primary purpose is to improve understanding of how a programme achieves what it does.

- It indicates whether the strategies and activities being implemented are likely to generate the expected results. Process evaluation also indicates whether the work is done on time. If the activities do not meet expectations, they may be changed or even stopped.

- Determines if specific programme strategies were implemented as planned.

- Focus on programme implementation, done to determine why an established programme has changed over time.

5. Outcome -

- It focuses on the changes in comprehension, attitudes, behaviours and practices that results from programme activities, done to decide activity affects participants outcomes.

6. **Impact –**

- It focuses on long term, sustained changes as a result of programme activities positive and negative as well as intended and unintended, done to influence the policy and to see the impact of longitudinal studies with comparison group.

We should consider the following points while planning education system in NEC programme

i. Integrate evaluation in the programme from the planning phase.

ii. Clarity the purpose of the evaluation. Prepare a set of realistic, achievable and measurable indicators for success.

iii. Whenever possible, set up control groups who do not receive the education. If controls are not possible, collect data that will help to show that it was the programmes effort that led to improvements.

iv. Develop an evaluation system, which takes account of all phases of the nutrition education communication project.

v. Decide if the evaluation should be internal or external, or both.

vi. When evaluating inputs, make sure that programme objectives are properly specified and that indicators are measurable and that the activities are relevant

Steps of evaluation involving health education:

Step 1: Involves people to participate in the activities:

Health educator should begin the evaluation cycle by engaging people who have been taking part in health education activity. It will be useful to meet with community members key informants, NGO in the locality and others who have participated in the activities.

Step 2: Describe the activity to be evaluated:

In order to carry out an evaluation you --- to be describe the activities being evaluated in detail. These enables to determine the objectives, activities, methods and materials as well as content of the message used in the activities being evaluated. In doing so, health evaluator will be able to focus on what he or she has planned and what he or she has achieved.

Step 3: Select methods: In this step health educator will need to select appropriate evaluation methods to use. He or She could select observation or interviews or use other methods depending on what needs to be evaluated. Moreover he or she need to be decide who want to interview and when to interview them. Prepare all the necessary resources needed to conduct the evaluation.

Step 4: Collect credible data:

The data that is collected in order to conduct an evaluation is the most important step. Health educator can use multiple data collection methods at the same time. For instance he or she may go to a family and observe whether their health related practices has changed in any way. At the same visit he or she can also interview the mother or

head of the family to know more in details about their health practices. The method that the health educator use should be the information needed to know.

Step 5: Analysis of data:

Once he or she has collected all the relevant data from various sources. The next step is to analyse and interpret the data. Analysing involves presenting the information he or she has collected in such a may that it gives meaning for example: health educator can convert raw data to percentage and numbers that will be relevant to people who need to know about the outcomes of the evaluation.

Step 6: Learn from evaluation:

The last step of evaluation deals with the judging the achievement. In this step, he or she look at the extant to which he or she has achieved his or her's objectives, particularly behavioral and learning objectives. If the achievement is encouraging and he or she appear to has done the right things, then it demonstrates that the methods, materials and the messages he or she has used have probably worked. So, he or she can learn from this evaluation and should be able to replicate these approaches in his or her future health education activities.

SHORT NOTES

1. Demonstration

This form of health education is based on learning through observation. There is a difference between knowing how to do something and actually being able to do it. The aim of a demonstration is to help learners become able to do the skills themselves, not just know how to do them.

health should be able to find ways to make health related demonstrations a pleasant way of sharing skills and knowledge. Although demonstration sessions usually focus on practice — they also involve theoretical teaching as well 'showing how is better than telling how'.

person remember 20% of what you hear, 50% of what you hear and see and 90% of what you hear, see and do — with repetition, close to 100% is remembered.

There are four steps to a demonstration

i. Explaining the ideas and skills that you will be demonstrating
ii. Giving the actual demonstration
iii. Giving an explanation as you go along, doing one step at a time
iv. Asking one person to repeat the demonstration and giving everyone a chance to repeat the process

Qualities of a good demonstration

For an effective demonstration you should consider the following features:

- The demonstration must be realistic, it should fit with the local culture and it should use familiar materials.
- Educator will need to arrange to have enough materials for everyone to practice and have adequate space for everyone to see or practice.
- People need to take enough time for practice and for you to check that everyone has acquired the appropriate skill.

2. Role play

Role play is usually a spontaneous or unrehearsed acting out of real-life situations where others watch and learn by seeing and discussing how people might behave in certain situations.

Learning takes place through active experience. It uses situations that the members of the group are likely to find themselves in during their lives.

It is a very direct way of learning; participants are given a role or character and have to think and speak immediately without detailed planning, because there is usually no script. In a role playing situation people volunteer to play the parts in a natural way, while other people watch carefully and may offer suggestions to the players. Some of the people watching may decide to join in with the play.

The purpose of role play is that it is acting out real-life situations in order that people can better understand their problems and the behaviour associated with the problem. For example, they can explore ways of improving relationships with other people and gain the support of others as well. They can develop empathy, or sympathy, with the points of view of other people.

Role play can give people experiences in communication, planning and decision making. For example it could provide the opportunity to practice a particular activity such as coping with a difficult home situation. Using this method may help people to re-evaluate their values and attitudes, Role play works best when people know each other

3. Drama

Drama is a very valuable method that you can use to discuss subjects where personal and social relationships are involved. Basic ideas, feelings, beliefs and values about health can be communicated to people of different ages, education and experience. It is a suitable teaching method for people who cannot read, because they often experience things visually. However the preparation and practice for a drama may cost time and money.

The general principles in drama are:

- Keep the script simple and clear
- Identify an appropriate site
- Say a few words at the beginning of the play to introduce the subject and give the reasons for the drama
- Encourage questions and discussions at the end.

4. Traditional means of communication

Traditional means of communication exploit and develop the local means, materials and methods of communication, such as poems, stories, songs and dances, games, fables and puppet shows.

Some of the benefits of traditional means of communication are that they are realistic and based on the daily lives of ordinary people; they can communicate attitudes, beliefs, values and feelings in powerful ways; they do not require understanding that comes with modern education in the majority of instances; they can communicate problems of community life; they can motivate people to change their behaviour and they can show ways to solve problems. Local traditional events are usually very popular and they can be funny, sad, serious or happy. Also, they are easily understood and they usually cost little or no money. All they require is imagination and practice.

5. Health talks

Talking is often the most natural way of communicating with people to share health knowledge and facts. In the part of job that involves health education, there will always be many opportunities to talk with people.

Group size is also important. The number of people who able to engage in a health talk depends on the group size. However, talks are most effective if conducted with small gatherings (5–10 people), because the larger the group the less chance that each person has to participate

To make a talk educational rather than just a chat you will find it beneficial if it is combined with other methods, especially visual aids, such as posters or audiovisual material. Also a talk can be tied into the local setting by the use of proverbs and local stories that carry a positive health message. when one is preparing a talk he or she should considered the following things:-

- Begin by getting to know the group. Find out its needs and interests and discover which groups are active in your locality.
- Then select an appropriate topic. The topic should be about a single issue or a simple topic.
- List the points that will talk about: Prepare only a few main points and make sure that you are clear about them.
- Next, write down what will say
- Visual aids are a good way to capture people's attention and make messages easer to understand.
- Practice talk beforehand: This should include rehearsing the telling of stories and the showing of posters and pictures.
- Determine the amount of time need

6. Health

The WHO Constitution of 1948 defines health as a state of complete physical, social and mental well-being, and not merely the absence of disease or infirmity. In addition, the Ottawa Declaration states an "individual or group must be able to identify and realize aspirations, to satisfy needs, and to change or cope with the environment. Health is, therefore, seen as a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities".

7. Primary health care

"Essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford." In many countries primary health care involves incorporating curative treatment given by the first-contact provider along with promotional, preventive and rehabilitative services provided by multidisciplinary teams of health care professionals working collaboratively.

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8. Health literacy

"The degree to which people are able to access, understand, appraise and communicate information to engage with the demands of different health contexts in order to promote and maintain good health across the life-course."

9. Lifestyle (lifestyles conducive to health)

"A way of living based on identifiable patterns of behaviour which are determined by the interplay between an individual's personal characteristics, social interactions, and socioeconomic and environmental living conditions."

10. Quality of Life

"An individual's perceptions of their position in life in the context of the culture and value system where they live, and in relation to their goals, expectations, standards, and concerns."

11. Wellness

The optimal state of health of individuals and groups; involves the realization of the fullest physical, psychological, social, spiritual and economical potential of an individual: the fulfillment one's role expectations in the family, community, place of worship, workplace and other settings.

12. Community mobilization

A community is a collection of people identified by a set of shared values. Working with communities is fundamental to the practice of health education. The first step in working with a community is community mobilization, which involves persuading community members to attend or participate in any activity planned by the health educator. The purpose of community mobilization is to enhance awareness on a given issue at the community level. Activities such as organizing a talk in the community, arranging a health fair, and bringing together key leaders of community for a panel discussion are all methods used in community mobilization.

13. Community organization

The second step for action at a community level is community organization. The term community organization was coined by American social workers in the late 1800s to describe their efforts with immigrants and indigent people. In community organization, community members identify needs, set objectives, prioritize issues, develop plans, and implement projects for community improvement in health and related matters. Green and kreuter define community organization as " the set of procedures and processes by which a population and its institutions mobilize and coordinate resources to soove a mutual problem or to pursue mutual goals. "

14. Community participation

When community members actively participate in planning or implementing projects, it is called community participation. Community participation can take place regarding health-related matters or other civic matters. Community members must be in leadership roles for true community participation. Arnstein (1971) has identified eight different types of participation in ladder of participation. At the bottom of the ladder there is no participation-only manipulation. Token participation entails the levels of information, consultation, and placation. Development of partnership, delegation of power, and citizen control are levels of participation that are desirable.

Benefits of Community Participation are

- Encourages cooperation with other people and enables them to accomplish things which they would not be able to do it alone,
- Provides contact with other people so that members can increase their knowledge and experience,
- Helps develop the skills and talents of individual members.
- Makes programme relevant to local situation,
- Ensures community motivation and support,
- Improves communication between health worker and community, and
- Enables the development of primary health care.

15. Community development

At the stage of community development local activities and leadership in a community has organized and stimulated so that changes in healthy or other matters are occurring. The key word in the concept of community development is change at the community level. Change can be measured by assessing the changes in services or the provision of new services or by replacing existing policies or by incorporating new policies.

16. Community empowerment

The concept of community empowerment is closely related to Ottawa Charter definition of community action for health. The WHO (1998) defines it as " a process through which people gain greater control over decisions and actions affecting their health." In essence, empowerment is a process whereby individuals gain mastery over their lives in the context of changing their social and political environments. Empowerment can be a social, cultural, psychological, or political process. Individual empowerment is different from community empowerment. Individual empowerment is mainly about an individual gaining control over his or her personal life. Community empowerment entails individuals collectively gaining greater influence and control over the determinants of health and quality of life in their community.

17. Policy development

Policies are made by institutions or organizations or governments (local, state r federal). Health promotion professionals work with institutional heads or other lawmakers to develop health policies. The process of developing a policy with ramification for the health of communities is called policy development.

18. Legislation

Legislation are the laws passed by elected officials at the local, state, or federal level. Legislation has ramifications for the health of a large number of people. Health promotion professionals work at every step of the way to influence laws that foster healthy behaviours and help in extinguishing negative and unhealthy behaviour.

19. Asynchronous communication

Asynchronous communication is when one send a message without expecting an immediate response.

Examples: Newspaper, email

20. Mass Media

The term mass" in mass media means that we can reach large number of people at a time through the means of communication employed through this approach. Mass media methods comprise the institutions and techniques by which specialized groups employ technological devices (press, radio, films, television etc.) to disseminate symbolic content to large heterogeneous and widely dispersed audiences. Thus in mass media methods, the interaction between source and the receiver is mediated through the visual image, print, verbally or by a combination of these elements. The source and receiver are never in direct contact in mass media methods. Mass media include broadcast media such as T.V, radio etc. and print media such as newspapers, magazines etc. Mass media plays a very important role in creating awareness and interest in new ideas among general population groups.

The advantages of mass media include:

i. It provides a rapid way to reach a very large (even non-literate) audience.
ii. It makes good use of scarce manpower.
iii. Mass media are not only appropriate to inform and to create or reinforce change. but may also help to motivate and teach.
iv. It can be inexpensive, at least in terms of cost per person reached.

Mass media though effective, have certain limitations as well. These are:

i. As mass media are broadcast to the whole population, they are not a good method for selectively reaching specific groups, e.g. grandmothers or teenagers. It is difficult to make the message appropriate to the special situation of local communities, whose problems and needs may be different from the rest of the region.
ii. Particularly for large and diverse audiences, mass media alone cannot persuade people to change deep-rooted attitudes or learn complex skills, since mass communication cannot possibly have the required cultural, linguistic, and social sensitivity nor receive individual feedback that will help assure that messages are relevant, appropriate, and understood by the audience.

21. Target Audience

Target audience is the population with whom we communicate for change in behaviors. You know that an individual's extremely important for his or her health. However, it is not always the individual who makes the decisions. We often find that other persons in the family and community influence a person's behaviour.

1) The primary target audience: These are the individuals who would actually change their nutrition health practices. For example, mothers of young children who would modify their behaviour to feed their children.

2) The secondary audience: These are the people who can be motivated to teach. support, and reinforce the practices and beliefs of the primary audiences. Examples of secondary audience are health care providers, family and friends, and popular public figures. Few communication programmes are successful if they ignore the potential of these groups.

3) The tertiary audience: These are the decision-makers, financial supporters, and other influential people in the community such as pradhan or school teachers. They can facilitate the communication process and behaviour change and make the programme a success.

22. POSTER

A poster is a monochrome or multicolored sheet of paper, usually designed with text and images. A poster is placed on a suitable area in the public space to convey a message.

Purpose and function

A poster is supposed to catch the attention, inform, convince and provoke. If the viewer feels addressed, a poster can influence his or her decisions through text and images.

An optimally designed poster appeals to the viewer's curiosity, his or her intellect, but also unconsciously to the emotional side. Finally, the viewer's reaction to the poster depends on his interests, inclinations and especially on his social situation. Consequently, each viewer may interpret a poster directly, based on his or her origin, the background, and social as well as political realities

Characteristics to be considered for a good poster design

1. **Format/Size:** generally, a large format is more noticeable, but a smaller, very bright and color-intensive poster is more noticeable than a large, dark-colored poster

2. **Color of the paper/background:** use light, not very cloudy colors. For darker colors, the contrast should be considered

3. **Contrast:** strong contrasts (e. g. light-dark or complementary contrasts) are striking; however, an overload of contrasts should be avoided

4. **Size and conspicuousness of the motif:** choice of an appealing motif in a size appropriate to the format. Originality and recognition should be drivers

5. **Title/slogan:** most effective and appealing slogan, e.g. an explanation, question or antithesis

6. **Type and size of the font:** choose a font that is easy to read and in line with the "character" of the poster

7. **Remote readability:** all the mentioned points have a major impact on the perception of the poster. The context of use (whether large-format city advertising or small posters for a literary reading, usually hanging in buildings) must be considered

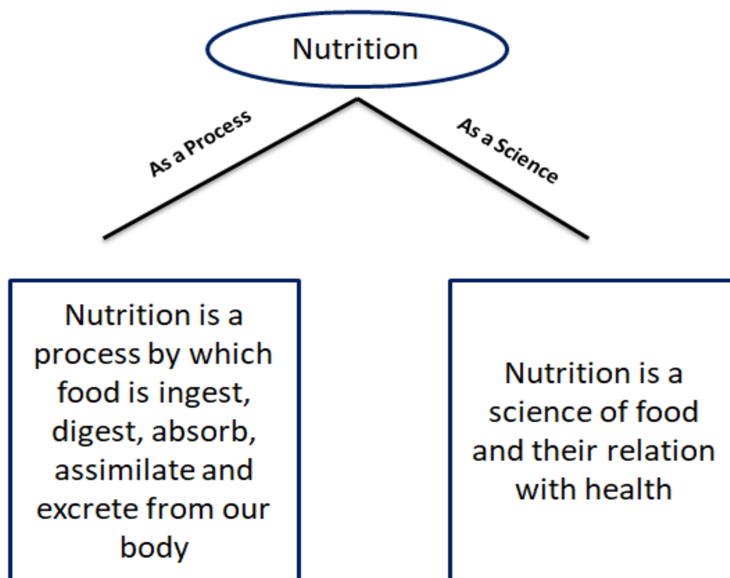
8. **Contents/information:** information on the product, dates, locations, etc. are legible and included in "exposed" areas of the poster

The AIDA formula

The perception of an advertising or product poster by the recipient takes place in gradual successive stages, which are summarized in the AIDA formula:

- **Attention:** A poster attracts attention
- **Interest:** The recipient's interest in studying the poster
- **Desire:** The message provokes a desire to acquire the "advertised" product or service
- **Action:** The viewer takes an action, which should be the purchase of the product or service

BASIC NUTRITION



NATIONAL NUTRITIONAL PROBLEM IN COMMUNITY

Nutritional deficiency is widely prevalent in India, especially in rural areas and particularly in poor families. Every human being requires a balance diet to live and to carry out the various activities. Any imbalance or inadequacy in food and nutrient could cause illness and lead to nutritional disorder and even cause death.

There are many nutritional problems which affects the segments of our population. The major ones which deserve special attention are highlighted-

1. Protein Energy Malnutrition:-

Protein Energy Malnutrition (PEM) is the deficiency of a macronutrient as energy and protein or both in diet, which forms the important nutritional deficiency in a community. It is very common in developing countries, especially in large segments of Asia and Africa.

Classification- PEM occurs in the three clinically distinguable forms-

A. Kwashiorkor
B. Marasmas
C. Marasmic Kwashiorkor

A. Kwashiorkor: It was meant "the sickness of older children when second baby is born". It is chiefly common in preschooler children between the age of 1-4 years.

Clinical Features:

- **Essential Features**

i. Growth failure
ii. Oedema occurs in legs, then hands and face. Bipedal Oedema is common.

- **Non essential Features**

i. Hair changes occur, brown hair found.
ii. Enlargement of liver, fatty liver changes or Hepatomegely.
iii. Diarrhoea, anorexia, vomiting, intolerance.

- **Biological Features**

i. Low serum cholesterol
ii. Low serum albumin level(significantly decrease)
iii. Deficiency of Na and K in low in blood.

B. Marasmas:

The children react to stress of PEM and secrets cortisol which metabolises the muscle protein, creating marasmas. Thos is more severe than Kwashiorkor. This is mainly affect the children under the age of 3 years. It is more common in infants found in twins.

Clinical Features-

- **Essential Features**

i. Rapid weight loss
ii. Oedema is absent

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iii. The children is absent 60% of his/her standard weight

- **Non essential Features**

i. Hepatomegaly
ii. Hair changes are generally not present
iii. Weakness
iv. Diarrhoea, Vomiting

C. Marasmic Kwashiorkor: Sometimes the children have both the features of Kwashiorkor and Marasmas that is called 'Marasmic Kwashiorkor'.

Clinical Features-

i. Extreme weight/muscle wasting
ii. Oedema
iii. Monkey face
iv. Weakness

2. Low Birth Weight

Low Birth Weight (LBW) is a major public health problem in many developing countries. When the birth weight is less than 2500 gm then it is called LBW baby.

In countries where the proportion of LBW infants is low, most of them are pre-term. Although we do not know all the causes of LBW, maternal malnutrition, Aneamia, appears to be a significant risk factors. Along the other causes LBW are causes by physical labour during pregnancy, illness, adolescence pregnancy etc. All these factors are interrelated.

3. Iodine Deficiency Disorder(IDD)

Iodine deficiency is yet another major nutritional problem in India. Iodine deficiency in water can create Goiter, which is the enlargement of Thyroid Gland.

In North-East India like in Jmmmu and Kashmir, Punjab and some parts of UP, West Bengal, Delhi, Bihar is very common. It is mostly found in hill station where water and soil contain less amount of India. Some neighborhood countries like Bangladesh, Nepal, Bhutan, Mayanmar are also suffering from this. Since, IDD or Goiter is constantly present in hilly area, that's why it is called Endemic Goiter.

There are several grade of Goiter-

- **Grade 0- Not visible not palatable**
- **Grade 1- Not visible but palatable**
- **Grade 2- Visible and palatable**

Iodised salt, Iodine tablet, Iodized oil proper Iodine containing water are the remedies.

4. Endemic Flurosis

In many part of the world where drinking water contains excessive amount of Flurine (3-5 mg/L), endemic fluorosis has been observed. It has been reported to be an important health problem in certain parts of our country, like Andrapradesh, Punjab, Karnataka, Kerala etc. Changing water source is/are necessary.

5. Xeropthalmia

Xeropthalmia (dry eyes) refers to all ocular manifestation of Vitamin A deficiency- also called Vitamin A deficiency Disorder or VAD. It is the most widespread and serious nutritional problem or disorder leading to blindness.

The stages of Vitamin A deficiency are as follows-

Night Blindness (XN)

Conjuctival Xerosis (XIA)

Bitot's Spot (XIB)

Corneal Xerosis (X2)

Keratomalacia (X3B)

On other words any kind of Eye Problem due to Vitamin A deficiency is called- Xeropthalmia.

It is more common in children between the age of 1-3 years and is often related to weaning. It is after associated with PEM. Associated risk factors include ignorance, faulty feeding ,infection particularly diarrhoea and

VAD is common in south East Asia. In India it is found in Andhrapradesh, Tamil Nadu, West Bengal, Karnataka, Bihar.

A Xeropthalmia patient need Vitamin A supplements.

6. Iron DeficiencyAnaemia(IDA)

Iron deficiency anaemia (IDA) is the most common micronutrient deficiency in the world , particularly in the developing country like India. It occur when haemoglobin production is considerable reduced,leading to a fall of its level in blood.

Though there is many causes of anaemia, mostly it is due to iron deficiency. Lack of Awareness, faulty dietary habit etc are the main cause of anaemia in our country.

Common sign and symptoms of anaemia are-

- Paleness of Conjunctiva
- Paleness of tongue
- Weakness
- Fatigue
- Koilonychia.

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- **Short Questions (2 marks)**

1. Name four food sources rich in Vitamin D.
2. Define Health Education.
3. Name four milk borne infections.
4. Why is ‘Good human relations’ so important in ‘Health Education’?
5. What is the ‘range’ of mid-arm-circumference measurement which indicates mild-moderatemalnutrition?
6. Name four contents of Health Education.
7. Why dose a ‘Health Educator’ depend on ‘Feedback’?
8. Mention four health hazards of ‘obesity’.
9. Mention four qualities of a counsellor.
10. Name four food sources rich in dietary fibres.
11. Name two micronutrients of public health importance.
12. Enumerate two eye signs of vitamin A deficiency.
13. Name four fat soluble vitamins.
14. Waite the name of one disease from fluorine excess and one disease from fluorine deficiency.
15. What is glycemic index?
16. Define Reference Indian adult man and woman'.
17. Name two milk borne diseases.
18. Enumerate two diseases by food toxicants.
19. Write the schedule of vitamin A in oil up to five years of age of a child.
20. Name two food standards used in India,
21. Why role playing is an important process of health education?
22. How to educate people about advantages of taking green leafy vegetables in daily diet?

- **Short Notes (5 marks)**

1. Advice to use iodized salt in a group meeting
2. Education of public regarding Lathyrism
3. Various channels of Communications
4. Motivation of people to take green leafy vegetables
5. 'Pre-planning' in 'Nutrition-Education'.
6. How do you measure body mass index (BMI)? What is its significance?
7. Enumerate criteria for a good nutrition educator.
8. Mention five methods to maintain food safety.
9. Write the dietary goals by WHO.
10. What are the components of health education? Write briefly on Socratic Method of health education.
11. What do you mean by iodine deficiency disorders assessment (IDD)? What are the indicators for epidemiological of iodine deficiency?

- **Broad Questions**

1. What do you mean by 'Exclusive Breast feeding'? How will you plan and implement a 'breast feeding education programme' among village mothers? (3+7)
2. Discuss the differences between 'Nutrition-Education' and 'Nutritional Propaganda' with examples. (10)
3. What principles will you follow when you would go to 'urban slum area' to teach people about 'right cooking processes'? (10)
4. How will you evaluate 'Anaemia-Control-Programme' in a Block Primary Health Centre after 'Health Education'? (10)
5. What are the different 'types' of communications'? Name 'barriers of communications' with examples. (5+5)
6. What do you mean by low birth weight (LBW)? Enumerate causes of LBW in India. What are the measures to prevent and manage LBW? (2+6+7)
7. Define health education. What are the objectives of health education? Write the principles of health education. (2+5+8)

8. Who are the target groups of nutrition education? What are the objectives of diet plan for a diabetic person? Make a sample diabetic diet plan. (3+4+8)

9. What are the processes of health communication? How will you plan and arrange a group meeting for pregnant women of a village for health promotion? (5+10)

10. What is evaluation of a health programme? Discuss model of a health programme evaiuation. Enumerate the steps of evaluation of health education programmes. (2+8+5)

11. Define nutrition. Write the merits and demerits of any two aids used during nutrition education. (3+6+6)

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