

Health communication

Unit objectives

At the end of this chapter students are expected to:

- Define health communication.
- List the principles of health communication.
- Explain components of communication.
- Discuss stages of communication.
- Describe models of health communication
- Explain types of health communication.
- Identify the barriers to effective communication.

Introduction

- It is evident that all meaningful social interaction can be called as communication.
- Communication is an essential part of a human life.
- It is attached to almost anything that people do.
- With out communication an individual could never become a human being and without mass communication individuals could never become a part of the modern society.
- By communication people transfer facts, ideas, emotions, knowledge, attitude and skills to make informed decisions about their health.

- It does not mean that communication is mere a talking. It is when only understood that talking become communication.
- Health communication encompasses the study and use of communication strategies to inform and influence individual and community decisions that enhance health.
- It links the domains of communication and health and is increasingly recognized as a necessary element of efforts to improve personal and public health.
- Health communication can contribute to all aspects of disease prevention and health promotion.

4.1. Definition

- The word communication is derived from the Latin word **“communis”** which means **to make common ground of understanding**, to **share** information, ideas or attitude, to impart, to transmit.
- ❖ Communication is the process by which two or more people exchange ideas, facts, feelings or impressions in ways that each gains a common or mutual understanding of the meaning and the use of the message.
 - ❖ Evert M. Rogers (1993), defined **“communication as the process by which an idea is transferred from a source to a receiver with intent to change his/her behavior.”**
 - ❖ Allen Louis A. defines communication as **“the sum total of the thing one person does when he wants to create understanding in the mind of another’s.”**

- Health communication is the **art** and technique of informing, influencing, and motivating individuals, institutions, and large public audiences about important health issues based on sound scientific and ethical consideration

Relevance to Health Education

- It helps to
 - Mobilize the community,
 - Implement health education programs &
 - Coordinate with different agencies.
- The ultimate goal of all health communication is to **create behavioral change.**

4.2. Principles of communication

1) Perception:

- For communication to be effective the perception of the sender should be as close as possible to the perception of the receiver.
- The extent of understanding depends on the extent to which the two minds come together.

2) Sensory involvement

3) Face to face

4) Feedback (two-way)

5) Clarity

6) Information:

- the sender should have at in hand correct, current and scientific information.

7) Completeness:

- the subject matter to be communicated must be adequate and full which enable the receiver to understand the central theme or idea of message.
- Incomplete message may result misunderstandings.

4.3. Components of communication

4.3.1. Source (sender):

- The source can be from an individual or groups, institution or organization.
- Is the originator of the messages.
- Should be the one who share similar backgrounds with the receivers.
- People are more likely to believe and trust person or organizations that share some characteristics with them.
- A person from a similar background to the community is more likely to share the same language, ideas & motivation & thus be a more effective communicator.

Components....Cont'd

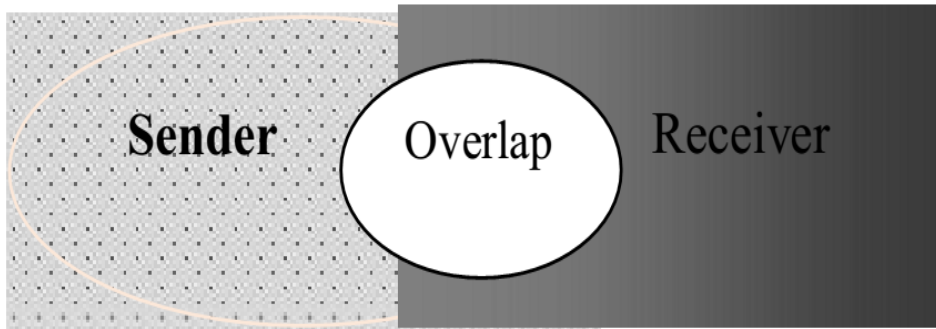
- Main reasons for communication failure is when :
 - The source comes from a different background from the receiver &
 - Used inappropriate message content & appeals.
- Health workers who are strangers to the local community are not always effective in their health education work.
- Many health education programs recruit field agents & volunteers from the community they are serving in.
- Develop **empathy** is necessary.

Components....Cont'd

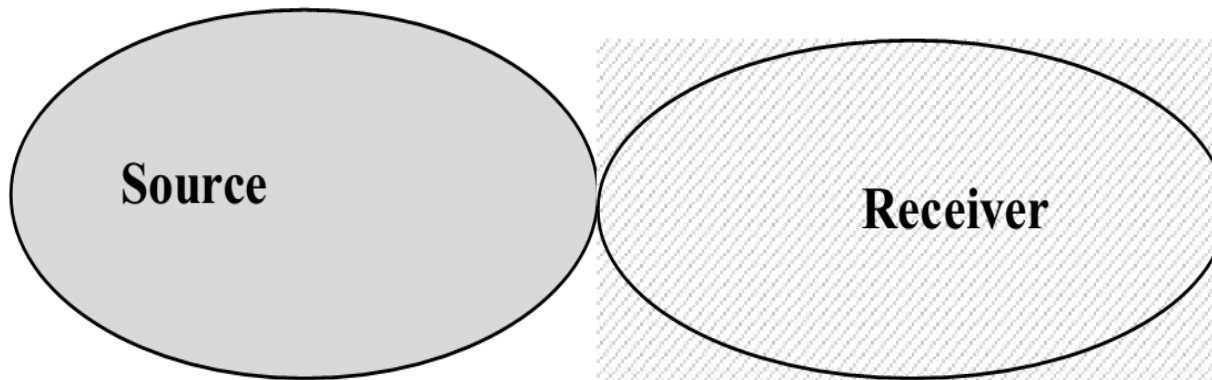
- What is important to us may not be considered important by the community.
- What is important and/or rational to the community may not be important to us but we must still respect it.
- Health educators to ensure the community's judgment is based on sound understanding and / or deliberate decision of the perception of their own situations, needs and the consequences of recommended alternative actions.

- The sender/source should be from high credibility sources.
 - **For example**, rural people are not usually impressed by educational status they have more regard for personal qualities.
- The health education worker is not the most credible source in most cases.
- You will need to find out who your intended audience respects and involve these opinion leaders in health education.

- Depending on the community, **source credibility** can come from:
 - ❖ A person's natural position in the family, community, e.g. head, village chief or elder;
 - ❖ Through their personal qualities or actions.
 - ❖ Qualifications and training;
 - ❖ The extent to which the source shares characteristics such as age, sex, education, religion, experiences with the receiver.



High overlap- a great deal in common



Little overlap- many differences

Figure 4.1: Mathematical presentation of Source & receiver in communication

Components....Cont'd

4.3. 2. Receiver/audience

- ❖ The person or the group for whom the communication is intended or the person who receive the message.

The **first** step in planning any communication is to consider the intended audience.

- ❖ A method which is effective with one audience may not succeed with another.
- ❖ The communicator always has to consider the culture, age, educational level, visual literacy and media habits of the receiver while design the message

- **Factors which should be considered about the audience**

Educational factors

- ✓ What is the age and educational level of the audience?
- ✓ What kind of appeal might convince them?
- ✓ Do have they culture of looking at pictures and diagrams?
- ✓ What words do they use in every day conversation?

Components....Cont'd

Socio-cultural factors

- ❖ What is their belief about the topic of communication?
- ❖ How strongly are held their present beliefs?
- ❖ What values do they hold as important?
- ❖ Whose opinions and views do they trust?

Patterns of communication

- What patterns of communication already exist in the community?
- What are the rules during conversation?
- How do people show respect when talking to another person?
- Do they listen to radio & television?
- What traditional media such as song & drama do they enjoy?
- What is the best timing to conduct health communication the best place to put posters?

Components...Cont'd

4.3.3. Message

- A piece of information, ideas, facts, opinion, feeling, attitude or a course of action that passed from the sender to the receiver.
- Is the subject matter of communication.
- Something that is considered important for the audience to know or do.
- It exists in the mind of the communicator.
- It is what to say.

- The content of the message could be organized in different ways so that it can persuade or convince people. These are called **appeals**.
- Not every one respond, in the same way.
- What might persuade you might be quite different from what might persuade another person.
 - For example what type of appeals might convince persons with little or no schooling; persons with high educational level; children; and health workers?
- One big wrong in many health education communication is the tendency to use logical arguments that rely heavily on medical details.

Types of appeals in health communication

Fear arousal appeal

- The message is conveyed to frighten people into action by emphasizing the serious outcome.
- Symbols such as dying persons, coffins, grave stones, skulls may be used.
- It is good for a person with little or no school.
- Evidence suggests that: **Mild fear** can arouse interest, create concern & lead to change.

- **Too much fear** is not appropriate for two reasons;
 - ✓ It can lead to denying & rejecting the message and results in laughter & failure to take action .
 - ✓ It also involves ethical issues.
- Fear might be aroused but a person **may not** able to take action to change this can lead to **considerable stress, panic responses and anxiety.**

Types of appeals.....Cont'd

B. Humour

- The message is conveyed in a funny way such as cartoon.
- Very good way of attracting interest & attention.
- Also serve a useful role to lighten the tension when dealing with serious subjects.
- Does not always lead to changes in beliefs & attitudes.
- Very subjective.
- What one person finds funny another person may not.

C. Logical / factual appeal

- The message is conveyed to convince people by giving facts, figures and information,
 - e.g. facts related to HIV/AIDS; its causes, route of transmission, prevention methods etc.
- Telling people the percentage of people living with HIV virus.
- It carries weight with a person of high educational level.
- Information on its own is usually not enough to change behaviors

Types of appeals.....Cont'd

D. Emotional appeal

- The message is conveying to convince people by arousing emotions, images & feelings rather than giving facts & figures,
 - e.g. by showing smiling babies, wealthy families with latrine etc, and associating with FP education.
- A Person with less education will often be more convinced by simple emotional appeals from people they trust.
- It is important to:
 - present some factual information because it allows people to make informed-decision.
 - be realistic about the limitations of just relying on facts to persuade people.

Types of appeals.....Cont'd

E. One sided message

- Only presents the advantages of taking action & does not mention any possible disadvantages.
 - E.g. Educating the mothers only about benefits of OCP.
- **One sided compared with two sided messages** Presenting only one side of an argument may be effective:
 1. If your audience will not be exposed to different views. They are likely to hear opposing information, it may create suspicion to take your advice such as the side-effects from a drug.
 2. It is better to be honest to tell them rather than let people find them out for themselves.
 3. If our communication is through mass media such as radio, TV, newspaper etc. because the audience may only grasp part of the message or selectively pick up the points that they agree with.

Types of appeals.....Cont'd

F. Two sided message

- Presents both the advantages & disadvantages (pros' & cons') of taking action.
- Appropriate if:
 - The audiences are exposed to different views.
 - The audiences are literates.
 - Given face to face with individuals or groups:
 - It is easy to present both sides and make sure that the audience understands the issues.

G. Positive appeals

- Communications that ask people to do something, e.g. breast feed your child, use a latrine.

Components....Cont'd

F. Negative appeals

- Communications that ask people not to do something,
 - e.g. do not bottle feed your child, do not defecate in the bush.
- **Positive compared with negative appeals.**
 - Negative appeals use terms such as “**avoid**” or “**don’t**” to discourage people from performing harmful behaviors.
 - It is better to be positive & promote beneficial behavior.

4.3.4. Channel

- A channel is the physical bridge or the media by which the message travels from a source to a receiver.
- The commonest types are audio, visual, printed materials or combined audio visual & printed materials.

4.3.5. Effect & feedback

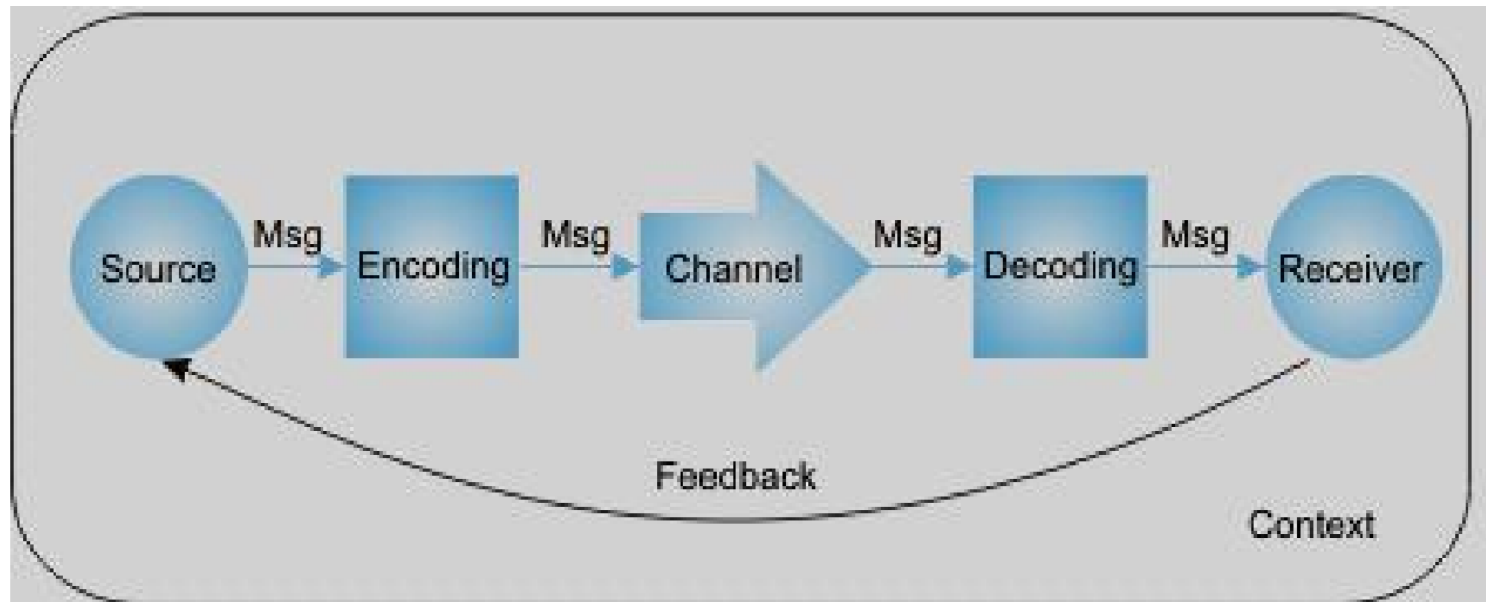
- **Feedback:** - is the mechanism of assessing what has happened on the receivers after the communication has occurred.
- A communication is said to have feedback when the receiver of the message gives his/her responses to the sender of the message.
- The sender must know how well the messages have been received by the receiver, understood, interpreted, and act up on it.
- It completes the process of communication.

Effect:- is the change in the receiver's knowledge, attitude & practice or behavior.

- ❖ **Positive effect:** when desired change in knowledge, attitude, practice occurs;
- ❖ **Negative effect:** when desired change in knowledge, attitude & practice does not occurs.

Communication process

- Is the whole sequence of transmission and interchange of facts, ideas, feeling, etc.
- As a process; it is routine and continues forever, ever ending process, cycle.



Msg = message

Figure 4.2: communication process

Source: available at: <http://www.mindtools.com/CommSkill/CommunicationIntro.htm>.

- **Code:** is a group of symbols that can be structured in a way that is meaningful to others.
 - E.g. language.
- **Encoding:** is the process of conversion of the subject matter into symbol.
- Encoding process translates ideas, facts, feelings, opinions etc. into symbols, signs, actions, pictures, audio-visuals etc.
- **Decoding:** is a mental process by which the stimuli that has been received through the sensory organs are given a proper meaning according to the individual's way of thinking.
- The receiver converts the symbols, signs, words, pictures etc. received from the sender to get the meaning of the message.

Message distortion in communication process

- The message that is sent may not be the message that is received.
- Messages are misunderstood both because of the limitations of the agents interpreting them.
- The agents might be two human beings, or a human and a computer.



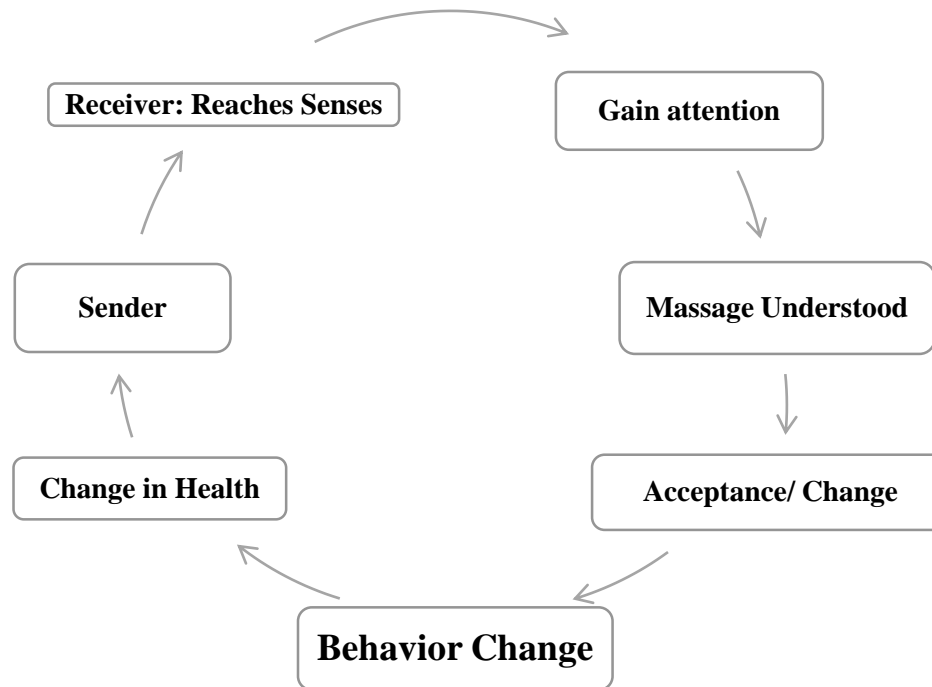
Figure 4.3. Mathematical presentation of message distortion

Source: <http://www.coiera.com/Chap4Comm.htm>. Viewed at Guide to Health Informatics 2nd Edition

- The second agent A_2 receives a message m_2 , which may in some ways be different from the intended message m_1 .
- Message distortion are mostly occurs during encoding and decoding process of the message.
- The effectiveness of the communication between the agents is dependent upon : –
 - The nature of the channel,
 - The state of the individual agents,
 - The knowledge possessed by the agents, and
 - The context within which the agents find themselves.

4.4. Communication stages

- In health education and health promotion we communicate for *special purpose* –to promote improvement/change in health through the modification of the human, social and political factors that influence behavior.
- A successful communication must pass through several stages.



Stage1. Reaching the intended audience

- Communication can not be effective unless it is Seen or heard by its intended audience.
- A common cause of failure in this stage is *preaching the converted*,
 - **e.g.** posters about announcing ANC placed at the clinic or talks given at antenatal clinics.
 - Only reach to the people who are already motivated & attended the service.

- Groups you are trying to reach may:
 - not attend clinics, nor have radios and newspapers.
 - be busy at times the health education programs are broadcast.
- Communication should be directed where people are going to see or hear.
- This requires sound study of your intended audience to find out **where** they might see posters, **what** their listening & reading habits are.

Stage2. Attracting the audiences attention

- Any communication must attract attention so that people will make the effort to listen and read it.

Attention: is the process by which a person selects part of the message to focus on while ignoring others for the time being.

Examples of failure at this stage are:

- ✓ Walking past the poster with out bothering to look at it;
- ✓ Not paying attention to the health talk or demonstration at the clinic;
- ✓ Turning off the radio programs or switching over.

Stage 3. Understanding the message

- Once the person pays attention to a message he/she then tries to understand it.
- Is stage of **perception**.
- Perception is a highly subjective process.
 - E.g., two people may hear the same radio program or see the same poster and interpret the message quite differentially from each other and from the meaning intended by the sender.

- A person's interpretation of a communication will depend on many things.
- Failures at this stage can take place when;
 - Complex language & unfamiliar technical words are used;
 - Pictures containing complicated diagrams and distracting details
 - Pictures containing unfamiliar/strange subjects.
 - Too much information is presented and people can not absorb it at all.

Stage 4: Promoting Change (acceptance)

- A communication should not only be received and understood – it should be believed & accepted.
- It is usually easier to promote a change when its effects can be easily demonstrated.
 - For example, ventilated improved pit latrines do not smell, if people become green in color when they get HIV/AIDS it is easier to promote change.

Stage 5. Producing a Behavior Change

- A communication may result in a change in beliefs and attitudes but still not influence behavior/action.
- Happen when the communication has not been aimed at the belief that has most influence on the person's behavior.

Stage 6. Improvement in Health

- Improvement in health will only take place if the behaviors have been carefully selected so that they really influence health.
- If your messages are based on outdated & incorrect ideas, people could follow your advice but their health would not improve.

Activity

- In a community dialogue the people were convinced of the importance of having latrine and wanted to build it. But they didn't have any material for construction. From this case, at what communication stage has the message failed?

4.5 Communication models

A) Linear (one –way) model

- The flow of information is one-way or **unidirectional**.
- The communication is dominated by the “**sender’s knowledge**”. “Information is poured out”.
- does not consider feedback and interaction with the sender.

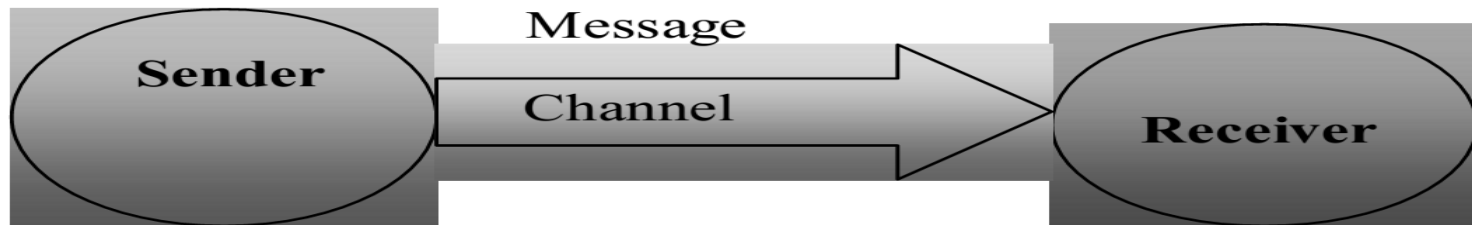


Figure 4.4: One-way communication

- A familiar example is the lecture method in class room

Advantages

- Faster
 - Orderly
-
- Classically messages from “experts”, “educators” or people who know more about a specific content are included in this type of communication.
 - **Note that:** Unless mechanisms are set to get feedback from the audience many mass media communication are one-way.

Disadvantages

- Little audience participation
- Learning is authoritative
- No feed back
- Does not influence behavior

B) Systems (Two –way)

- Information flows from the source to the receiver & back.
- Roles are interchanged.
- It is more appropriate in problem solving situations.

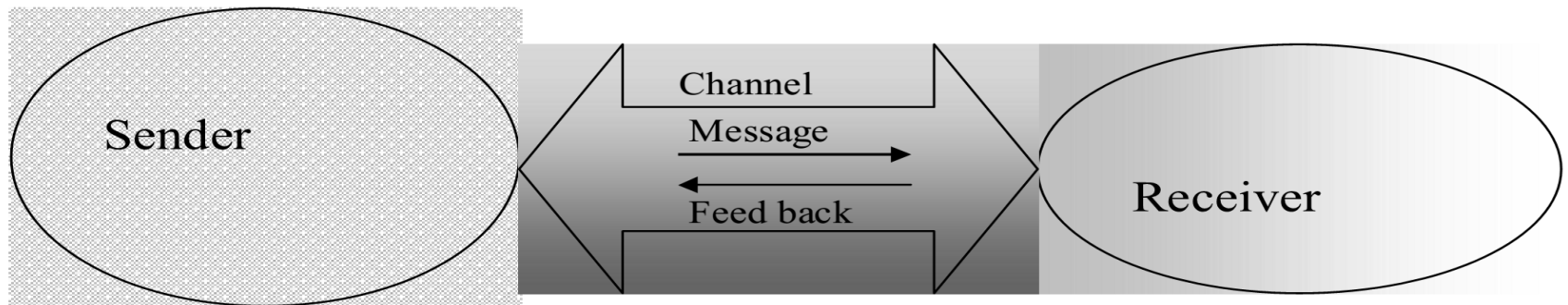


Figure 4.5: Two-way communication-two direction flow of information.

Advantages

- More audience participation
- Learning is more democratic
- Open for feed back
- Influence behavior change

Disadvantages

- Slower (time taking)
- Not orderly

4.6. Methods of communication

There are two main types;

1. Face-to-face ('interpersonal')
2. Mass media.

A. Interpersonal (face-to-face)

- Face-to-face or interpersonal methods include all those forms of communication involving direct interaction between the source & receiver.
- In most instances the decisive criterion for personal communication is.
 - a. Communication at the same time and/or
 - b. Communication at the same place.
- The powerful advantage of face-to-face communication over mass media is, it gives the opportunity to ask the audience questions and obtain their feedback.
- So public meetings share many characteristics of mass media in that they involve limited participation & feed back.
- Main effect = changes in attitude and behavior = acquisition of problem solving skill.

Advantages

1. Dynamic or bi-directional

- Communication takes place in both directions from the source to the receiver & vice versa.

2. Feed back

- A chance to raise question & discuss so that the idea is understood at the same time and/or place.

3. Multisensory (channel)

- Since the communication is active & interactive there is high chance of utilizing more than two senses such as seeing, hearing & touching.

4. Useful in all stages of adoption of innovation

- Adoption of a behavior passes through different stages and interpersonal communication has paramount importance through all these stages.

5. Useful when the topic is taboo or sensitive.

- For example, it is usually difficult to discuss about sexual matters in a group.

6. Can fit to local needs

- It provides open-room for discussion & feed back

Limitations

1. Easily distorted – as we mostly rely on word-of-mouth.
2. Often needs multi-lingual
3. Needs personal status/ credibility
4. Needs professional knowledge & preparation

For effective interpersonal communication

- Exchange of ideas with clients;
- Realize the importance of 1st impression when meeting a person. A saying ‘1st impression last long’.
- Learn to observe the person & derive useful information.
- Keep in mind the same words mean different things to different persons; perception is highly subjective.
- Pay attention body language there is a saying “action speaks louder than words”.

B) Mass media communication

- Mass communication is a means of transmitting messages, on an electronic or print media to a large segment of a population.
- Media is currently used to refer not only broadcast media such as radio & TV and print media such as papers, magazines, leaflets & wall posters but also folk media such as art, town criers, songs, plays, puppet shows & dance.
- The powerful advantage of mass media over face-to-face is **rapid spread of information to a large population at a low cost.**

- Main effect of this type of communication are:
 - ❖ Increased knowledge/awareness
 - ❖ Influence behaviors at the early stages.
 - ❖ Useful to communicate new ideas to early adopters (opinion leaders).

Advantages

1. They can reach many people quickly.
2. They are accurate and believable e.g. article on a newspaper, or “voice” of highly respected person.
3. They can provide continuing reminders and reinforcement.

Limitations

1. One sided /no feedback

- The broad caster transmits his message with out knowing what is going on in the receivers mind.

2. Selective perception:

- The audience may only grasp part of the message or selectively pick up the points that they agree with and ignore other

3. Does not differentiate the target

- Some may develop “this does not concern me type of attitude.

4. Only provides non-specific information

- As mass media are broad cast to the whole population, it is difficult to make the message to fit to the local needs of the community whose problems and needs may be different from the rest of the country.

For an effective mass media communication

- ❖ The message / advice should be realistic and pre tested so that it is transmitted accurately with out distortion.
- ❖ Useful in creating awareness, it has to be followed by individual & group approach for an effective feed back & in turn for attitudinal & behavioral change.

According to the way of expression there are three types of communication.

1. Verbal/oral communication
2. Non-verbal communication and
3. Written communication

Oral or Verbal communication

- It is communication by Word of mouth.
- Speech or talk is the widely adopted tool of communication.
- The message is received through our ear.
- May also use mechanical devices such as telephone, radio, PAS (Public address system) etc.

Written communication

- It involves the exchange of facts, ideas, and opinions through a written instrument /materials.
- Individuals or groups come in touch with each other and share meaning and understanding with each other through written materials such as letters notes, leaflets, reports, handouts, bulletins, newspaper.

Non-verbal communication

- Much communication also takes place through non-verbal communication.
- But most of us think a great deal about choosing the words we say (verbal) when talking with another person and forget to plan for our non-verbal communication.
- The fact is, the gestures we use, how we look at people, our tone of voice, how we are seated and our clothes can all have an impact on the way people interpret what we say.

Sounds accompanying spoken words.

- Pitch of voice
- Laughing, angry, groaning
- Pauses, speed of talking
- Stresses on particular words
- Loudness or softness of voice

Body talking

- Body contact – touching, holding hands, , greetings, shaking hands.
- Closeness – distance between persons.
- Posture- sitting up, leaning forward
- Orientation – angle at which people put themselves.
- Gestures – hand movements, raising eyebrows, shape of mouth.
- Appearance – clothes, hair, cleanliness.
- In face- to – face communication be sensitive to the impact our non-verbal communication might be having.
- Non- verbal communication can be interpreted in different ways according to the culture of the community.
 - For example, looking people straight at some ones eye.

4.7 Barriers to effective communication

1. Physical

- Difficulties in hearing, seeing
- In appropriate physical facilities

2. Intellectual

- The natural ability, home background, schooling affects the perception/ understanding of the receiver for what he sees & hears.
- The ability of the facilitator/ education/ instructor.

3. Emotional

- Readiness, willingness or eagerness of the receiver
- Emotional status of the educator

4. Environmental

- Noise, invisibility, congestion/overcrowding/,

5. Cultural

- Customs he beliefs, religion, attitudes, economic and social class differences, language variation.

6. Status of the source

- Status of the source either too high or too low as compared to the audience also affects effectiveness

7. Inconsistencies between verbal & non- verbal communication

4.12. Qualities of communication

- ✓ The communicator should be knowledgeable, positive attitude, skilled and have credibility.
- ✓ The message should be **S**imple (or brief & clear) **M**eaningful, **A**ppropriate, **R**elevant, and **T**imely (SMART).
- ✓ The channel should be familiar, appropriate, available & accessible.
- ✓ The receiver should also be responsible with proper attitude to receive the information.

4.8. Characteristics of effective communication

- ❖ Promotes actions that are realistic feasible with the constraint faced by the community.
- ❖ Builds on beliefs and practices that people already have.
- ❖ Repeated & reinforced over time using different methods
- ❖ Adaptable, and uses the existing channels of communication for example, songs, drama & story telling.
- ❖ Entertaining & attracts community's attention.

Characteristics.....

- ❖ Emphasizes short term benefits of taking action
- ❖ Uses demonstrations to show the benefits of adopting practices.
- ❖ Develop natural style; although we can learn how to present, each person has his/her own natural way of presenting ideas.
- ❖ Provides opportunities for dialogue and discussion to get the feed back on understanding and implementation.

• **Why Are Health Communication and Health Information Technology Important?**

- Effective use of communication and technology by health care and public health professionals can bring about an age of patient- and public-centered health information and services.
- By strategically combining health IT tools and effective health communication processes, there is the potential to:
 - Improve health care quality and safety
 - Increase the efficiency of health care and public health service delivery
 - Improve the public health information infrastructure
 - Support care in the community and at home
 - Facilitate clinical and consumer decision-making
 - Build health skills and knowledge

Community Theories

- From the ecological perspective this group of theories includes three categories of factors (institutional, community, and public policy).
- **Institutional factors** – include rules, regulations and policies of an organization that can impact health behavior.
- **Community factors**-include social networks and norms that can impact health behavior.
- **Public policy factors**-Includes legislations (laws) that can impact health behavior.

Diffusion of innovation theory /DOI/

- In health education/promotion, innovations come in the form of new ideas, techniques and behaviors.
- When people become “consumers” of an innovation they are referred to as *adopters*.
- DOI theory is a **theoretical approach** which provides an explanation **how** innovation, or ideas perceived as new are **communicated** (diffused) through channels among the members of the social system
 - How people create & share information?
 - What makes them adopt or change a behavior?
 - How quickly are they willing to change?
 - This model mostly used in market advertisement of new technologies.

DOI Cont'd....

- The 4 elements in the diffusion of innovation (Evert Rogers):
 1. **Innovation** - means an idea, practices or objects perceived as new by the people.
 2. **Communication channels** - the means by which the new idea is communicated or message gets from one individual to the other.
 - E.g. 'iqub', 'idir' (social system)
 3. **Time** - takes to accept the innovation.
 4. **Social system** - a set of interrelated units that are engaged in joint problem solving to accomplish a common goal.

DOI Cont'd....

- Adopter categories in the diffusion process based on the amount of time it took to adapt an innovation.
- These are;
 - A. Innovators
 - B. Adopters
 - C. Early majority
 - D. Late majority
 - E. Laggards

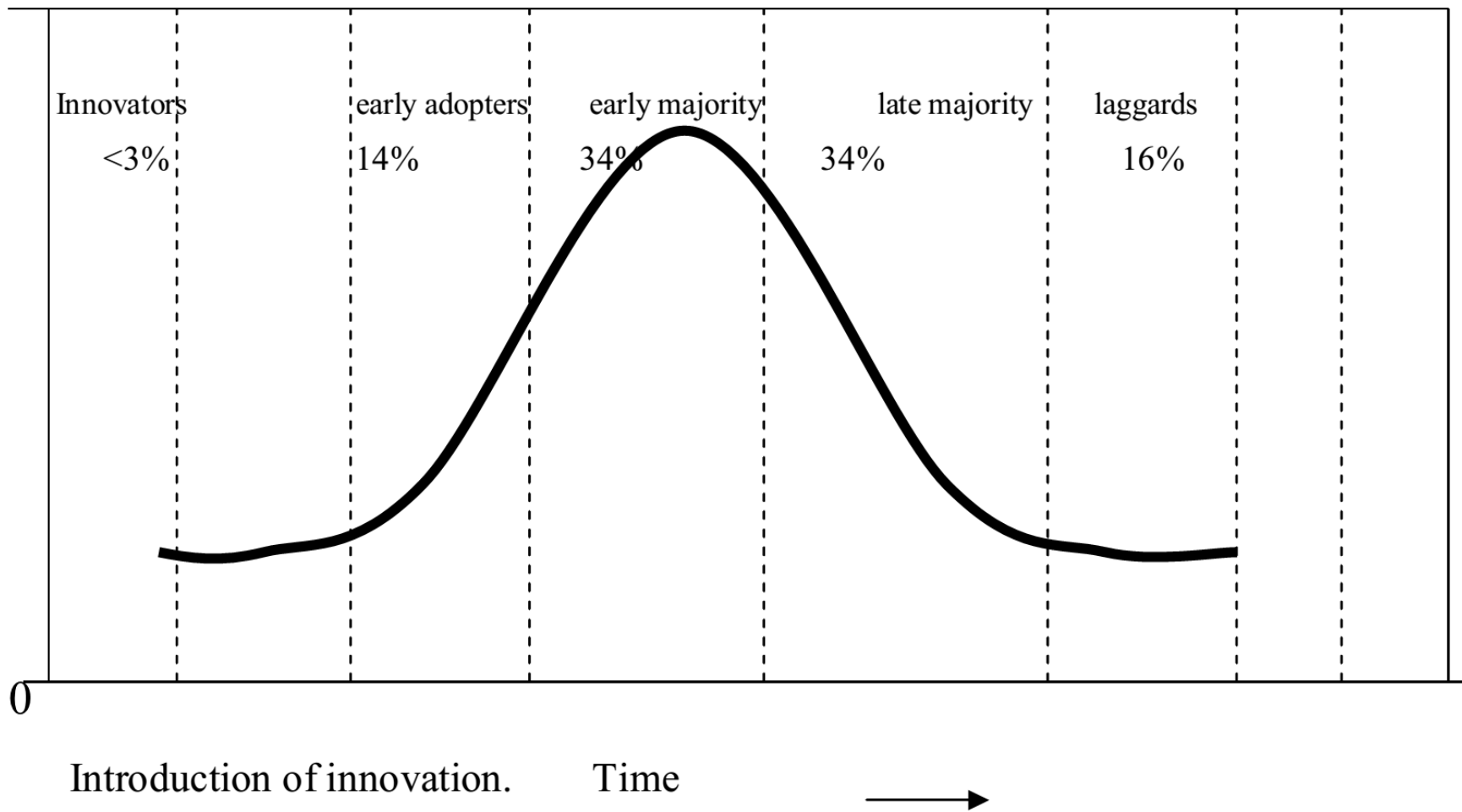


Figure 3.8: Bell shaped curve and adopter categories (the rate at people become adopters)

Source: Randall R. Cottrell, James T. Girvan, James F. McKenzie, 2006.

DOI Cont'd....

Characteristics by Rogers identified in categories:

Innovators

- Are first to adapt an innovation (they want to be first to do something)
- Control substantial a financial resource to absorb possible loses if the innovation is unprofitable.
- They are venturesome, independent, risky, daring and desire for rush.

- They have the ability to understand and apply complex technical knowledge (mostly they are literates).
- Have the ability to cope with high degree of uncertainty about the innovation.
- Are few and changed very earlier.
- they have higher socioeconomic status than any other group
- they require a shorter adoption period than any other category

DOI Cont'd....

Early adopters

- ✓ Are very interested in innovation, but they do not want to be first to be involved.
- ✓ Are integrated part of the local social system.
- ✓ Possess greatest degree of opinion leadership in most social systems (are respected by peers)
- ✓ Are usually successful.
- ✓ Serve as role model for other members or society

DOI Cont'd....

Early majority

- May be interested in innovation, but will need some external motivation to get involved.
- Interact frequently with peers (sociable and jockey)
- Seldom held the position of opinion leadership.
- Deliberate (check and discuss) before adopting a new idea.
- One-third of the members of a system, making the early majority the largest category.

DOI Cont'd....

Late majority

- Are skeptical and cautious and will not adopt an innovation until most people adopt.
- one-third of the members of a system
- Pressure from peers.
- And adapt because of economical necessity.

DOI Cont'd....

Laggards

- Will be the last to get involved in an innovation, if they get involved in an innovation at all.
- Posses no opinion leadership.
- Isolated in the social systems
- Point of reference is in the past.
 - E.g. '*Diro kere diro eko! Doro 25 santim neber*'.
- Suspicious of innovation
 - E.g. what if the 'whites' put virus in the condom?
- But also are usually with limited resources.
- Innovation-decision making is lengthy

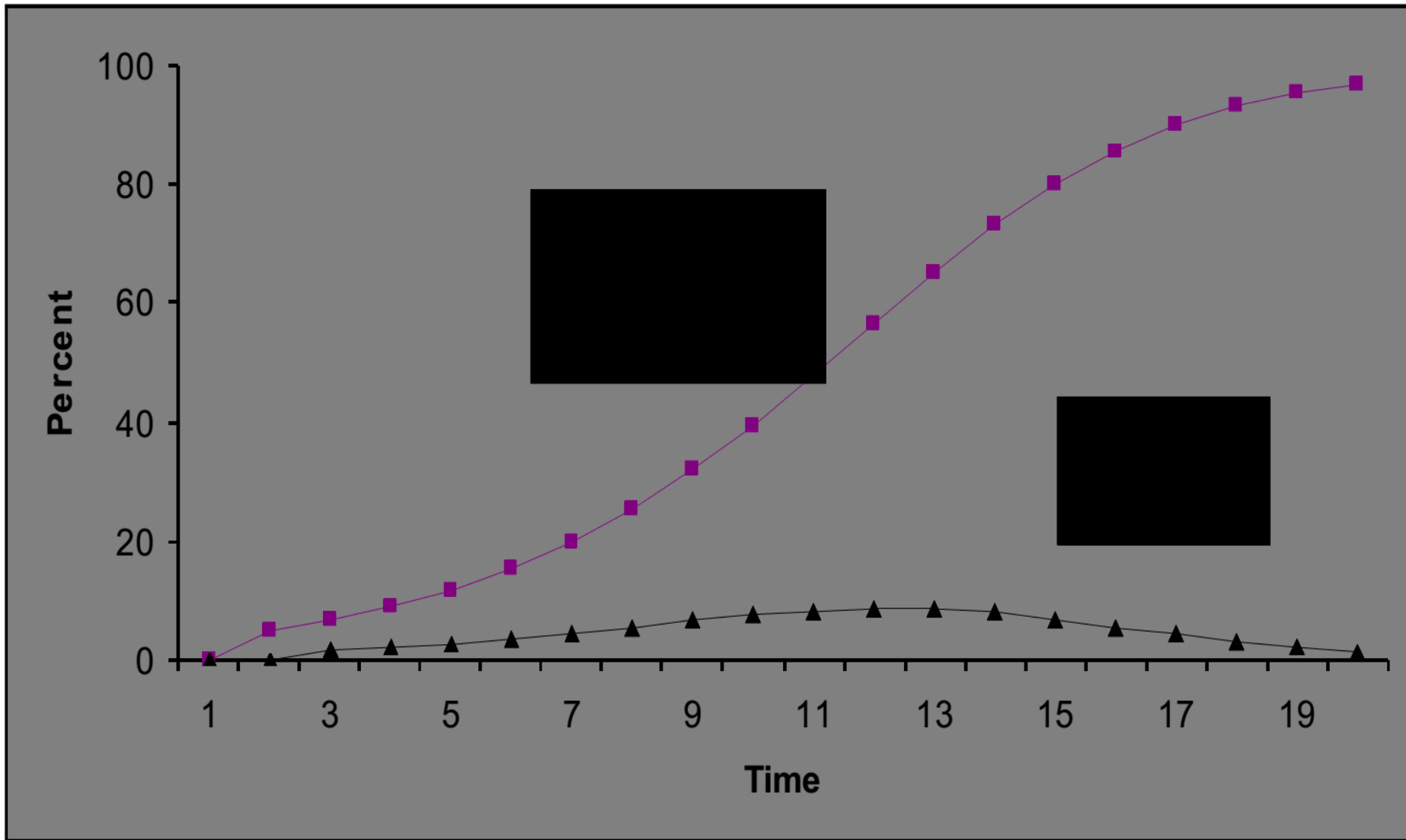


Figure 3.9: Typical diffusion of innovation curve

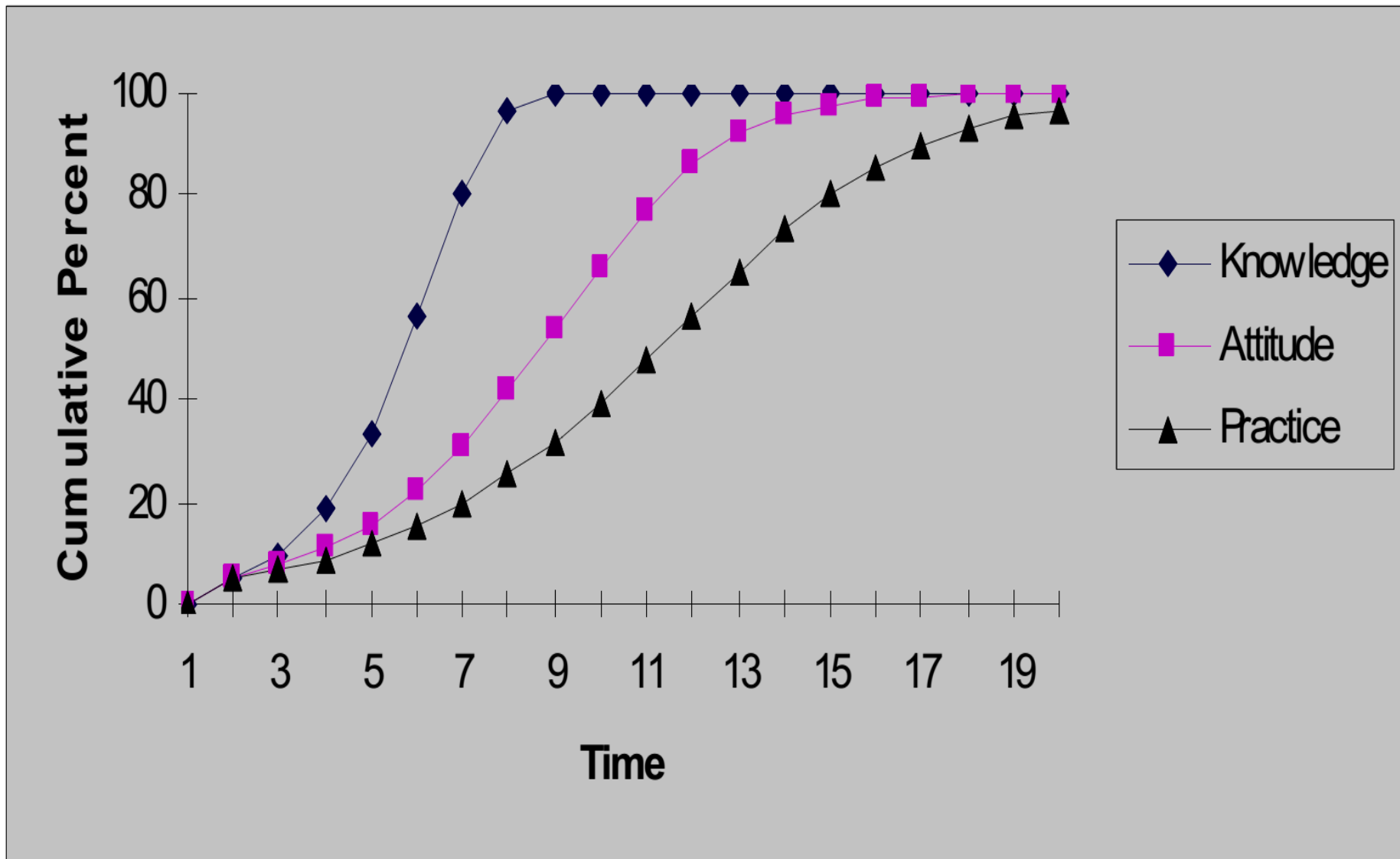


Figure 3.10: KAP curve in diffusion of innovation

Behavior change in population

Not all people change their behavior.

- Some are apt to change and others are reluctant. Based on research' findings, in any given society, there are four types of people.
- A very small percentage of people (2-3%) accept any ideas with out any question.
- Includes people who come up with new ideas (innovators) and those who are early adopters of the behavior.
 - For example community leaders belong to this group.

- Some do not take the new ideas readily (14%).
- But they prefer to observe the behavior from other people who are accepted by the community like opinion leaders
- The great majority (about 68%) **Says---Ok----later on**, but it is not usually easy to see them practicing the new behavior.
- This is the group that is difficult to change.

Behavior change Cont'd.....

- No matter what one says or does, about 16% will not accept the new idea.
- This group includes older peoples such as grand parents.
- **N.B.** Fortunately each of the above has group leaders. If we identify and use them they can change the behavior of others.

The adoption process

- **Diffusion process:** is the spread of a new idea from its source of invention or creation to its ultimate users or adopters"-occurs within society as a group process.
- **Adoption process:** is the mental process through which an individual passes from first hearing about an innovation to final adoption"- it pertains to an individuals. Rogers breaks the adoption process down into **five main stages**.

Stages Cont'd.....

1. **Awareness stage** - the individual is exposed to the innovation but lacks complete information about it. E.g. about a fertilizer.
2. **Interest or information stage**-the individual become interested in the innovation and seeks additional information about it and considers its general merits.
 - E.g. by reading form magazines, manuals, etc. about this fertilizer.
3. **Evaluation stage**-the individual makes mental application of the information to his present and future events and weights its merits for his own situation, and then he decides weather or not to try it.

Stages Cont'd.....

- For example, the person may evaluate the fertilizer; in terms of its benefit (increase his yield in the present time) and he may also evaluate the innovation as, what if it decreases the production in the future (anticipation).
4. **Trial stage**-individuals usually make full use of an innovation on small scale. It is actual application of the idea.
 5. **Adoption stage**- the individual accepts to continue full use of the innovation.

Rejection and Discontinuance

- Of course, as Rogers's points out, an innovation may be rejected during any stage of the adoption process.

Rogers defines

- **Rejection:** is a decision not to adopt an innovation.
- **Discontinuance:** is a rejection that occurs after adoption of the innovation.
- Many "discountenances occur over a relatively short time period" and few of the "discountenances were caused by supersedence of a superior innovation replacing a previously adopted idea".

- The relatively later adopters had twice as many discountenances as the earlier adopters.
- Previous researchers had assumed that later adopters were relatively less innovative because they did not adopt or were relatively slow to adopt innovations.
- This evidence suggests the later adopters may adopt, but then discontinue at a later point in time.

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Thank you !!!!!