Augmentative and Alternative Communication

Addressing basic communication needs in hospital

Manual for Nursing Personnel

Mascha Thiart & Holly Saxby

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Section One: Course Overview

Course Overview

Communication is one of the most valuable tools patients have to navigate their medical care, but most health care providers are not trained in communicating with patients who are 'communication vulnerable' and learn how to do so largely by trial and error. The aim of this training is to train you, as a health care provider, to utilize communication strategies and tools to more effectively communicate with patients.[1] [2] [3] We want to empower you to make communication easier - for the patient and for you.

Learning Objectives

By the end of today, you will better be able to:

- Understand the need for Augmentative and Alternative Communication in hospitals
- Understand the communication process
- Understand basic Augmentative and Alternative Communication terminology & concepts
- Identify patients' communication vulnerabilities
- Assist patients with communication vulnerabilities by using Augmentative and Alternative tools and strategies

Personal Objectives

Section Two: Communication in Hospitals

Just for a moment, imagine you are intubated or trached and so are unable to speak
You have IV lines in your arms and so you may not be able to use your hands
You can't rely on what worked before
Speaking is impossible
Writing is impossible
Signing is impossible
You are a scared and anxious
You want to get your nurse's attention but cannot
You want to ask someone what happened, but you cannot.
You are in pain and want to indicate where the pain is and how much pain you have, but you cannot
You are thirsty and want to ask for water, but you cannot.[4]

For the normal adult who has spoken without difficulty since early childhood the prospect of being unable to communicate is incomprehensible, but the possibility of it happening to us or our loved ones are not impossible.

Background Information

Communication Vulnerabilities

As Nursing Personnel you constantly need to communicate with your patients, and come across patients who are "communication vulnerable".[5]

Patients, who are vulnerable to communication breakdowns, are defined as individuals with

- Pre-existing hearing, speech or cognitive disabilities who may (may not) have access to communication tools/supports
- Recent communication difficulties occurring as a result of their disease/illness/accident/event
- Communication difficulties that occur as a result of medical interventions (e.g., intubation, sedation)
- Language differences (those who cannot speak the language of the health practitioner)

- Limited health literacy (the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions)
- Limited ability to read/write
- Cultural differences

Interaction between Nursing Personnel and communication vulnerable patients often limits effective communication. Examples include misunderstandings, confidentiality issues when a friend or family members serves as an interpreter, and limited patient ability to participate in his/her own care and decision-making.[1 2 3]

Communication vulnerable patients are more likely to[1 2 3]

- be hospitalized,
- have a prolonged hospital stay,
- experience medical/physical harm, e.g., drug treatment errors,
- leave hospital against medical advice,
- be intubated if asthmatic,
- have increased costs,
- receive delayed care and
- receive a misdiagnosis or a diagnosis of psychopathology.

Communication vulnerable patients are less likely to[2]

- adhere to recommended medication regime,
- report abuse,
- access and use medical care,
- return for follow-up appointments after Emergency Room visits, and
- be satisfied with care

Patients regularly report instances during their hospitalization in which communication barriers resulted in feelings of anxiety, fear and frustration, unrecognized pain and overall loss of control.[2] According to Fowler patients experience a sense of "powerlessness."[4]

Strategies typically used are inadequate

In the general hospital setting, there is often a friend or family member who usefully serves as a communication conduit between the professional staff and the encumbered patient. However, when that person goes home for the evening or is otherwise not present, the patient can be left without the tools to communicate and this is highly distressing for many patients. For elderly patients these circumstances may lead to disorientation and to the administration of medication that may not otherwise be needed.[6] Many strategies typically

used to communicate with patients with complex communication needs, including lip reading, gestures, hand-drawn pictures, and asking yes and no questions, are inadequate to meet patients' diverse needs.[3] By simply asking yes/no questions, the patient's communication is restricted to predictable messages only or messages that meet the expectation of the patient's need as determined by the clinician.[5] Inconsistency in the choice of communication and a wide variety of variability in nurses' and family members' abilities to lip read or interpret gestures can create confusion and frustration for critically ill patients.[7]

Effective communication between patients and providers is increasingly being viewed as an essential component of quality healthcare because it directly affects the quality of patient care, safety, medical outcomes and patient satisfaction.[8]

The solution – Augmentative and Alternative Communication

'Thirty years ago a stroke left me in a coma. When I awoke I found myself completely paralyzed and unable to speak. For six years I was considered brain-dead. I was not. As time went by I forgot the sound of my own voice. But now I have found it again.' [9]

Augmentative and Alternative Communication (AAC) is the term used to describe methods of communication which can be used to supplement or replace natural communication when the latter is impaired.

AAC techniques, strategies and devices can significantly alleviate communication problems and barriers. AAC approaches can help communication vulnerable patients participate actively in their care and interact with family members and Nursing Personnel .[2 3 6]

Pre-Training Questionnaire

Section Three: The Communication Process

Effective Communication

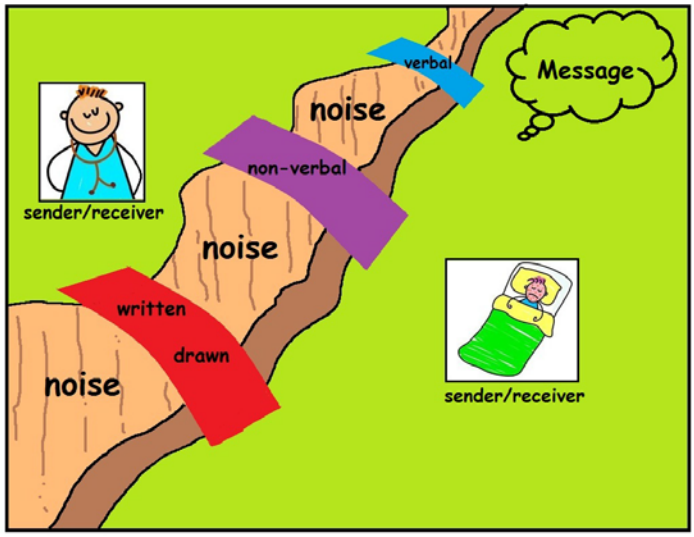
Effective communication is understood as a two-way process wherein messages are negotiated using a variety of common symbols, whether these be spoken words, manual signs, text, gestures, or graphics, until the information is correctly understood by both parties.[8] To be effective, both patients with communication vulnerabilities and healthcare professionals need to be able to participate fully using whatever means that can enable them to establish meaning.[10] Information must be complete, accurate, timely, unambiguous, and understood by the patient.[5] Access to communication should be functional, user-friendly, accessible and easy to acquire.[6]

Elements of communication

For the purpose of this training, we are going to define communication as a process consisting of five elements.[11]

1. Sender (person sending the message)
2. Message
3. Channel (method of communication)
4. Receiver (person receiving the message)
5. Noise (any barrier that interferes with the transmission of the message)
6. Feedback

Fig. 1: The Elements of Communication



Message[17]

The types of messages that people are trying to get across fall into one of a few categories, i.e.:

- Making contact with someone (human contact and social interaction is important to everyone, it is part of being in a social world)
- Asking for information i.e. asking questions
- Giving information
- Expressing feelings,
- Expressing 'likes', 'dislikes', making a choice
- Expressing humour

Noise[11]

Several barriers can interfere with the transmission of a message and are categorized as follows:

1. **Environmental noise**
    - Time
    - Space (distance between sender and receiver)
    - Place/location (lightning and ventilation)
    - Climate (room temperature)
    - Background noise
    - Visual distractions e.g. people walking past

2. **Physical noise**
   The sender's or receiver's
    - personal discomfort (hunger, pain, exhaustion)
    - poor eye sight
    - hearing difficulties
    - unintelligible/no speech
    - temporary inability to produce speech because of medical procedures (e.g., intubation
    - cognitive difficulties due to medications taken
    - cognitive difficulties due to stroke, dementia, autism, severe developmental disabilities etc.
    - emotional status e.g. fear, stressed

3. **Psychological noise**
   The sender's or receiver's
    - preconceived ideas,
    - previous experience and knowledge,

- attitudes and beliefs

Psychological noise causes us to jump to conclusions and make assumptions about the other person's beliefs and intentions.

4. **Cultural noise**
    - People from different cultural backgrounds do not necessarily share the same knowledge or expectations about healthcare services.
    - There is a range of noticeable cultural differences in the ways that people:
        - greet each other
        - use gestures
        - use personal space
    - Some cultures value direct verbal interaction and 'straight speaking' whereas others value 'saving face' and ensuring that neither the sender nor receiver of a message is embarrassed. Consequently they may appear to understand a message when they don't, or to agree with you when they have no intention of complying with your wishes.

5. **Semantic noise**

    Words have exact and connotative (e.g. ambiguity, idioms, metaphors) meanings Connotative meanings are understood based only on an individual's experience. If the sender and the receiver do not share the same connotative meaning for a word, miscommunication occurs, e.g. a "couple" is either a few or exactly two.

6. **Language noise**
    - Jargon/specialist terminology: many professions rely heavily on jargon, making their 'language' impenetrable to outsiders.
    - The assumption that words have the same meaning for different people. Our understanding of a word is influenced by our background knowledge, culture and experience.

Feedback[17]

This refers to monitoring the receiver's reaction to what is being said and adjusting communication accordingly e.g. by watching facial expression to try and determine whether or not the individual has understood what has been said, what they feel about it, and to be aware of when they want to say something etc.

It is not always clear whether or not a person has understood what we are saying. Sometimes there are clear signs that a person has not understood e.g. the person may

- Become withdrawn
- Stop making eye contact
- Become agitated

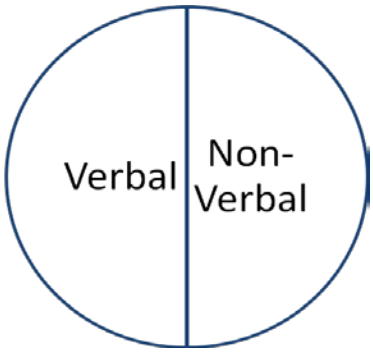
- Not respond in the way we would expect them to

At other times it may be less clear that a person has not understood what has been said e.g. A person may nod at appropriate points because they feel that is what is expected of them, but may not actually understand fully what has been said – these expressions do not imply understanding.

Channels

Our natural communication is a combination of verbal and non-verbal communication methods.

Fig. 2: Natural Communication Methods



All communication uses ***symbols*** to represent messages. When we communicate verbally, we use sounds. When we communicate non-verbally, we use gestures.

Section Four: Augmentative & Alternative Communication

Basic terminology and concepts

As a result of the ***noise*** sometimes present in communication between health care providers and patients, natural communication might not be the best ***channel*** to convey the message. In such cases, the use of Augmentative and Alternative Communication channels could be useful.

Unaided communication systems

Formalized gestural codes/signing systems exist that rely on the user's body to convey messages. These signing systems are mainly used by people with hearing disabilities. When natural verbal and non-verbal communication is used, we only use our own bodies. In the case of formalized non-verbal communication we still only rely on our own bodies. All other forms of AAC, however, are supplemented by ***aids***. Therefore non-verbal AAC is called ***unaided***.

Fig. 3: Non-verbal communication

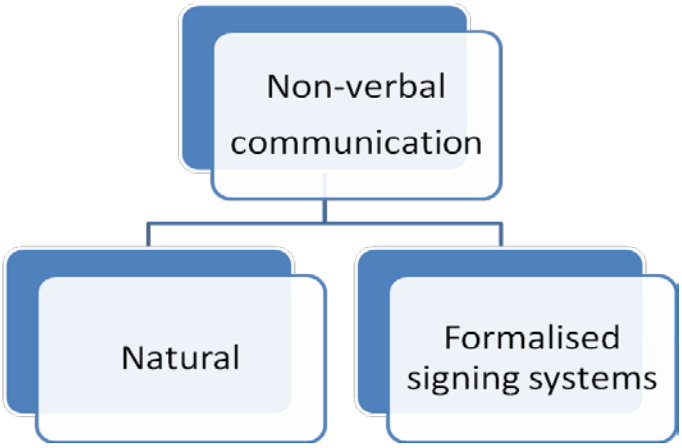
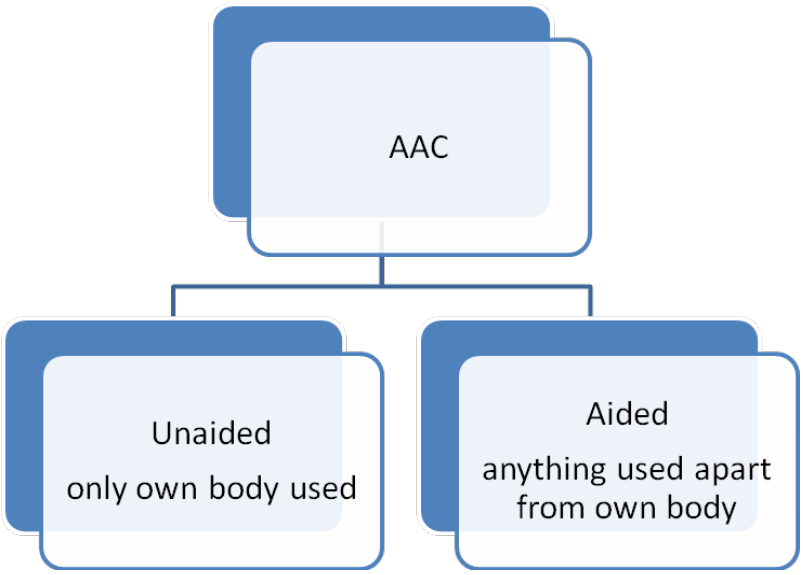


Fig. 4: Two types of AAC



Aided communication systems

All aided communication systems use **symbols,** a physical object / device to convey messages **(aid)** as well as techniques to select the aid **(access)**.

Fig. 5: Aided Communication

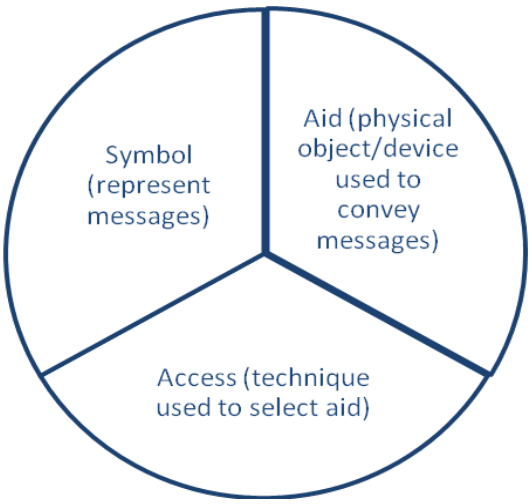
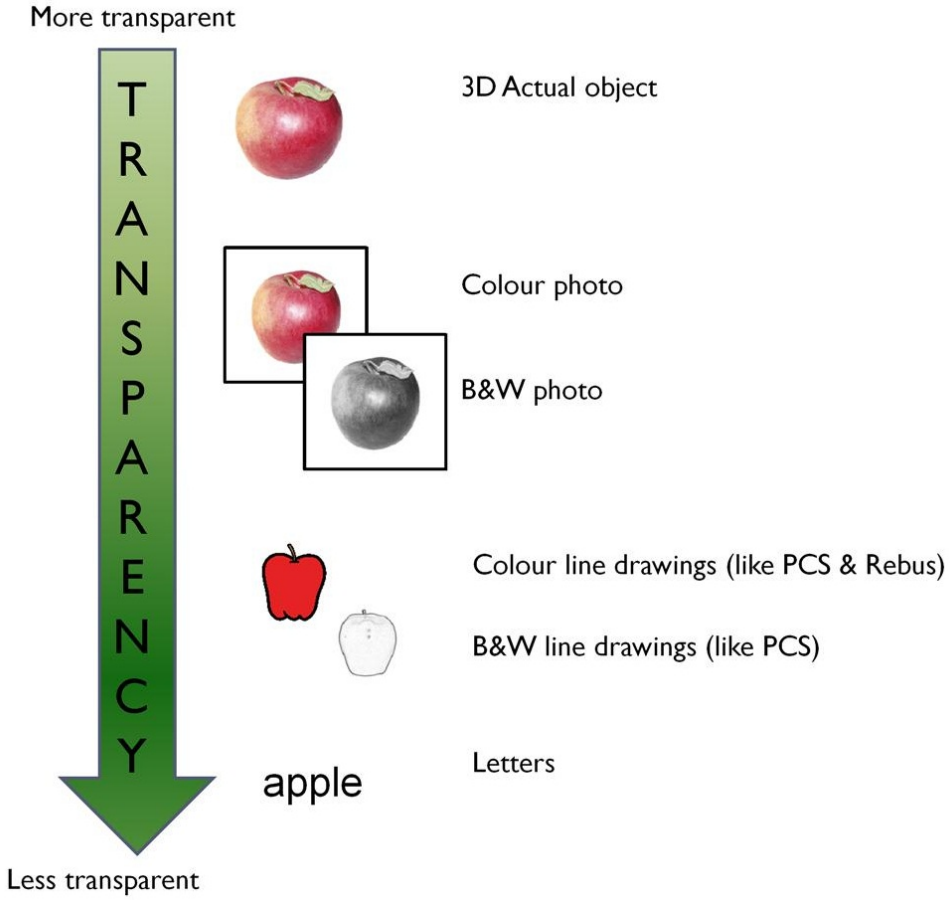
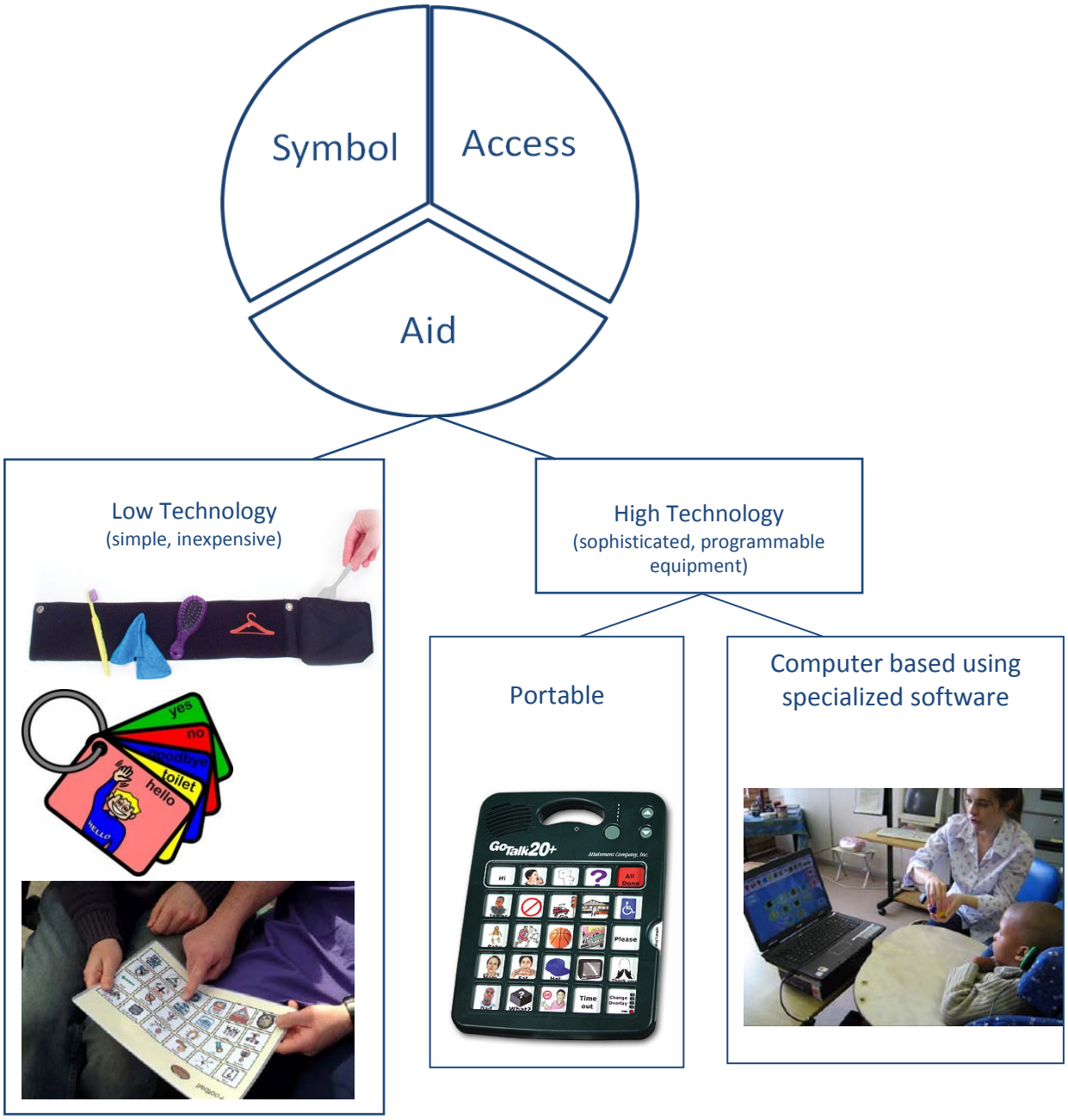


Fig. 6: Aided Symbols[13]



Symbols can be transparent (showing much resemblance to the message it is representing) or less transparent (showing little to no resemblance to the message it is representing). The more transparent/guessable a symbol, the easier it will be to learn. The less transparent symbols, however, are more flexible and generative, allowing more adult like representation.[13]

Fig. 7: Aids



Access

- Direct Selection

The individual directly indicates the desired symbol, usually by pointing with a body part, such as a finger, fist, elbow, eyes, foot etc.

- Indirect Selection / Scanning

When an individual does not have adequate motor control, scanning can be used. Another individual or an electronic device scans through the symbol choices one at a time. The individual then signals when the desired symbol is scanned. A signal can be anything: a head nod, eye blink, clicking a special switch with any body part etc.

Fig. 8: Access

Section Five: Augmentative and Alternative Tools at your hospital

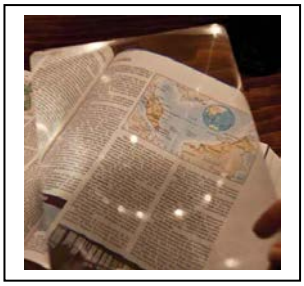
Description of tools

Your hospital made basic, low cost communication aids available.

Pocket Talker and accessories[14]
The pocket talker is useful for patients with hearing loss that benefit from amplified sound. It can be used when patients left their hearing aids at home and/or are having trouble hearing in noisy environments.

It is still verbal communication, just amplified sound symbols to be heard by the receiver.

Magnifier[3]
The magnifier enlarges text to help patients to read written material when their glasses are unavailable (physical noise). It could also be helpful if the patient had a new diagnosis affecting his or her visual acuity.



Clip board[15]
Holds paper, communication displays, instructions etc.

Dry Erase board and marker[15]
For writing and drawing messages.

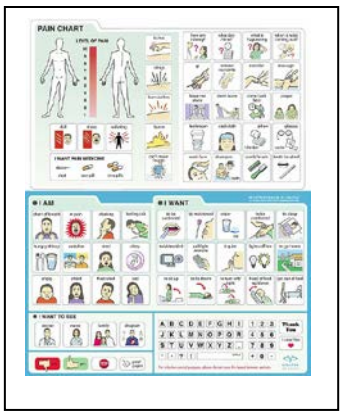
AAC classification:

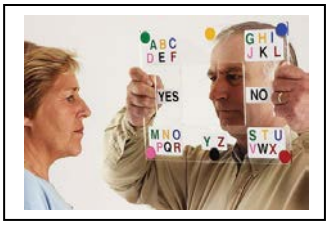
- Aided communication
  - Aid: dry erase board
  - Symbol: letters / pictures
  - Access: Marker

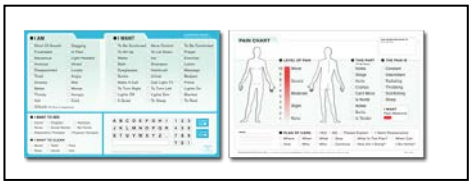
Communication Boards[3]

AAC classification:

- Aided communication
  - Aid: board
  - Symbol: phrases / words / letters / pictures
  - Access: Direct e.g. pointing or Indirect (partner-assisted scanning)







Adapted Call Switch[3 9]

When a patient does not have adequate motor control to use the regular nursing bell/switch, the patient needs an adapted switch enabling him or her to select the switch with a functional body part.

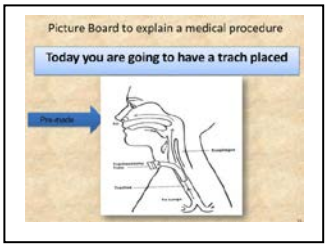
AAC classification:

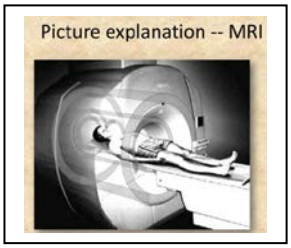
- Alternative Access

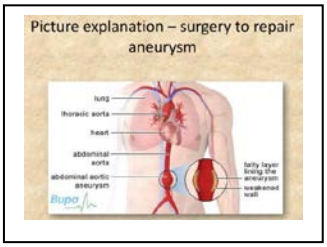
Explanation boards[3]

Picture boards to help explain medical diagnosis and procedures can

- be useful for patients with cognitive difficulties,
- assist when specialist terminology may be a barrier to effective communication
- assist when the health care provider cannot speak the language of the patient







Section Six: Communication Strategies

Writing Strategies[3]

Writing can be a successful way to communicate when speaking is not possible. Here are ways to make it easier.

- Help the patient **sit upright**
- Position a **pillow** or towel under the patient's **writing arm/elbow** for support.
- Place a pillow on patient's lap to prop up a **clip board** or **dry erase board**.
- A patient may find it easier to use their **strongest hand** for writing, even if it is not their dominant hand.
- Use **white paper** rather than lined paper
- Use a **felt tip pen** or **thin marker** instead of a ball point pen or pencil, as it may glide easier.
- Encourage the patient to **print** rather than use cursive.
- Encourage the patient to **print LARGE** and **space out** the letters and words.

When the patient uses a communication board with direct selection

- Make sure the patient is positioned optimally to see the symbols.[16]
- Say out loud each word that the patient point to so that he knows you have the correct word.[21]
- Do not interrupt when the patient is in the middle of conveying a message.[21]
- Write down the words that the patient is communicating to make it easier to remember long messages.[21]
- If you are not sure when the patient is finished, ask her, "Are you finished?"[21]
- When the patient has finished communicating, say the words out loud in the order he gave them.[21]
- Suggest what she might mean by using all of the words in a complete sentence.[21]

Partner-assisted scanning / auditory scanning

- Make sure the patient is positioned optimally to see the items.
- Establish the signal to be used by the patient:
    - One movement to accept i.e. a signal to indicate "YES"

    - Patient does nothing until the required option is indicated (similar to automatic scanning using a switch).
    - This option requires you to provide an appropriate pause time between each scan.
    - The patient needs to be able to reliably produce the "YES" movement within the identified pause time.[16]
  - Two movements to reject & accept i.e. differentiated "YES" / "NO" signals
    - Less familiar partners often feel more confident of an individual's responses when he or she does a specific movement to indicate "NO, not this one".
    - This option requires less skill from you by eliminating the timing element, but increased activity may cause fatigue for some patients.
    - This option allows the patient to control the speed of the communication according to his ability to process and understand the choices.[16]
- Begin in the left corner, slowly scanning (pointing or speaking) through each symbol, until the patient signals that you have reached the desired item.
- Row-column scanning will speed up the process and can be used if patient can cope with it. You then start by first pointing to groups of items, such as rows of letters, and once a row has been selected, proceeding to point to all letters in that row until a choice is made.
- Avoid asking a lot of questions and adding a lot of prompts (i.e., is it this…?, do you want…?, did you mean…?, hit your switch to tell me…). Simply offer the choices to the patient. Decreasing the amount of extra talk/input will give the patient a chance to focus on the choices, consider them, and to focus on organizing his or her body to make a response.

Scenario 1:
"Sarah, are you still doing o.k.? Tell me if there is anything you need. Please indicate yes to tell me. Do you maybe need some water? Or do you have pain? I'm not sure what you want. You need to help me."

Scenario 2:
"Sarah, I want to hear if you are still doing o.k. Do you need," (while pointing to the symbol):

"lip moistening"	(pause)
"water"	(pause)
"pain medication"	(pause)

Strategies to support attention and understanding

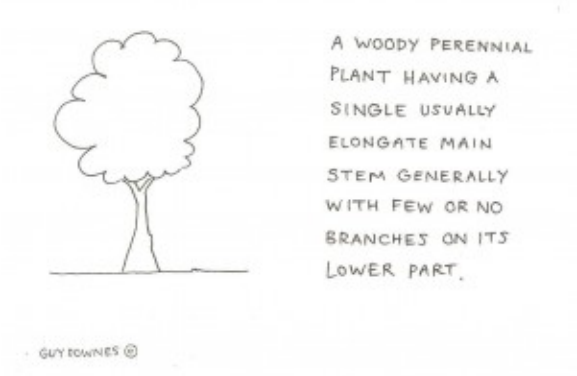
Getting and maintaining another person's attention is important for effective communication. Different people have different levels of attention and our attention to anything is affected by what is going on around us and how we are feeling. Some people are able to attend to conversations for long periods of time; others have a very short attention span and can only attend for short durations. Being worried and anxious will reduce levels of attention. Many people become anxious when in a hospital setting and so will find it hard to keep their attention on what is being said.[17]

Use these strategies to support a patient's ability to understand:

- Keep **sentences short**. If there are too many important words or key words in a sentence, that may be too much information for the person to process. Try to limit the number of key words in a sentence to one or two per sentence. Allow time for the individual to take this in before giving the next bit of information.[17]
- Speak in **plain language** instead of using technical terminology or medical jargon.[10] [20]
- Use **positive phrases.** Negatives i.e. words such as "no", "not", "cannot", "won't" are more difficult to understand e.g. "you need to stay here" rather than "you cannot go home."[17]
- **Time is a difficult concept** for many people. This does not only mean difficulty in telling the time on a clock but it also refers to difficulty in understanding words connected with time such as 'tomorrow' 'next week' etc. Symbols and picture timetables are widely used to help indicate to an individual when something is going to happen – seeing time presented visually in this way helps individuals to understand the passage of time. Many people use the idea of 'number of sleeps' to indicate how many days away something is happening e.g. 'after two nights, two sleeps you'll be going home'.[17]
- Use precise language incorporating simpler words. When possible, **use words that relate to things you both can see (concrete).**[18]
  Idioms (i.e. phrases that have a metaphorical meaning and are not meant to be taken literally e.g. 'butterflies in your stomach' etc.) could be difficult to understand. Inferences i.e. inferring meaning rather than saying exactly what you mean, (I'm thirsty = I'd like a drink please). We often use inferences in communication, particularly when giving painful or difficult information, in order to try and reduce the impact of that painful information for the person who is hearing it. However a person with cognitive difficulties may not pick up the inferred information and may therefore not fully grasp the intended meaning of what was said. Avoid using too much inference – say what you mean even if this seems a blunter way of putting things than you would normally use.[17]
- **Give exact instructions.** For example, "Be back from lunch at 12:30," not "Be back in 30 minutes."[18]
- Give people **time to reply.** It may take longer for some people to process information, understand what has been said, and express a response.[17] [18]
- Slow the pace of the interaction by pausing between your sentences.[20]

- Be patient. **Take the time** necessary to assure clear understanding. Be prepared to give the person the same information more than once in different ways.[18]
- **Phrase questions to elicit accurate information**. Use open not closed questions. Check someone's understanding by asking questions that require something other than a 'Yes/No' answer and ask for feedback. Verify responses by repeating each question in a different way.[17 18]

Fig. 8: A picture does paint a thousand words



Photos, pictures and text can help with communication because they provide a permanent record which helps people remember things. People can keep referring back to information presented visually, they don't need to try and remember it all. Visual materials can also help to sustain attention when a patient has difficulty maintaining attention.[17]

Demonstrate what you are talking about by:

- Using gestures e.g. point with your thumb to the upper arm to indicate 'injection'.
- Showing objects or pointing at people
- Writing down key words as you speak
- Using a picture[10 17 19 20]

Feedback

To ensure a patient has understood what is being said, it may be appropriate to check out their understanding e.g. by asking them to recall what has been talked about, or asking open-ended questions. An open-ended question is one which requires an answer other than 'yes' or 'no'. Refrain from simply asking the patient "Do you understand?" Regardless of their ability to understand the information, many people who do not understand may still answer "Yes."[10]

If you are aware that the other person has not fully understood what has been said, it may be useful to employ one of the following **Repair Strategies**[17]**,** i.e. a strategy to repair communication breakdown:

Repeat the key words or ideas

Long sentences can be difficult to understand. Aiding understanding can be achieved by repeating key words of the sentence to indicate what the main idea is: e.g. "You are going to have chemotherapy treatment, this will help to reduce the size of the tumour, which will help to make you feel better"
"You will have treatment to help make you feel better"

Rephrasing
Changing the way the sentence is said sometimes help i.e. rephrasing e.g. "You can wait here for a while before going for lunch, then come back later"
"Can you come back here after your lunch" or "Have lunch and come back"

Using gesture/signs
Use gestures or signing key words, to back up your speech, e.g. point to things, or mime an action while saying the word.

Write / draw
When possible, write a key word for what you are saying, draw a picture to help get a message across or use the pictures on a communication board.

Change the word
Describe things by function e.g. CUP - to drink from; BED – to lie on
Describe attributes/features e.g. AMBULANCE – goes fast, has flashing lights, takes sick people to hospital
Describe by category e.g. CHEMOTHERAPY – it is a treatment

Strategies to support sensory disabilities

When greeting a person with a severe loss of vision, always identify yourself and others who may be with you. Speak in a normal tone of voice, indicate when you move from one place to another, and let it be known when the conversation is at an end.

It helps, when talking to anyone with a hearing difficulty to:

- Reduce background noise
- To get the attention of a person who has a hearing disability, tap the person on the shoulder or wave your hand.
- Make sure the person is looking at you before you start talking.
- Try to establish if the person can read your lips. Not all persons with hearing impairments can lip read. Those who can, rely on facial expressions and other body language to aid understanding.
- Show consideration by placing yourself facing the light source and keeping your hands away from your mouth when speaking.
- Speak clearly and at a moderate pace. Do not shout.
- Use gestures and pictures to back up speech. [20]

Strategies to support expression

If the patient has distorted speech and you find it difficult to understand, you might find these techniques helpful:

- Give whole, unhurried attention when you're talking to a person who has difficulty speaking. Allow extra time for communication.[18 20]
- Keep your manner encouraging rather than correcting. Be patient—don't speak for the person.[18]
- If necessary, ask questions that require short answers or a nod or shake of the head.[18]
- Never pretend to understand if you are having difficulty doing so. Repeat what you understand. The person's reaction will assist you and guide you to understanding.[18 20]
- Focusing on speech alone may inhibit communication, which may reinforce a feeling of failure or frustration because of difficulties experienced. Use every available means to help the patient express him/herself.[17 19]

Section Seven: Identifying patients with communication vulnerabilities

Screening protocol

A screening protocol, permitting rapid decision making and minimal efforts by the acutely ill patient, is necessary to identify patients with communication vulnerabilities at admission. Since communication needs may change after a surgery, or as a result of medical events or treatments, it is also important to update this information throughout hospitalization. The communication needs identified and the recommendations made, should be clearly documented in the patient's file and included in any hand-off reports. [3 5 10]

To be completed by a family member / care giver of a patient:

Barrier to communication	Performance	Recommendation
Can pt hear?	Partial	1
	No	2
Can pt see?	Partial	3
	No	4
Another language	Yes	5
Can pt understand verbal language?	No	6
	Partial	7
Can pt talk?	Very soft	8
	Distorted	9
	No	10
Can pt indicate yes and no?	Yes	11
	No	12
Can pt read?	Yes	13
	No	14
Can pt write?	Yes	15
	No, but can point	16
	No, but can use eye gaze	17
Can pt gesture?	Yes	18
Can pt access call button?	No	19

Communication Care Plan

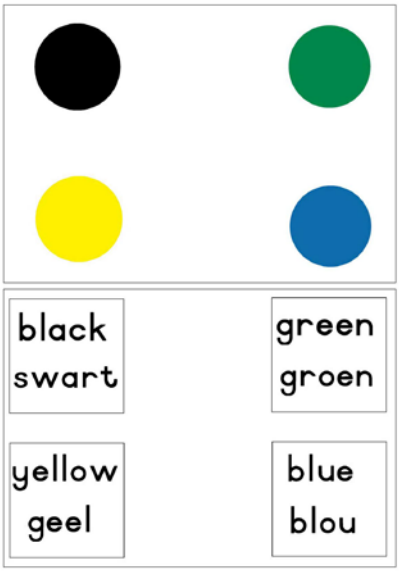
1:	Hearing aid / Pocket talker
2 + 13:	Dry erase board / Written communication board
2 + 14:	Picture communication board
3:	Glasses / Magnifier for written communication
4:	Pt is blind.
5:	Translation cards / picture communication board in ..... (Specify language)
6:	Photo communication board, explanation boards
7:	Verbal language aided by photo/picture communication board and explanation boards
14:	Read food menu to pt
14 + 6:	Food menu in photos
14 + 7:	Food menu in photos
8:	Pocket talker
9:	Verbal language aided by photo/picture communication board
10 + 13 + 15:	Pen & paper / dry erase board & marker + writing strategies
10 + 13 + 16:	Written communication board
10 + 13 + 17:	Letter e-tran. Write letters as pt spells
10 + 14 + 16:	Picture communication board
10 + 14 + 17:	Picture e-tran / partner assisted scanning of picture communication board
18:	Pt can gesture. Establish gesture system.
11:	Pt can indicate yes and no
12:	Yes/No/Maybe board
19:	Adapted call button

To be completed by the nursing administrator

Assessment task	Performance	Recommendation
1. Hello, what is your name?	Answers correctly. Proceed to nr.4	Pt can communicate verbally.
Is your name… (wrong name)? Is your name… (correct name)?	Gestures yes/no	Pt can indicate yes/no with • head movements • hand squeezes • eye blinks
Repeat question with yes/no/maybe card.	Cannot gesture yes/no	Needs yes/no/maybe board
	Patient still do not know	Limited understanding Strategies to support attention and understanding e.g. photo communication boards, explanation boards

2. What is the colour of grass?	Can write it.	Pen & paper / dry erase board & marker + writing strategies
Point	Can point to the word, green	Written communication board
Look	Can look at the word, green	Letter e-tran. Write letters as pt spells
Point	Can point to colour, green	Picture communication board. Food menu in photos
Look	Can look at colour, green	Partner assisted scanning of picture communication board Food menu in photos

3. Can you gesture that you are thirsty?	Can	Pt can gesture. Establish basic gesture system
4. Check if pt can access call button	Cannot	Adapted call button



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