

# Aphasia: a care study

Jeanette Stewart/Jacqueline Creed

## Care study

**E**thel is a 70-year-old lady who was admitted to an acute medical ward following a fall at home. She did not sustain any injuries and there were no medical reasons for the fall. Ethel had fallen numerous times at home. She had suffered a cerebrovascular accident 2 years previously. She did not have any paralysis down either side of her body, but the stroke had left her unable to speak.

Ethel could make sounds but could not form them into words. Her intellectual function was not impaired. She communicated very well using a pen and paper. Ethel had been assessed and treated by the speech therapist and discharged from therapy.

Ethel walked with a frame and demonstrated quick shuffling movements. She could wash and dress the top part of her body independently but required help to put on her stockings and shoes. She could feed herself and take herself to the toilet.

Three days after admission Ethel was transferred to the department of acute rehabilitation for the elderly. The multidisciplinary team were to assess her needs in order to ascertain her ability to return home. The Roper et al (1990) model of nursing was used and assessment was guided by examining the activities of daily living.

an aphasia in which the principal difficulty is speech production (Holden, 1988). Hence, this is frequently known as expressive aphasia. Patients with expressive aphasia have great difficulty in producing speech and thus in describing events or expressing needs. Their speech is slow, laboured and poorly articulated, with many pauses and gaps. Key words are often used to describe things, hence this type of speech has been called telegraphic speech.

The grammatical content of speech in such patients is also poor and verbs or function words, i.e. he, it or a, are often omitted. Patients sometimes have great difficulty in finding words and it may be tempting to supply the word for them. While speech production is the main problem in expressive aphasia, speech comprehension for simple ordered sentences remains largely intact. The problems vary from patient to patient depending on the severity of the damage.

## Wernicke's (receptive) aphasia

Aphasia caused by damage to Wernicke's area produces symptoms that are very different from and almost opposite to those of expressed aphasia. The main problem is one of speech comprehension rather than speech production. For this reason, such aphasia is called receptive aphasia. However, there are also some subtle speech deficits. Whereas expressive aphasia produces non-fluent speech, receptive aphasia produces super-fluent speech. Patients speak rapidly and the speech sounds quite normal unless it is listened to closely. The speech is remarkably devoid of content and a number of errors are made. For example, rather than using single words to describe objects a circumlocutory phrase may be used in which long-winded explanations provide a description, e.g. a chair is called a thing you sit on. Sometimes words are substituted in meaning, e.g. a knife may be called a fork. Substitutions also occur with sounds, so that blue becomes flue.

The comprehension problems experienced by patients suffering from receptive aphasia can be tested by setting a task that requires a non-verbal response. For in-

**A**phasia (Greek for lack of speech) is a term used to describe any deficit in the production or comprehension of speech following damage to the brain. Much of our present knowledge about aphasia dates back to the early part of the 18th century.

In 1861, Paul Broca provided anatomical proof of the theory that language disorders were consistently associated with lesions of the left hemisphere. The area of the brain he identified is known as Broca's area. Subsequently, Karl Wernicke in 1887 demonstrated that a lesion to a part of the brain outside Broca's area could produce a very different type of aphasia. The region he identified is called Wernicke's area.

Today it is known that damage to Broca's area, Wernicke's area or the fibres that connect the two produces very different kinds of aphasia (*Fig. 1*). This article describes the problems experienced by patients with aphasia and presents one patient's experience as seen through the eyes of a nurse.

## Broca's (expressive) aphasia

Information about aphasia has come principally from patients who have suffered strokes. Damage to Broca's area produces

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stance, a common test of comprehension assesses the ability to respond to questions by pointing to named objects. The difficulty in understanding speech can be eased by using very simple ordered sentences or non-verbal modes of communication as well as speech. As with expressive aphasia, the problems encountered vary greatly from patient to patient according to the extent and type of damage to the brain.

Expressive and receptive aphasias are the most common types of aphasia that the nurse is likely to encounter. However, there are various other forms of aphasia which result from damage to the regions surrounding Broca's and Wernicke's areas.

### Outlook: recovery and treatment

Classifying the different forms of aphasia is a difficult task, and many attempts have been made to pigeonhole each problem according to the site of damage in the brain. However, considerable disagreement exists among researchers as to how large or small the lesion has to be to cause aphasia. For the purposes of this article it is sufficient to say that damage to either Broca's area or Wernicke's area will cause problems in the production or comprehension of speech. For more information on other types of aphasia see Harris and Coltheart (1989), Kolb and Whitshaw (1990) and Carlson (1991).

To what extent can patients recover their language abilities following a stroke or head

injury? It is curious that children and female patients often recover more language abilities than do adults and male patients. Some adults who have suffered left temporal lobe epilepsy seem to recover their language abilities more easily; this may be because in childhood the patient was using the right hemisphere for language functions to a considerable degree.

Left-handed people also show on average milder disorders than expected when the speech regions are damaged, even though in most cases the left hemisphere is dominant for speech just as it is for right-handed people. Moreover, right-handed people with a strong family history of left-handedness show better speech recovery than people without left-handed inheritance. The special role of cerebral dominance may account for this difference in recovery. Despite the left hemisphere of right-handed people being the dominant hemisphere in language, there is growing evidence that the right hemisphere does have some language abilities.

Patients with aphasia have a number of problems. A nursing assessment will help identify these needs and a problem-solving approach will help the nurse to meet them. This care study (see care study box), presented by Jacqueline Creed, demonstrates how the assessment and care of one patient with expressive aphasia was managed.

### Assessment

It was important to know what Ethel could do for herself as this would help the multi-disciplinary team to understand her needs. Knowledge of her social background was also significant for the same reason. Ethel lived alone in a ground-floor flat. She had two sons, one of whom lived in Devon and the other in Australia.

On my first contact with Ethel, she was sitting at the ward dining table crying and waving a piece of paper at me. She was making incomprehensible sounds. When I went over to find out what was upsetting her she wrote something down on the paper. I could not read it as it appeared to be scribble. She was clearly frustrated and became even more so because she could not make me understand what she wanted. Emotional outbursts of tears and/or rage are not uncommon following a cerebrovascular accident, and have been termed catastrophic reaction (Benner and Wrubel, 1988).

I explained to Ethel that I had difficulty in reading her writing. I sat down next to

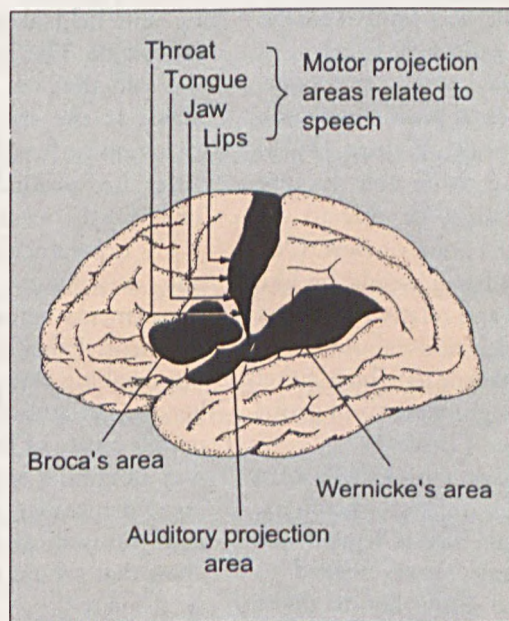


Fig. 1. The two association areas most relevant to language: Broca's and Wernicke's areas. Destruction of Broca's area generally leads to expressive aphasia while destruction of Wernicke's area generally leads to receptive aphasia. (From Gleitmann, 1986)

*'The degree to which a person is able to manage the requirements of everyday life can obviously determine whether he/she can live independently or not.'*

her and asked her to write down again what she wanted me to know. She stopped crying and concentrated on her writing. She wanted to know why she had been moved from the other ward and gave her reasons for why she fell at home, saying that her walking frame was unsafe. She believed that she could manage at home with support from the social services. I told Ethel that we aimed to get her home but that we would need to ensure that she could manage, as she had fallen several times.

When I read through Ethel's medical and nursing notes I found a letter addressed to the doctor and ward sister. In the letter she had given her reasons why she had fallen at home. She explained what she felt she could do for herself and ended by clearly stating that she wanted to go home.

After meeting Ethel and reading her letter it was clear to me that here was a lady who was desperate to maintain her independence. Benner and Wrubel (1988) identified oral communication as a primary way of encountering problems. This capacity was now denied to Ethel. She had to cope with her brain damage without the very skill she would have invoked first.

### Rehabilitation

The multidisciplinary team discussed Ethel's care. One member of the team felt that Ethel's rehabilitation programme would be limited because of Ethel's mental state. When I asked her to clarify this she explained that Ethel became very agitated and because of this she was limited in the amount of input she could give Ethel.

I was very concerned about this comment. Ethel had no mental problems — she was just unable to speak! Watson (1988) stated that for a nurse to be able to care for a patient, he/she must be able to see things from the patient's point of view. One must try to imagine what it would be like if one could not speak and relative strangers were making major decisions about one's life. This was the situation in which Ethel found herself. A nursing intervention problem sheet was compiled (Table 1).

The most crucial aspect of Ethel's care was her relationship with staff members. She wanted to maintain her independence and the multidisciplinary team needed to know this in order to allow her to make decisions about her care.

Ethel was introduced to her named nurse who was responsible for her nursing care (Department of Health, 1991). The named nurse cared for her on a regular basis and

began to understand what Ethel needed and how she functioned. A quiet Ethel sitting with the other patients or reading was a contented Ethel. An Ethel raising her hands or making loud sounds was an Ethel who wanted to communicate something.

For instance, one evening when Ethel's dinner was brought to her she immediately started making noises at the nurse. The nurse said to Ethel that unless she wrote something down the nurse would not know what she wanted. So Ethel wrote that she wanted sandwiches instead of a hot dinner.

A home visit was carried out to see how Ethel would function in her own environment. It was not a success. There were numerous rugs over which she could trip and a gas fire which she turned on full blast before lighting it. Ethel refused to accept that there were any problems.

The degree to which a person is able to manage the requirements of everyday life can obviously determine whether he/she can live independently or not. However, everyday coping as measured by activities of daily living is not the same as everyday coping as understood by that person (Benner and Wrubel, 1988).

Ethel's son in Devon felt very strongly that she would not manage at home as she had fallen so many times. Eventually it was decided that the son in Australia would come home for 6 months and that the three of them would come to some agreement.

My last impressions of Ethel were of a well-dressed lady who sat down one evening and held a conversation through pen and paper. Her writing was easy to read. She said that one of her sons was once a Major in the army and that he was used to giving orders, but he was not going to order her around. 'I am my own MISTRESS!' she wrote. We both laughed.

My experience with Ethel has taught me not to judge patients with speech impairments before making a thorough assessment. Ethel's initial behaviour of crying, shaking and making loud noises was her way of attracting attention and making people aware of her needs. This was Ethel's way of coping with her speech impairment but one member of the team misinterpreted it. If this is allowed to occur, we could miss clues that are important for planning a patient's care.

### Conclusion

Aphasia is a complex problem which frequently follows a stroke. Apart from the complications of a stroke, communication

Table 1. Nursing intervention problem sheet for Ethel

Problem	Aim	Plan
Difficulty in communicating her needs due to aphasia	For Ethel to communicate her needs effectively	<p>Encourage Ethel to use a pen and paper to write down her needs to staff</p> <p>Spend time with Ethel to allow her time to communicate her needs through writing</p> <p>Introduce Ethel to staff caring for her so that she knows who to relate to</p> <p>When Ethel becomes agitated, encourage her to write slowly and clearly so that she can be easily understood</p> <p>Ensure that staff are aware of Ethel's physical impairment (there is no intellectual impairment)</p> <p>Ensure that Ethel is kept up to date with her progress</p>
Potential inability to cope at home alone because of a fall	To reduce to a minimum the risk of falling again if returning home to live alone	<p>Assess Ethel's present and past capabilities of daily living to identify attainable goals in order that she can reach her optimum level of independence</p> <p>Assess the home situation:</p> <ol style="list-style-type: none"> <li>1. What previous social support is there?</li> <li>2. Is there is a need for this support to commence or increase?</li> <li>3. Involve the social worker</li> <li>4. Involve the occupational therapist to carry out a home visit</li> <li>5. Involve Ethel and her sons in discharge planning</li> </ol>
Ethel's fear of losing her independence	For Ethel to have some control over her future	<p>Keep Ethel up to date with what is happening</p> <p>Encourage Ethel to take an active role in decision making</p> <p>Liaise with Ethel's sons and keep them informed about how she feels about issues relating to her future</p> <p>Make Ethel aware of the potential hazards if she returns home</p>

**KEY POINTS**

- Aphasia is a term used to describe any deficit in the production or comprehension of speech.
- Damage to various parts of the brain can give rise to aphasia.
- The communication problems experienced by patients with aphasia present a unique challenge to the nurse.
- It is vital that all patients receive a proper assessment of their needs. A holistic approach is required.
- Nurses should be non-judgmental in their approach and remember the person behind the aphasia.

problems will only add to the distress of the patient. By spending time with these patients and finding out about their background and lifestyles it is possible to hold a conversation with them and to see them as individuals. This level of understanding is vital if we are to care for these patients effectively.



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Benner P, Wrubel J (1988) *The Primacy of Caring*. Addison-Wesley, London

Carlson NR (1991) *Physiology of Behaviour*. 4th edn. Allyn and Bacon, Massachusetts

Department of Health (1991) *The Patient's Charter*. HMSO, London

Gleitmann H (1986) *Psychology*. 2nd edn. WW Norton, London

Harris M, Coltheart M (1989) *Language Processing in Children and Adults - An Introduction*. Routledge, London: 230-51

Holden M (1988) *Neurophysiology and Ageing. Definitions Explanations and Practice Approaches*. Croom Helm, London

Kolb B, Whitshaw I (1990) *Fundamentals of Human Neuropsychology*. 3rd edn. WH Freeman, New York

Roper N, Logan W, Tierney A (1990) *The Elements of Nursing*. 3rd edn. Churchill Livingstone, London

Watson (1988) *Nursing: Human Science and Human Care - A Theory of Nursing*. National League for Nursing, New York