

PUBLIC EDUCATION PAMPHLET ON COMMUNICATION STRATEGIES FOR
HEARING IMPAIRED ADULTS

Reg. No. M 9609

AN INDEPENDENT PROJECT WORK SUBMITTED IN PART FULFILMENT FOR
FIRST YEAR M.SC (SPEECH AND HEARING) TO THE UNIVERSITY OF
MYSORE

ALL INDIA INSTITUTE OF SPEECH AND HEARING
MYSORE - 570 006
MAY 1997

DEDICATED TO

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DECLARATION

I hereby declare that this Independent Project titled **"PUBLIC EDUCATION PAMPHLET ON COMMUNICATION STRATEGIES FOR HEARING IMPAIRED ADULTS"** is the result of my own study undertaken under the guidance of **Dr. (Mrs.) Asha Yathiraj, Reader,** Department of Audiology, All India Institute of **Speech** and Hearing, Mysore and has not been submitted earlier at any University for any other Diploma or Degree.

Mysore

May 1997

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CERTIFICATE

This is to certify that the Independent Project titled **"PUBLIC EDUCATION PAMPHLET ON COMMUNICATION STRATEGIES FOR HEARING IMPAIRED ADULTS"** is the bonaifde work done in part fulfilment for first year M.Sc, (Speech and Hearing), of the student with Reg. No. M 9609.

Mysore

May 1997



Director

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CERTIFICATE

This is to certify that the Independent Project titled
**"PUBLIC EDUCATION PAMPHLET ON COMMUNICATION STRATEGIES FOR
HEARING IMPAIRED ADULTS"** has been prepared under my
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ACKNOWLEDGEMENTS

I extend my heartfelt gratitude to **Dr. (Mrs) Asha Yathiraj**, Reader, Department of Audiology for her constant encouragement, support and guidance. I thank you Madam for bearing with me and guiding me throughout and helping me successfully complete this project.

I would like to thank **Dr. (Miss) S. Nikam**, Director, AIISH, Mysore for permitting me take up this project.

My sincere thanks to **Mrs. Vanaja, Mrs. Manjula, Mrs. Ramadevi** and **Dr. (Mrs.) Rajalakshmi** for their valuable suggestions during the course of this project.

My dear **"Boss"** ! I loved being your GENIE and would love being the same forever. Thanks for being a great friend and brightening my days.

Anu, only you could tolerate my terrible mood swings. With you in my life I cannot ask for more.

Sajith, Sara, Deep, Binu, Ratna, Raj, J.P and Shibu your friendship means a lot to me.

My gratitude to all others who have helped me directly and indirectly in completing this project.

Kudos to **"Maruthi Computers"** for making this project presentable.

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INTRODUCTION

Communication is the process of imparting to one another ideas, thoughts, feelings or opinions by means of signs, signals and symbols expressed consciously or unconsciously; a broader and more inclusive term than language and speech (Travis 1971).

Man's need for communication with his fellow man is possibly his greatest need and the fulfillment of his other needs and desires is largely dependent upon, or at least greatly facilitated by his ability to satisfy this basic one. The development of language, both spoken and written, as a means of communication is one of mankind's greatest achievements (Hull, 1982). Yet, from birth we hearing people effortlessly, almost unconsciously we have absorbed this magnificent tool. As we are lucky enough to hear, we take it very much for granted and tend to belittle, to shun or to look somewhat askance at anyone, who has had to fashion bit by bit, word by word, sound by sound, a workable even though imperfect, language tool for himself.

Speech signal is an acoustic pattern resulting from the interaction of multiple vibrations. Each speech sound arises from an unique combination of acoustic features that gives the sound its perceptual identity. The exclusion or diminution of any feature by a hearing impairment will result in a distortion of the pattern, as our hearing is dependent on the systematic processing of these features (Hull, 1982).

When a hearing deficit develop after language rules have been learned thoroughly the individual is not faced with a complete breakdown in auditory communication. The process, being primarily cognitive linguistic in nature, has so much intrinsic redundancy that a surprising amount of information lost in the acoustic signal can be compensated for before communication breakdown occur. The observable difficulties experienced in communication begin when the combination of acoustic information and contextual constrains fails to provide sufficient cues for pattern recognition. As the definitiveness of the information at the primary stages of processing decreases, the degree of confidence that accompanies perception also decreases (Trychin & Boone, 1987).

The sense of hearing is integrally related to communication and interaction with one's fellow beings. To a very great extent, we relate to others through verbal language. When the sense of hearing is impaired the ability to relate may be impaired as well. Messages may not be interpreted properly because crucial words are missed and the hearing impaired person does not catch the nuances of meaning conveyed by a rising inflection, a pause or an emphasis in a particular part of an utterance. Faulty hearing often leads to misunderstanding and inappropriate behaviour (Verderber & Verderber, 1986).

A hearing impaired adult is someone who needs help in surviving in a society in which normal hearing is taken for granted. It is a society which for the most part, neither understands the problems created by hearing impairment, nor knows how to accommodate them. The hearing impaired person and the society needs to understand to what extent he/she must live differently as a result of the hearing impairment, to learn what adjustments he/she must make and to realize how to make them. These are people, who without help, will experience difficulty and frustration beyond that experienced by the normal hearing counterparts. They are people with practical problems of everyday living, problems that need direct intervention procedures.

Neither ideas nor language can be transferred physically between persons. Comprehension is dependent, therefore upon the ability of the listener to receive information that permits him/her to reconstruct equivalent of language patterns which represent those ideas. The information transmitted and received is encoded into the physical signal which travels between the speaker and listener. Hearing impairment distorts the signal received. This distortion limits the ability of the listener to reconstruct an equivalent of the message which the speaker wishes to convey. If the hearing impaired person's hearing deficit is so severe as to prevent adequate monitoring of his/her own speech production, then the production and transmission of correct speech sound patterns will also be affected. This will

compound the interpersonal communication problem (Mc Ginnis, 1983).

Even with amplification, many hearing impaired persons are still unable to derive enough information from the acoustic signal to comprehend a given message. Because information about the thought or idea is also encoded by the speaker into the visual channel, vision has the potential of serving a valuable role in the reception of additional information. The production of speech sounds involves the use of the speech articulators whose movement are visible to varying degrees. Visible articulatory patterns, therefore constitute a potential source of valuable information about the speech code. The common auditory visual link of speech articulation frequently provides enough information from both sensory channels to reconstruct a spoken message not recoverable through acoustic information alone (Peterson & Denver, 1972). Behavioural cues to meaning are also often transmitted simultaneously with the spoken message. This additional source of visual information, together with cues which may be generated by such situational constraints as dress, tools, equipment, environment helps the hearing impaired persons to make use of all available cues to meaning.

Satisfactory communication is dependent upon two or more people's sharing of a common means of interaction. This necessitates the development of a communication system in

which the participants have compatibility. It is the aim of habilitation/rehabilitation procedures to develop compensatory communication strategies to reduce the impedance between the individual and the larger communication matrix into which that person must fit (Palmer, 1982).

Strategies may be divided into two categories, anticipatory and repair. Anticipatory strategies involve predicting possible problems in a situation and figuring out ways to handle them. They may be thought of as presituational modifications. Repair strategies on the other hand involve things that can be done when actually in a difficult situation. Both types are important.

Many communication situations are missed or avoided by the hearing impaired adults due to their inability to cope up with the speaker's conversation despite the use of amplification devices. Communication strategies, in these situations help them to overcome spoken message breakdown in the perception of a spoken message. Knowledge of the different strategies and their use in appropriate contexts is important for the hearing impaired adults in situations where communication breaks down. However these strategies are also useful to normal hearing individuals when the speaker for some reason is difficult to understand (eg: communicating in a noisy situation or through telephones). Therefore an attempt is made to develop a public education pamphlet on communication strategies. This will enlighten the hearing

impaired adults and individuals who communicate with them regarding the use and importance of communication strategies. The pamphlet describes the strategies in order of importance.

The strategies have been categorised as anticipatory and repair strategies. These strategies include information on overcoming

- (1) Problems related to the speaker or the inability of the hearing impaired person to understand.
- (2) Problems related to the environment, and
- (3) Problems related to the hearing impaired person's ability to be understood.

REVIEW OF LITERATURE

When human beings communicate, it is for the purpose of sharing thoughts, feelings, ideas and emotions (Verderber and Verderber, 1986). Communication is thus social and interactive, requiring participants to act at times as both receiver and sender of information (Tubbs and Moss, 1987). Effective communication occurs when individuals accept their shared responsibility to provide feedback on how the content of a message was received, either verbally or nonverbally and when responses are made that are appropriate to the person, setting, topic, and task of the communication (Wood, 1976). The interaction of all these components contributes to successful exchange of information between people. The basic communication process becomes more difficult, however, when one of the participants has a hearing loss.

A severe or profound hearing impairment makes social or on-the-job communication a daily challenge, placing demands on residual hearing and vision, and usually increasing the individuals reliance on alternative means of communication. Perhaps the most important of these is speech reading. Additional factors affecting success are insufficient knowledge of the language and unfamiliarity with pragmatic or interpersonal aspects of communication within the more dominant normal hearing culture (Mc Ginnis, 1983).

There is little doubt that speech reading training can facilitate communication for the hearing impaired individual. There are many approaches to speech reading training. Some speech reading models focus on training perceptual skills using nonsense syllabus and words. Other models teach and test more cognitive skills using sentence length stimuli and connected speech, while still others look for an indication that the gist of a message was understood. A change in speech reading skill is often measured using the number of words correct or an improved words per minute score. This has been used in the technique described by DeFilippo and Scott (1978). Although nothing could or should take the place of perceptual drill and practice in learning to speech read, the ultimate goal of any speech reading training is to improve the hearing impaired individuals overall ability to communicate effectively with those who hear normally.

COMMUNICATION COMPETENCE:

Attaining communication competence can give an individual a feeling of power in social groups, the classroom and the community (Wood, 1976). It can increase confidence and self-regard, which have shown to be particularly important in developing social and communicative competence in young hearing impaired children (Coopersmith, 1967; Maslow; 1968; Rogers, 1961). Learning personal and social competencies has also been identified by White (1982) as crucial to the education of hearing-impaired individuals.

Communication competence encompasses a variety of component skills, only one being the ability to speech read. Some other skills that contribute to overall communication competence are;

- (a) understanding the role of nonverbal cues in communication;
- (b) being able to evaluate one's own receptive and expressive communication strengths and weaknesses, including how to make communication needs known; and
- (c) becoming familiar and skilled at using alternative communication strategies.

UNDERSTANDING NON VERBAL CUES:

Non verbal cues play an important role for the speech reader (Jacobs, 1981). Communication that takes place without words is considered non verbal. Verbal communication, on the other hand includes the spoken word as well as the printed word. Research suggest that as much as sixty to seventy percent of information communicated is transmitted non verbally (Birdwhistell, 1970), yet few studies have looked at the specific meanings of non verbal messages or at the development of this form of communication. It is generally believed that nonverbal cues are more important and truthful than verbal cues (Verderber and Verderber, 1986). When messages via the verbal and non verbal channels are contradictory, interpreting emotions and meanings become very

difficult. People are relatively unaware of the information their own bodies may be sending, but are extremely sensitive to the signals sent nonverbally by others (Verderber and Verderber, 1986). Although individuals may unknowingly transmit nonverbal information, it communicates powerfully. The skill of understanding nonverbal cues varies from individual to individual (Johnson, 1975). The functions of nonverbal cues also vary according to culture, subculture, age, sex, personality and race (Verderber and Verderber, 1986).

The role of nonverbal information cannot be overestimated for the hearing impaired person relying on speech reading to communicate. These cues give valuable information about the speech reading situation, helping one formulate an appropriate response or determine what spoken language is likely to occur. Surprisingly, the ability to comprehend nonverbal information is not innate (Wood, 1976). Severely and profoundly hearing-impaired adolescents benefit from practicing both reception and expression of nonverbal cues; such practice has been shown to significantly improve speech reading performance (Palmer, 1988).

Components of nonverbal communication can be categorised into time and space cues, which include personal and social distance; visual cues such as eye contact body movements, physical appearance, and facial expressions; and vocal cues, which include the voice characteristics of rate, fluency,

pitch, quality and volume (Tubbs and Moss, 1989). These components help improve communication. It is not always, that they are available to the hearing-impaired. In order to communicate effectively, the hearing-impaired person should make their needs to improve speech comprehension known.

MAKING COMMUNICATION NEEDS KNOWN:

Hearing-impaired people must be able to tell those they wish to communicate with how they are best able to receive and send information. To accomplish this, individuals must possess an accurate understanding of their own receptive and expressive communication strengths and weaknesses. One technique used to reach this goal is self-evaluation. Items that could be included in a self evaluation include the following questions;

- (1) Is my speech understandable ?
- (2) When I speech read, how much do I understand ?
- (3) In what situations is communication most difficult for me ?

Only after carefully assessing strengths and weaknesses is an individual ready to relay what is needed to communicate successfully (Palmer, 1988).

USING ALTERNATIVE STRATEGIES:

Hearing impaired people should be aware of the variety of possible alternative communication strategies and build for themselves a hierarchy of strategies that feel most comfortable to them. Knowledge of and practice with a variety of alternative communication strategies can make communication more effective for them. The result of using strategies is more effective in handling of communication breakdowns and a feeling of confidence of being able to control the uncertainties of a speech reading situation (Palmer, 1988).

Strategies may be divided into two categories, anticipatory and repair. Anticipatory strategies involve predicting possible problems in a situation and figuring out ways to handle them. They may be thought of as presituational modifications. Repair strategies on the other hand, involve things that can be done when actually in a difficult situations. Both types, however are important.

ANTICIPATORY STRATEGIES

Anticipatory strategies involve predicting possible problems in a situation and figuring out ways to handle them. They may be thought of as pre situational modifications. It is necessary to identify potential problems in advance to anticipate sources of difficulty. This is not always possible, but anticipatory strategies can be used more often

than we realize. Anytime hearing impaired person goes into a situation in which the speakers or speakers are known, he/she can predict the speaker characteristics that are likely to create problems. Once he/she figures out what is difficult about understanding a speaker, he/she can plan approaches to minimize the difficulty.

Following are some of the suggestions and recommendations by different authors as a result of experiments and investigations performed using different anticipatory strategies. They may be useful in some situations of communication breakdown.

ANTICIPATE ENVIRONMENTAL PROBLEMS:

The setting in which the communication act takes place plays an important role in how well a person will hear and understand what is being said. This is especially true for the hearing impaired person, whose redundancy factor has been reduced by the hearing impairment. Consequently, environmental conditions such as background noise, lighting, number of people talking and distance from the speaker can all contribute to auditory failure. Whenever possible, these conditions should be optimized to improve communication efficiency.

NOISE FREE ENVIRONMENT:

According to Giolas (1992) a relatively noise free environment is essential for a hearing impaired to follow conversation in a communication environment.

To reduce noise levels, attention should be given to mechanical noise producing sources that benefit from replacement or servicing (Nabelek & Nabelek, 1985) Noise level should be a prime consideration in the purchasing of air conditions, Fans space heaters, dish washers and all other noise producing home appliances. Turning off the radio, TV or record player will greatly facilitate communication by reducing the S/N ration as will closing doors or windows to reduce outside noise (Maurer, 1976) Wall-to-wall carpeting with thick underpadding as well as an open weave in homes and offices results in maximum effect. Carpet also serves to limit reverberation of high frequency sounds (Nabelek and Nabelek, 1985).

Maurer (1976) stressed the need for reducing the ambient noise in the residential care facility. The administrators should be made aware that by doing so, all residents and staff are benefited. Among these are radios and TVs left on when non one is paying attention to them and open doors to the kitchen, laundry room or staff lounge. The trundling of instruments through social areas - all can be controlled given administrative and staff concern.

REVERBERATION:

In the home or where possible in the work setting, reverberation may be reduced by lowering ceiling height and by using acoustic ceiling tile. Extending heavy window drapes beyond the window frame to cover wall space and extending drapes several inches from wall reduce low frequency reverberation (Nabelek and Nabelek, 1985). Drapes are particularly important when rooms have large picture windows.

SPEAKER - LISTENER DISTANCE:

Distance while conversing face-to-face between speaker and listener dramatically influences the ease of understanding. An ideal distance for communicating with the hearing impaired person is three to six feet. Cooper (1979) suggest that by halving the distance between communicators, it is possible to effect a 6 dB increase in intensity level of the signal.

According to Berger (1972), distances of up to perhaps 20-24 feet do not have a significant effect on speech reading performance, if the individuals have normal or corrected normal vision. But speech reading training would, logically be most meaningful if done at those distances most representative of typical daily conversational situations i.e., between 5-10 feet.

Shortening the listener-speaker distance is effective because it increases S/N ratio (Nabelek and Nabelek, 1985). The action should aim to move the listener well within the critical distance. In home and office attention should be paid to the arrangement of furniture to provide favourable areas for conversation.

According to Maurer (1976) in a residential care facility staff should be made to understand that reducing speaker-listener distance rather than raising the voice level greatly increases discrimination and comprehension while reducing stress on the staff member.

At meetings, the hearing impaired individual should secure the most advantageous position relative to the speaker(s). It is always wise that the hearing-impaired individual arrives early so that he/she can have the option of sitting close to the chair person. Sitting up front at lectures, public hearings, churches etc., help the hearing impaired to see all the speakers (Giolas, 1992).

NUMBER OF SPEAKERS:

According to Giolas (1992), at informal gatherings, the number of speakers the hearing impaired engages in conversation with at any one time should be limited. One-to-one correspondence is earlier than group conversations.

LIGHTING CONDITIONS:

According to Giolas (1992) poor lighting conditions should be corrected in order to facilitate the use of all nonverbal cases.

In a study by Berger (1972), it was found that individuals familiar with the message content produced slightly and non-significantly diminishing scores in speech reading as the intensity of the room illumination decreased from 30 foot candles to one-half foot candle.

Proper seating should be provided to the hearing impaired person so that he/she can select to sit with his/her back to the source of natural light. Good artificial light should be provided with particular attention to seating areas (Nabelek and Nabelek, 1985).

Therefore, controlling the above mentioned environmental factors play a major role in enabling the hearing impaired to speech read effectively and efficiently. Controlling ambient noise, reducing the speaker listener distance, reducing number of speakers, improving the lighting conditions and reducing reverberation makes speech-reading for the hearing impaired easier. Having controlled the environmental problems, there is also a need to modify the communication behaviour of the family members, acquaintances and other significant people of the hearing impaired

individual as they constitute the major share of the hearing impaired individual's communication world.

**MODIFICATION OF COMMUNICATION BEHAVIOUR OF SIGNIFICANT
OTHERS:**

The most successful method of persuading any one to modify their behaviour is to convince them that to do so is in their own best interest and that it will improve the situation. This is the most advisable approach to take with family members of the hearing impaired. In addition to reducing background noise and the distance between the speaker and speech reader, the family needs to be encouraged to be sensitive and alert to those situations that make listening difficult. According to Sanders (1990) they are:

- * Soft speech
- * High pitched voices
- * Rapid conversation
- * Being addressed before one's attention is captured
- * Topic changes
- * Unfamiliarity with the topic
- * Inability to see the speaker.

The family may find such a list to be quite helpful to them in identifying the particular situations in which problems occur. In addition to identifying the situations the family needs to be made aware to analyze them. Once this has been achieved the next step is to explore acceptable

alternative ways of managing those situations. Some options include

- (1) Make a point of talking only after the person's attention has been alerted (Hull, 1986; Sanders 1990; Giolas, 1982).
- (2) Move closer to the person who is speaking (Sanders, 1990; Maurer, 1976).
- (3) Face the listener when speaking (Scheety, 1993; Hull, 1986; Giolas, 1982).
- (4) Provide topic identification words before talking about the topic (Hull, 1986; Sanders, 1990).
- (5) Speak only when in the same room (Maurer, 1976; Scheeting 1993).
- (6) Do not expect to compete with the TV or radio. They make communication very difficult (Nabelek and Nabelek, 1985; Giolas, 1982).
- (7) Alert a person to a topic change with a key context phrase (Giolas, 1982; Sanders, 1990; Scheetz, 1993).

Modifying the communication behaviour of significant others of the hearing impaired reduces the frequency of communication breakdowns and makes communication easier for the hearing impaired and people associated with him. However, the hearing impaired also needs to modify his communication

behaviour as a means of easing the difficulties in communicating with his co-communicator whenever there is a communication breakdown.

**MODIFICATION OF COMMUNICATION BEHAVIOURS USED BY THE CLIENT
(HEARING IMPAIRED):**

The hearing impaired should be helped to identify and describe the problem situations where communication breakdown occurs. He/she must be further helped to analyze and manage the difficulty. Options for change and follow up with the most practical of them should be considered. According to Sanders (1990), the available options are.

- (1) The speaker should be advised regarding the hearing impairment, thus increasing his/her understanding of the hearing impaired's speech difficulty.
- (2) The hearing impaired should change the seat to reduce distance, to optimize favourable listening conditions, and to enhance visibility of the speaker.
- (3) Clarifications should be asked for when the hearing , impaired is not sure he/she has understood.
- (4) Repeat the speaker's message saying, "let me see if I have understood your plan/intention/wish, and so on.
- (5) The hearing impaired should acknowledge if he/she lost the topic of conversation when it changed, thus initiating an update or orientation.

- (6) Names, difficult instructions, and figures should be asked to be written down.
- (7) Review the main points of the discussion/plan/findings with the speaker or with a colleague at the end of or before a meeting.
- (8) Ask for written confirmation.
- (9) Use a fax message rather than telephone when possible.
- (10) Take a note taker or a quality cassette recorder to important meetings.

The above said options, though effective in overcoming communication breakdowns require the hearing impaired person to be assertive to implicate them. Therefore being assertive is also an important factor in sharing effective communication.

BEING ASSERTIVE:

Most of the time, assertive behaviour is appropriate for good communication. Assertive people respect their communication partners, but they also meet their own needs. They are honest and open in expressing their feelings and opinions. They admit their problems and ask for assistance. They take the initiative in a communication situation when that is appropriate but in such a way that the right of others are not violated. (Horn, Mahshie and Wilson, 1983).

Assertive people share rather than dominate the conversation. They freely admit not understanding, but they also indicate specifically what kind of help is necessary. For eg: if the speaker's face is shadowed because of improper lighting, the assertive person indicates:

1. The need to speech read because of poor hearing and
2. The difficulty created by the poor lighting.

Then the speaker is asked politely to move to a position where the lighting is more advantageous and is shown where. It is not enough to say "Im sorry, I don't understand". The speaker needs to know what to do. Follow up the admission of not understanding by a statement such as. "I can understand you better if the light is on your face. "Last, but certainly not the least, the speaker is thanked for helping". Most people will cooperate when given information courteously.

The assertive person must know what language is appropriate for good communication. It is possible to be aggressive without appearing that way if inappropriate language is used. Consider a communication problem. The speaker is trying to converse with a hearing impaired individual but is not facing him/her. The hearing impaired person might respond. "What is the matter with you ? Can't you look at a person when you talk ?" On the other hand, the response might be. "I am having trouble hearing you

because I have a hearing problem. You can help me by facing me when you talk. I would appreciate that".

One area that is often addressed in aural rehabilitation is development of assertiveness. This area is also an important goal for the late deafened adult who may become very passive in communicative situations. Rehabilitation should focus on encouraging appropriate assertiveness and reinforcing the pragmatic give and take of normal conversation (Spitzer, 1993).

Behaviours Stressed in Assertive Training:

According to Spitzer, Leder and Giolas (1987) some of the behaviours given emphasis in assertive training are:

- 1) Asking for assistance when something is missed ("I missed the date of the meeting. When will the meeting take place?").
- 2) Getting feedback regarding a portion of the utterance ("I know that you were discussing the movie you saw. Was the movie Raiders of the lost Heart").
- 3) Informing others of hearing impairment ("I have a hearing loss. Would you mind facing me directly while we talk?")
- 4) Moving seat to advantageous location (Sit near the front of an auditorium or away from extraneous noise sources).

- 5) Continuing to try to understand (Maintain eye contact and use communicative repair strategies when there is some breakdown in understanding; ask speaker to rephrase, simplify, elaborate).
- 6) Attempting to anticipate the flow of conversation (While following the flow of a topic, recognize possible divergences or related topics that may become part of the conversation).
- 7) Modifying strategy when initial approach is unsuccessful. ("I am sorry but I still don't understand that name. Would you mind telling a word it rhymes with ?")
- 8) Negative behaviours should be reduced or extinguished. The hearing impaired person should not demonstrate, impatience, tension or hostility when there is a communicative failure.

Once the behaviours stressed in assertive training are acquired by a hearing impaired person, he/she is ready to select the appropriate strategy depending on the situation and use them effectively.

The strategies mentioned above are the most commonly used anticipatory strategies. These require little effort on the part of the hearing impaired person. To use them effectively he/she only needs to modify the existing communication situations or modify his/her own behaviour.

Those mentioned ahead involve practice to use them effectively.

WORK BOOK ACTIVITIES INVOLVING SITUATION SPECIFIC SPEECH READING:

The work book activities involve charting the communication interactions which may take place in a particular situation. These activities are used to provide speech reading practice.

Tye Murray (1992) evaluated the effectiveness of work book activities which involves situation specific speech reading practice on normal hearing subjects to prepare for a communication interaction in a bank setting where they would be required to recognize speech using only the visual signal. She also evaluated whether the same strategies improved cochlear implant users ability to recognize statements and words audiovisually. In both experiments, subjects who used the anticipatory strategy did not improve their performance on specific sentence tests.

Though the study by Tye Murray (1992) did not show any improvement in performance on specific sentence tasks, work books giving activities on speech reading and communication strategies are steadily gaining importance especially in rehabilitation of cochlear implantees and those with profound hearing impairment (personal communication, Benzer, 1994).

LISTING PRIORITY COMMUNICATIVE NEEDS:

According to Hull (1982) each hearing impaired client must be asked to list those difficulties in communication which affect them most. They can include specific communication environments, such as a meeting room, church, certain restaurants, table arrangements and so on. They can also list certain individuals who they have difficulty understanding. They should list those difficulties on paper even if someone else must write for them. The next step is for those clients to set priorities in those situations or persons on the same sheet of paper, from most important to least important. And if, they had their choice, in which of those would they most like to improve. They should be asked, of course, to be realistic in their final choices.

Horn, Mahshie and Wilson (1983) have summarised the anticipatory strategies whose usage can help hearing impaired overcome communication breakdown. They include:

- * Anticipate possible vocabulary
- * Anticipate possible dialogue and its sequence
- * Anticipate questions that might be asked
- * Decide upon information to be obtained
- * Plan questions to be asked
- * Decide on how to narrow the questions
- * Anticipate environmental problems
- * Consider how to be assertive.

The anticipatory strategies thus mentioned when used effectively and efficiently helps overcome communication breakdown. These strategies require preplanning on the part of the hearing impaired and so he/she is well prepared to face the difficult communication situation.

The next set of strategies include those which can be used when the hearing impaired is not able to anticipate communication difficulties. These are the strategies which can be used when actually in a difficult-to-communicate situation.

REPAIR STRATEGIES:

Aural rehabilitation programs often encourage hearing impaired listeners to use repair strategies when they do not perceive an utterance (Michael, 1985; Kaplan, Bally and Garreston, 1985; Trychin and Boone, 1987). Presumably the listener understands more of a message after implementing a repair strategy.

It is not always possible to anticipate problems. Sometimes, speakers are not known, or unexpected difficulties occur during communication. These are the times to use repair strategies, those strategies that are used during the communication situation. Some of the anticipatory strategies can be useful for repair purposes. For eg: It is possible to ask a speaker to remove a cigarette or pipe, speak more slowly etc, while engaged in a conversation.

In addition to the anticipatory strategies used during the communication situation, there are a variety of repair strategies that can be helpful when a message needs clarification.

REPETITION:

Repetition is the strategy that probably is used most often. It is perfectly acceptable, but it should not be over used. A speaker should not be asked to repeat more than once or twice. Continual requests for repetition will frustrate the speaker and impair communication.

Typically, if a word or phrase is not understood, the listener will say, "Please say that sentence (word) again", or "please repeat". Other approaches are possible however. If part of a message is understood, it is good to ask for repetition of only that part which is not understood. Ask the speaker to repeat the last word or the last part of the sentence or whatever was missed. One way to accomplish this is to repeat what was understood and ask the speaker to supply the rest. For eg, the speaker might say, "I met John at the store. The hearing impaired did not understand "store". He/she might say, "You met John where ?" The speaker knows exactly what is needed and responds with "at the store" or perhaps with "I met John in the store, shopping".

It is good for the hearing impaired person to develop a few key phrases that seem pleasant and use them when he/she needs a repetition. For example, "Please forgive me, I may have misunderstood", or "I sometimes miss an important word or two. What did you say?" He/she should avoid saying "What"? or "Huh"? When a repetition is needed.

The benefits of repeating sentence materials may be different from, the benefits of repeating single word materials. Miller, Heise and Lichten (1951) presented the Psychs Acoustic Laboratory sentences to two normal subjects in audition plus white noise condition. A 2 dB smaller signal to noise ratio was necessary to maintain scores at fifty percent when the sentences were repeated three times as opposed to once.

Berger (1972) reported that visual-consonant recognition scores did not improve significantly regardless of whether the stimuli were repeated once, twice or three times.

Traul and Black (1965), and Gagne and Wyllie (1968) reported similar findings for single-word stimuli.

Nielson (1966) investigated the effects of repetition as a speech reading variable with normal hearing subjects. As many as 5 repetitions of misidentified words (presented in isolation) were given to the subjects. The results revealed that there was not a statistically significant improvement in performance between the visual-word recognition scores

obtained after the first presentation of the stimulus and the visual-word recognition scores obtained after five repetitions of the same stimulus.

The above studies indicate that the number of repetitions did not improve the recognition scores in normal hearing subjects. That is to say one repetition of the misidentified word is in no way better than more than one repetition of the misidentified word.

Erber and Greer (1973) have listed certain strategies with illustration under "Repetition" repair strategy employed to overcome breakdown in communication.

1) Repetition of a word

Speaker: where do we eat ?

Listener: food ?

Speaker: where ?

2) Repetition of a phrase

Speaker: Put the pen in the draw.

Listener: (Puts the pen on the table)

Speaker: In the draw.

3) Repetition of a sentence

Speaker: What do you wear on your feet ?

Listener: (No Response)

Speaker: What do you wear on your feet ?

Use of repair strategies is an integral component of the tracking procedure described by DeFilippo and Scott (1978). The tracking procedure requires the participation of two individuals, a sender and a receiver. The sender sends a short segment of a text to the receiver who is required to repeat the stimuli. When the receiver fails to accomplish this, repair strategies are implemented until the receiver repeats the stimulus. Effectivenesses of four repair strategies commonly used in connected discourse tracking was studied by Lunato and Weisenberger in 1994. The strategies used were:

- a) verbatum repetition of a word or phrase
- b) use of antonyms or clues
- c) use of phonemic clues
- d) going back or ahead in the text.

Results indicated that repetition of the missed segment produced the highest tracking rates, significantly higher than any of the other strategies.

Van Tassel and Hawkins (1981) presented fifty revised CID everyday sentences (Davis and Silverman 1978) to ten normal hearing adults in an audition- plus vision- plus habble- condition two times successively. Average scores improved significantly from sixty percent to sixty-nine percent key words correct.

Owens and Telleen (1981) noted the type of repair strategy that were preferred by the hearing impaired receivers. The authors reported that during the early stages of training, the receivers tended to adopt a limited set of repair strategies. Further, more than eighty five percent of the repair strategies requested by the hearing impaired subjects involved the repetition of a phrase, or a portion of a phrase.

The roles of both the hearing impaired speaker and the listener during communicative breakdown were studied by Donnelly and Brackett (1982). Using a simulated talk-show format adopted from Bryan, Donahue, Pearl and Strum (1981), they found that hearing impaired listeners gave all the forms of feedback described in the literature, with implicit feedback occurring most often. The hearing impaired speaker most frequently responded to this feedback by repeating the utterance exactly or repeating the operative word in the utterance.

Squires and Dancer (1986) tested fifteen normal hearing subjects with revised CID every day sentence list (twenty sentences in each list) in a vision-only and an audition-plus white noise condition. Subjects completed the same list in each condition twice in succession. Scores improved significantly for the second presentation with greater improvement for the audition plus white noise condition (from

forty eight percent to fifty nine percent for correct identification of key words).

Repetition of stimuli incorrectly identified has been used in the training programme designed to improve the speech reading skills of the hearing impaired subjects (Lesner, Sandridge and Kricos, 1987; Montgomery, Walden, Schwrtz and Prosek, 1984; Walden, Erdman, Prosek, Montgomery, Scherrand Jones, 1977).

According to Lesner, Sandridge and Kricos (1987), use of repair strategies occur naturally in everyday conversation. The repetition of stimuli incorrectly identified has been used in training programmes designed to improve the speech reading skills of hearing impaired subjects.

An investigation by Tye Murray, Witt and Schum in 1995 studied the effects of talker familiarity on communication breakdown in conversations with adult coclear implant users. Results revealed that cochlear implant subjects most commonly asked "what" ? "Huh" or "Pardon" after not recognising a spoken message regardless of whether the communication-partner was familiar or unfamiliar. Communication partners most common response to this repair strategy was to repeat the original message.

Repetition as a repair strategy has been widely employed by hearing impaired communicators when a message is mispercieved. This is evident from the studies mentioned

above. Repetition is also helpful for normal hearing individuals when they don't understand a message in noisy situations or other difficult to hear conditions. Though this strategy is the most widely employed one, there are other repair strategies which can be adopted if repetition fails or is not suitable for that situation.

REDUCE RATE OF SPEECH:

Reducing the rate of speech makes speech reading easier. If the speaker speaks too fast or soft, request can be made to speak a little more slowly or a little more loudly.

Berger (1978) contends that the speaker should speak distinctly, in a conversational tone and with a conversational rate. If the speechreader is having difficulty in understanding, try slowing down the speech a little and experiment with a slight exaggeration of the speech movements.

Horn, Mahshie, Bally and Wilson (1983) suggest that request should be made by the hearing impaired to reduce the rate of speech when the speaker talks too fast. When people reduce their rate of speech, speech reading becomes easier and distracting facial expressions and head movements tend to slow down or even stop.

Erber (1988) suggested that request can be made for reducing the rate of utterance of syllables.

REPHRASING:

The strategy of rephrasing can be an effective alternative to repetition because it asks the talker to reformulate the message. Rephrasing can be requested with sentences like "Please say that again another way" or "Can you say that again using different words ?" (Palmer, 1988).

To use this strategy the hearing impaired tells the speaker "I don't understand what you are saying. Please say it in different way". For example, the clerk in a clothing store tells the hearing impaired "I think you look good in red". The hearing impaired person respond, "I'm not sure I understand. Can you say that another way ?" The clerk then picks up a red shirt and says "I think this red shirt would look good on you". This strategy is a good alternative to repetition. It is especially useful when the speaker is using technical or unfamiliar language as in the situation that follows.

A student clinician was explaining a client's hearing loss and used the term high frequency hearing loss. The hearing impaired client, who did not understand the terminology, used the rephrasing strategy. She said "I'm sorry, I did not understand the last part of the sentence. Could you say it another way ?" The clinician substituted the sentence. "You have trouble hearing high pitches." The problem was solved.

Berger (1972) suggested that synonyms and phrases may constitute more effective repair strategies than simple repetition of the misunderstood message.

Erber and Greer (1973) define rephrasing strategies as an alteration of an utterance through manipulation of its vocabulary or syntax.

1) Variation in word order

Speaker: where are the boys going ?

Listener: Tomorrow

Speaker: The boys are going where ?

2) Word/phrase addition

Speaker: The children were tired ?

Listener: What ?

Speaker: The children were very tired ?

3) Simplification through word/phrase deletion; subject and verb of independent clause retained

Speaker: How do you feel about that ?

Listener: (No response)

Speaker: How do you feel ?

4) Simplification through word/phrase substitution

Speaker: The boys picked up all the toys in the room

Listener: What ?

Speaker: The boys picked up everything.

5) Clause inversion

Speaker: If we are late, we will miss the bus.

Listener: I don't understand

Speaker: We will miss the bus if we are late.

6) Complete syntactic change

Speaker: What was left after she bought the apples ?

Listener: (No response)

Speaker: How much money did she have ?

Gagne and Wyllie (1989) studied the relative effectiveness of rephrasing and repeating repair strategies on the visual identification of mispercieved words. Experimental videotapes were used to assess the effectiveness of the repair strategies. Findings indicated that rephrasing using synonyms and paraphrases may be more effective than the simple repetition of the misunderstood message.

Lunato and Weisenberger (1994) compared the effectiveness of using synonyms as a repair strategy with other repair strategies like repetition, use of phonemic cues etc and found that using synonyms was best next only to repetition.

Rephrasing, as evident from the reported studies are effective means of overcoming communication breakdown only if repetition fails i.e., rephrasing as a repair strategy is best next only to repetition. This may be because the listener has to exert extra effort to rephrase the utterance

whereas in repetition he needs to only repeat the whole utterance or key words of the utterance. Other repair strategies include writing and oral, palm and air spelling. These strategies however should be employed only if repetition and rephrasing fail as a strategy.

WRITING:

Writing is a strategy that makes the most sense in some situations, those requiring exact information. By asking the speaker to write, the hearing impaired will be sure he/she has correct information and also he/she will not have to trust names or numbers to memory. Writing is also appropriate when the other person does not understand the hearing impaired person's speech. Situations in which writing may be the most appropriate strategy are getting directions; bus, train or airplane schedules; address; telephone numbers; names of people; appointment times; and dates. Writing is also appropriate if all other strategies fail because it is a sure way to keep communication going. However, the hearing impaired shouldn't give up on other strategies too quickly.

In order to use the writing strategy effectively, one must be able to write a clear, easily understood message to indicate what is needed. It helps to keep written messages brief concentrating on key words. For example, if the hearing impaired needs the name of a street, he/she may write, "Street name, please".

Scheetz (1993) maintained that hearing impaired people who have little or no speech skills and who rely primarily on speech reading and writing to communicate benefit from tips that are helpful on how to vary their style of writing when the primary purpose is understanding oral communication. Hearing impaired communicators should be encouraged to use short sentences, key words or telegraphic writing rather than long complete sentences, to send information. For example the sentences "please write" requires less time to communicate than "I need you to write for me what you just said". Although both the sentences command the same result, the shorter sentence is more efficient. Similarly telegraphic writing or writing only key words also speeds up writing time as in the example "8.00 Wednesday" rather than "I will see you at 8.00 on Wednesday".

Hearing impaired adolescents and adults often express reluctance to initiate writing to a normal hearing person because they believe normal hearing people have no patience with communicating on paper. While writing does require more time, techniques can be used to make writing more varied. Using natural gestures and eye contact when appropriate and frequently switching writing strategies can lessen the impersonal nature of this communication strategy (Scheetz 1993).

Other important considerations for hearing impaired communicating using writing as a strategy are who they are

talking with and where the interaction is taking place. Both of these factors effect the type of written response made. For example, the nature of writing and strategies used may be different when communicating with the dean of an university as opposed to while conversing with a familiar friend.

Writing as a strategy has limited use for the illiterate hearing impaired adults in India. India has the largest number of illeterates in the world (about 281 million) and thirty percent of worlds adult illiterates (Manorama Year Book, 1995). A high percent of the hearing impaired adults in India are illiterate. Another reason for the limited use of the strategy is that India being a multilingual country, people speak and comprehend many languages. Some of them may comprehend a particular langauge but can't read or write that langauge. So even if writing is use as a communication strategy the hearing impaired can use it only with people who can read what the is writing. These reasons limit the use of this strategy in the Indian context.

ORAL, PALM AND AIR SPELLING:

The use of oral, palm and air spelling can provide a welcome break from writing for a hearing impaired communicator. These strategies according to Palmer (1988) are not recommended for anything other than short words because of the difficulty the receiver has in understanding long words or sentences communicated in this manner.

Even people with little speech skill can become effective users of oral spelling i.e., the oral pronunciation of the letter names to spell words that are difficult to speech read or say. If an individual is unable to articulate letter names adequately, appropriate lip movement can be similarly beneficial to communication.

Palm spelling is printing words with the index finger of one hand on the outstretched palm of the hand. When letters in the palm are accompanied by the oral spelling of the word, understanding increased. In air spelling, the letters are printed in the air or on another surface, such as a table top. The letters used in palm or air spelling should always be capitals. They should be presented slowly and clearly to maximise comprehension (Palmer, 1988). Oral, Palm and air spelling is difficult to be used as a communication strategy in the Indian context. This is because most Indian languages are syllable based. There is a 1 to 1 relation between reading, writing and spoken words. Unlike in English it is not possible to spell out words. Thus the use of this strategy is limited in the Indian context.

As a result of extensive work and experience in the field of communication rehabilitation, Horn, Mashie, Wilson and Bally (1983) have summarised the repair strategies in order of preference.

* Repeat a word, phrase or sentence

* Rephrase a word, phrase or sentence

- * Say key words of the sentence
- * Summarize the message
- * Spell the key word
- * Say each digit individually (for numbers)
- * Ask a specific question when message not clearly understood.
- * Ask a general question when message is misunderstood.
- * Write a brief message focussing on key words
- * Use gestures if all the above fail.

Effective use of the strategies reviewed so far however depends on the attitude and behaviour of the hearing impaired communicator. There are 3 way to react to a communication situations, namely (i) being passive, (ii) being aggressive, (iii) being assertive.

The person who reacts passively withdraws from communication situations, thus avoiding real or perceived conflict even if avoiding these situations hurts. When actually caught in a difficult communication situation, the non assertive person tends to smile, nod the head and pretend to understand. The opposite type of behaviour is aggressiveness. The aggressive person expresses feelings and needs openly but in such a way that the other person's rights are violated. The aggressive person is hostile to the speaker, behaving in such a way that the speaker is hurt or humiliated. The person engaging in passive behaviour often feels frustrated and inadequate. Many opportunities may be

missed, socially and vocationally. Truly a passive or aggressive approach to communication is not the answer.

Therefore in order to use strategies successfully, a hearing impaired individual must be assertive. That means the person must.

- 1) be willing to admit to a hearing problem.
- 2) be willing to explain the problem to other people when appropriate
- 3) be able to suggest ways to improve communication.

Assertive people not only respect their communication partners, but they also meet their own needs. They are honest and open in expressing their feelings and opinions. They admit their problem and ask for assistance. They take the initiative in a communication situation when that is appropriate but in such a way that they rights of others are not violated. Thus the assertive hearing impaired person is ready to use the communication strategies advantageously.

METHODOLOGY

The material for public education pamphlet on communication strategies was developed based on the following:

- a) Information on communication strategies from the literature.
- b) Experience of communication experts with regard to the strategies.
- c) The report of hearing impaired adults with acquired hearing loss.

INFORMATION FROM LITERATURE

Reports on investigations performed by researchers who studied the efficacy of communication strategies were reviewed. These strategies were then arranged in a hierarchial order with the most important and widely used strategies reported first and ending with the least important/ones.

EXPERIENCE OF EXPERTS

The anticipatory and repair strategies reviewed from literature were randomly arranged and presented to five professionals involved in the rehabilitation of hearing impaired adults (Appendix I) were asked to arrange the strategies in order of importance based on their experience

REPORT OF HEARING IMPAIRED ADULTS

Five hearing impaired adults who met the following criteria were interviewed:

They should

- (i) be literate,
- (ii) have acquired hearing loss of duration of atleast five years.
- (iii) have a SN hearing loss ranging from moderate to profound degree.
- iv) be wearing a hearing aid
- v) report of communication problems even with the hearing aid.

They were asked to describe the communication strategies they used in various situation where communication broke down.

Based on studies from literature, experience of communication experts with regard to the communication strategies and report of hearing impaired adults who use communication strategies the public education pamphlet will be developed. The pamphlet will list the strategies in a hierarchial order from the most preferred and widely used strategy to the least preferred strategy.

RESULTS AND DISCUSSION

Adopting communication strategies when there is a breakdown in communication is essential to maintain the flow of conversation. Many strategies have been reported in literature which the hearing impaired individual can adopt in difficult communication situations. However awareness regarding the use and importance of communication strategies is limited as far as the hearing impaired individuals and the general public are concerned. The present study therefore aimed at developing a public education pamphlet on communication strategies based on

- i) Information from the literature
- ii) Experience of five communication experts and
- iii) Report of five literate hearing impaired adults with acquired hearing loss of more than five years.

INFORMATION FROM THE LITERATURE

A review of literature on investigations and reports of different authors indicate that certain strategies tend to be very widely and successfully used. Some strategies on the other hand were recommended for use only if other strategies failed to help the hearing impaired individual overcome a communication breakdown.

EXPERIENCE OF COMMUNICATION EXPERTS

The strategies reviewed were then randomly arranged and presented to five communication experts (Appendix-I). They were asked to rank the strategies based on importance as per their experience. The ranking of all the five experts for each strategy was averaged and arranged in a hierarchy (Appendix - II). The earlier mentioned strategies were ranked higher while the later mentioned ones were ranked lower. The ranking of the strategies given by the experts and the hierarchy of the strategies derived from review of literature were found to be similar.

REPORT OF HEARING IMPAIRED INDIVIDUALS

Reports from five literate hearing impaired adults indicated that their knowledge of communication strategies were limited. The most common strategy used was asking for repetition when the speaker was not understood. But most of the hearing impaired adults preferred to avoid conversation even when there was a dire need to communicate. Some hearing impaired adults reacted aggressively to communication breakdowns blaming the speaker for it. They did not accept that the problem mainly lay with their hearing abilities. Writing was adopted by a few of them very often. through it was time consuming. One hearing impaired adults always turned to his wife for clarification when the message was not understood. Overall, the interview with hearing impaired

adults showed that all of them had communication problems despite the use of a hearing aid and speech reading.

The information obtained from reports of hearing impaired adults on communication strategies were to be incorporated into the pamphlet. However, the reports indicated that the hearing impaired adults were not making use of the communication strategies effectively. Hence it was decided not to make use of the information offered by the hearing impaired adults.

The public education pamphlet was developed based on information from literature and experience of communication experts only. This pamphlet comprises of instructions to the hearing impaired on how to use the strategies effectively and the anticipatory and repair strategies arranged in a hierarchial order (Appendix - III).

SUMMARY AND CONCLUSION

An attempt at developing a public education pamphlet on communication strategies for adults was made. The matter in the pamphlet is based on

- a) Information available in the literature
- b) Experience of five communication experts working in this area and
- c) Experience of five literate hearing impaired adults with acquired hearing loss of more than five years.

The hierarchy of usage of communication strategies derived from literature and from the experts were similar. However the hearing impaired adults were not making use of the communication strategies effectively. Therefore, the public education pamphlet was developed based on information from literature and experience of communication experts only.

The pamphlet describes anticipatory and repair strategies which the hearing impaired adult can use in difficult to communication situation or when there is communication breakdown. Emphasis is also made for the hearing impaired adult to be assertive to enable him to use the strategies effectively. These strategies can also be used by normal hearing individuals in an adverse listening situation or when the speaker for some reason is difficult to understand.

It is hoped that this pamphlet developed on communication strategies for hearing impaired adults will create better awareness among the hearing impaired adults and educate them regarding their use.

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APPENDIX - I

**CHECKLIST OF COMMUNICATION STRATEGIES PRESENTED TO
COMMUNICATION EXPERTS**

Please arrange the below said strategies in order of importance as per your experience. Mention other strategies, if any and their place in the order of usage.

Anticipating possible vocabulary and being prepared for it
 Request for summarizing the message
 Moving closer to the speaker
 Request for repetition of spoken message
 Request for gesturing the message mispercieved
 Request to speak slower
 Request for spelling the mispercieved word
 Asking a specific question of the topic of conversation
 Asking a general question on the topic of conversation
 Request for a written message
 Request for rephrasing the message
 Avoiding conversation in a noisy environment
 Communicating in a well illuminated environment with
 adequate light on the speaker's face
 Other (specify if any)

Please rank then by writing numbers in the circles provided.

Thank you.

APPENDIX - II

RANKING OF THE COMMUNICATION STRATEGIES BY COMMUNICATION EXPERTS

[Higher ranked strategies appear earlier and lower ranked strategies appear later in the order]

1. Avoiding conversation in a noisy environment
2. Request for repetition of spoken message
3. Request to speak slower
4. Communicating in a well illuminated environment with adequate light on speaker's face.
5. Request for rephrasing the message
6. Anticipating possible vocabulary and being prepared for it
7. Asking a general question on the topic of conversation
8. Asking a specific question on the topic of conversation
9. Moving closer to the speaker
10. Request for gesturing the message misperceived
11. Request for summarizing the message
12. Request for a written message
13. Request for spelling the mispercieved word.

APPENDIX - III**COMMUNICATION STRATEGIES FOR HEARING IMPAIRED ADULTS**

As far as human beings are concerned, speech is the most common mode of communication. Expression and understanding of speech go hand in hand and a defect in any one of them affects the process of communication. The most common cause of a breakdown in this process is a hearing loss. The breakdown can be overcome to an extent by hearing aids, assistive listening devices and/or the use of speech reading. Speech reading involves understanding a speaker by observing the movements of his/her lips, tongue and other oral structures. At times however the use of a device together with speech reading does not provide enough information for a person to comfortably follow a conversation. In such circumstances the use of certain communication strategies are recommended.

Strategies can be of two types, namely anticipatory and repair. Anticipatory strategies involve predicting possible problems in a situation and planning ways to deal with them. Repair strategies on the other hand involve ways by which a listener can seek help after the breakdown in communication takes place. Given below are a set of communication strategies which have been classified as anticipatory and repair strategies.

However for effective use of the strategies, the following points should be kept in mind by the hearing-impaired individual.

- a) When there is a breakdown in communication during a conversation, it is your duty to let the speaker know what strategies are to be used. The choice of the strategy may vary from situation to situation.
- b) It is good to memorize the strategies so that you can react to a communication breakdown quickly.
- c) It is also advisable to use the earlier mentioned strategies under each group more frequently. The later mentioned ones are to be used only if the earlier mentioned ones fail to help. Anticipatory strategies are to be tried initially and if they prove unsuccessful, adopt repair strategies.

ANTICIPATORY STRATEGIES.

Reveal Your Problem:

- 1) It is your responsibility to inform a speaker about your hearing problem and/or your need to watch their face to understand them better. This should be done in a polite manner.

Select Appropriate Seating:

2) Arrival at a meeting, lecture or class early will enable you to get a good seat near the speaker. This will help you to speak read the listener better. While attending a play or a movie you should request for appropriate seating.

Adequate Lightng:

3) Proper lighting is very important for speech reading. The light should fall on the face of the speaker. If the light source is behind the speaker it will cast a shadow on his/her face, interfering with speech reading.

Avoid Noisy Situations:

4) Hearing aids pick up all sounds within their range. A hearing aid will pick up the noise as well as speech, making the speech sound muddled. Therefore, source of noise should be anticipated in any situation and planning should be done to avoid them. In a restaurant, for example, it is best to sit at a corner table to avoid hearing the conversations of other patrons. If you are communicating with somebody in a noisy situation, a quieter place to communicate should be suggested.

Anticipate Vocabulary/Conversation:

5) You can practice the possible vocabulary that might arise in a situation, anticipate the questions that might be

asked and prepare the answers for them in advance. This will help in improving a communication situation.

Remove Visual Distractors:

- 6) If the speaker is known to you and is a friend or a relative, he can be asked to trim his moustache or beard so that his lips become more visible. Telling this in a polite way and making the person understand the importance of such an act will often make the person oblige.

Request For Speaking Naturally:

- 7) You should tell a person tactfully, who shouts or uses exaggerated mouth movements, not to do so in advance. This will help in better understanding of speech. People who exaggerate mouth movements think they are helping you understand better but this act actually distorts lip movements and makes speech reading difficult.

Request For Cueing Topic/Turn Taking:

- 8) In a group, more than one speaker is involved and the conversation may jump quickly from one person to another. Topics also tend to change rapidly. If you enter the group in the middle of a discussion, the topic and probably the speaker is not known. In such situation, you can
 - a) Ask one member of the group to cue when the topic has changed.

- b) Ask the members of the group to take turns in talking and to signal some way before starting to speak or
- c) Obtain notes or topic headlines in advance if the discussion is a formal one.

Be Informed About Happenings Around You:

- 9) Since current events are often the topic of conversation. You should be aware of what is happening internationally, nationally and locally. You should keep up with sports news, popular TV shows, happenings in your neighbourhood and your friends' interests. Own hobbies and interests should be developed and it should be shared with your friends. By doing so, you will be prepared to understand most conversations you encounter.

REPAIR STRATEGIES

It is not always possible to anticipate communication problems. Sometimes the situations arise all of a sudden when you find understanding the conversation situation itself is new. These are the times to use repair strategies. These are variety of repair strategies that can be helpful when a message needs clarification.

Repetition:

1. Repetition is one strategy that perhaps can be used most often and very effectively. The language used while asking for repetition should be polite and should always

be preceded by "please". You should also avoid saying "what" ? or "Huh" when a repetition is needed.

a) Repeat Part Of The Message:

If a part of the sentence is not understood repetition of only that part can be requested for. If a word or phrase is not understood you can say. "Please say that work (or phrase) again" or just "please repeat".

b) Repeat Key Word:

You can ask the speaker to repeat the main words (key words) of the sentence when the sentence is not understood. The whole sentence can be figured out by knowing one or two of the key words.

c) Repeat Full Message:

In adverse conditions, inspite of repeating part of the sentence or key words of the sentence, the speaker may still not be understood. In such situations, it is wise to ask for repetition of the whole sentence.

Speak Slower:

- 2) If the speaker speaks too fast, a request can be made to slow down, when people reduce their rate of speech, speech reading becomes easier and distracting facial expressions and head movements tend to slow down or even stop.

Speak Louder:

- 3) If the speaker speaks very softly, you can request him/her to raise his/her voice.

Rephrase:

- 4) Rephrasing is another strategy which can be used when you do not understand a message. You can then ask the speaker to rephrase, i.e., say the sentence in a different way. The speaker can be requested to simplify the word order, use more common words or add/delete a word. This is especially useful when the speaker is using technical terms which you are not familiar with.

Seek Clarification:

- 5) When you think you haven't understood correctly, you can either clarify or confirm what the other person has said. For example, you board a bus and ask the driver, "Does this bus go to the market?" The driver answers, "No, it goes to the station". Since you are not sure you understood the last word, you can say, "I think you said the bus goes to the station." If there was a misunderstanding, the driver will be able to correct and if it was understood correctly, the driver will confirm the understanding.

Summarize:

- 6) You can also summarize the message which was received in order to clarify the correctness of the message.

Spell:

- 7) If key words have not been understood after they have been repeated, you can ask the speaker to spell them. Names of people, numbers and places are often misunderstood and such a strategy has to be undertaken. For example, spelling the numbers 14 and 40 avoids the confusion as both of them look similar at the level of the lips.

Remove Visual Distractions:

- 8) If the speaker habitually communicates with something in his mouth like a pipe, cigarette, beedi, chewing gum or beetel leaves (paan) you can ask him/her to remove the object before beginning to talk. Speaking with objects in the mouth interferes with speech reading and results in poor understanding of speech.

Pointing To Subject Matter:

- 9) The speaker can be asked to point to a related object or refer to a drawing photo or map about which he/she is talking, when you have not understood the context of the conversation.

Write:

10) Writing is the strategy that makes the most sense in some situations such as those requiring exact information. Writing however is appropriate only if other strategies fail as this strategy is time consuming and reduces the rate of communication. Communication situations in which writing may be the most appropriate strategy are getting directions; bus train or airplane schedules; addresses; telephone numbers; names of people; appointment times and dates. To use a writing strategy effectively you can carry writing material and keep the written messages brief, concentrating on key words.

Sign Language/Gestures/Finger Spelling:

11) If you use sign language or finger spelling, it is perfectly acceptable to ask a speaker if he or she knows sign language and explain that signing the message will enable you to understand better. The speaker can also be asked to gesture the message when you have misunderstood him/her.

In spite of the many strategies mentioned above, you may feel comfortable using some and not so with others. You may also have developed additional ways of coping. Any strategy that results in adequate and faster communication should be chosen. Regardless of the strategies chosen the following important things should be remembered.

- a) Be honest about the hearing loss,
- b) Be assertive about asking for help,
- c) Always think about ways to keep the communication following.