

UNIVERSITY OF BRIGHTON

Neurological Patient Care level 6

Name: Pasqua Balestra

Module code: NH6127

Word count: 2500

CRITICAL ANALYSIS OF THE NURSING COMMUNICATION SKILLS CARING FOR
PATIENT AFFECTED BY DYSPHASIA AS A CONSEQUENCE OF LEFT TEMPORAL
TUMOUR DEBULKING.

The focus within this assignment is to investigate a patient with a cerebral tumour and the importance of the Nurses communication skills, fundamental to holistic care and positive outcomes for patients affected by dysphasia. The aim of this assignment is to highlight the importance of communication for a nurse to take care of a patient admitted to the neurosurgical ward with dysphasia post craniotomy and left temporal tumour debulking: it will provide information that will help nurses to use neuropsychological knowledge in the assessment and caring of people with dysphasia. To protect the patient's confidentiality will be using a pseudonym name "Rose" in accordance with the Nursing and Midwifery Council (NMC) The Code (2015).

Miss Rose (see appendix) suffered a large left temporal Oligodendroglioma. Oligodendrogliomas, arising in the white matter of cerebral hemispheres (Editorial board, 2008), coming from oligodendrocytes, one of the types of cells that are important for the tissue's maintenance of the brain (American Brain Tumor Association, 2014). This tumour can however, occur throughout the central nervous system, including infratentorial locations and spinal cord. A craniotomy is the most common type of operation for a brain tumour (Lubin, Dodson, and Winawer, 2013) and surgery has three objectives: to verify the nature of the injury, the improvement of signs and symptoms in patients with lesion with mass effect, and improvement of prognosis. Most authors of research believe that the surgery-related goal for oligodendroglioma should be total removal, but aggressive resection can cause significant neurological damage and that should be avoided (Engelhard, 2002). During the operation, the surgeon tried to remove as much of the tumour as possible from the Rose's brain, but unfortunately when the tumour mass cannot be completely excised without compromising the patient's life, like in this specific case, the surgeon can do a debulking, removing as much as possible, of the tumour mass. Miss Rose arrived in HDU after a left large volume temporal Oligodendroglioma elective craniotomy and debulking and once she was more awake and relatively stable, Rose was moved to the neurosurgery ward.

Neurological observations on the ward were required at the surgeons request, to observe and check changes in the nervous system, signifying trends, aiding diagnosis and care which may affect prognosis and recovery (Waterhouse, 2005). The main tool used for assessing neurological function is the Glasgow Coma Score (GCS) (Teasdale et al, 2014). The Glasgow Coma Scale (GCS) was introduced in 1974 with the aim of standardizing assessment of level of consciousness in head injured patients (Matis, G., and T. Birbilis, 2008). According to NICE (2014) it recommends that if a patient experiences changes in levels of GCS then the GCS should be monitored closely performing every 30 minutes for two hours, then hourly for four hours and two hourly thereafter if GCS is improving or unchanged. The GCS consists of three steps: eye, verbal and motor response

and then the patient's score is between 3-15. Close observation is absolutely necessary as it prompts care and management (Elliott et al, 2012). The scale was originally elaborated for patients with Head injuries (HI), for this reason in patients affected by dysphasia the verbal score produces an unrepresentative assessment of their conscious level, therefore a totally dysphasic patient would have a maximum score of 13 (rather than 15), regarded a damage to the speech and language centre rather than reduced consciousness. The GCS contains valuable predictive information: it can sometimes be difficult to distinguish confusion from dysphasia and, if the patient is cooperative enough, formal tests for expressive or receptive dysphasia (naming objects, carrying out complex commands) may be tried. Rose appeared orientated in place and time but had difficulty to express it in words, for this reason she was more likely dysphasic than confused, and another important consequence was the right sided weakness, not present before the surgery, with evidence of left hemisphere damage on the CT scan (Philip Barlow, 2012).

Rose's GCS score was between 13 and 14 because she was not using the language correctly: she had severe word-finding difficulties, she was non-fluent and agrammatic. Several studies have shown that the right hemisphere creates actions and thoughts of simpler or mechanical type, while the left hemisphere produces the most complex creative thoughts, and in around 97% of people, language is represented in the left hemisphere (Robertson, 2013). Several studies of the left hemisphere tumours have shown that the resulting dysphasia (or aphasia) tends to be confined to a mild word-finding impairment (Davie, Hutcheson, Barringer, et al., 2009). In 1861, the French physician Paul Broca confirmed that there are two major areas of the left cerebral cortex intimately connected to the language centre, as evidenced from aphasia that results from their damage. Language processing is the result of the complex functional interactions between the core language areas and other cortical and subcortical structures. The classical model of language is based on two core language regions, namely Broca's region (for language production) and Wernicke's region (for comprehension of spoken language), and the connection between them (Petrides, 2013). Broca's area is located in the lower posterior region of the frontal lobe, in front of the motor area that distributes neural impulses to speech muscles (Davis, 2013): it "was the first brain region to which a circumscribed function, over speech, had been related" (Amunts & Zilles, 2006, p.17). In neurological contexts, the disorders of language are identified as acquired (aphasia) or developmental (dysphasia) (Riccio, Sullivan, and Cohen, 2010). Broca concluded, on the basis of several post-mortem examinations, that language is localized in the left frontal lobe: when there is a damage in this area, can be present dysphasia, a specific language impairment. When not impaired people formulate a sentence, they open the drawers matching the words you want to express. The dysphasic patient cannot open these

drawers or open the wrong drawers, formulating sometimes incomprehensible concepts: Rose is perfectly aware of what she wants to express (Kolb and Whishaw, 2010).

When testing for dysphasia, Rose's ability to repeat or produce difficult sentences or tongue-twisters was indicative. Her spontaneous speech consisted of the carrying out of some occurring spontaneously words and phrases, like "David" (her husband) and "my little boy" (her dog). There were grammatical errors in Rose's speaking and difficulty finding the correct word: in most cases she does not speak spontaneously but she usually understands what is said to her. After few sessions of conversation with her, the nurses realized that Rose was affected by expressive dysphasia caused by damage in Broca's area because unlike Wernicke's aphasia, Broca's patients are conscious of their language difficulties: dysphasia is a disorder of the language system processing mechanisms in the different levels such as structure, phonology, syntax, semantics, pragmatics. An appropriate referral to the Speech and Language Therapist (SLT) was completed by nursing staff. It is important that nurses attend the speech therapist sessions to be able to repeat what is being done on the ward. The language is re-educated through a complex and "mosaic work" and the purpose of the exercises is to recreate the brain patterns that contribute to speech production, simultaneously involving the receptive and expressive side (Wu et al., 2011).

It is not easy to take care of a dysphasic patient, especially in the early days of the disorder. Dysphasia has consequences on the psychological and relational level: the difficulties of interpretation of the messages that are addressed and frustration at the failure of communicative production attempts will inevitably impact on the Rose's psychological development (Sturdy, 2009). Dysphasia may have a severe, debilitating effect on the ordinary life of the patient. Behaviourally, on the ward Rose appeared anxious and depressed. The effects of dysphasia on Rose was exceedingly frustrating as she was not able to communicate efficiently: Rose felt emotionally 'cut off' from those around her, she felt extremely isolated, started to cry and to apologise when she was not able to say a word she had in her mind, this is the reason why depression is not uncommon in people affected by dysphasia. Intervention is based on knowledge of normal development (Arvedson 2006). It's important to understand the devastating impact that dysphasia has on quality of life: the human being has a unique intellectual ability, which consists in the possibility of combining words or signs to express their own thoughts. Language is at the heart of this construction. Without language, this action becomes hard, as the individual cannot express the world who he or she (Rose) is. Nurses caring of Rose conduct and concentrate conversations on their own nursing task goals, while Rose rarely takes the action of talking about something opening discussions and has little influence over subjects. This not evenly distributed communication results

in a further decrement of the self and a rejection of Rose's rights to participate in her own care or be in charge for her future. It is essential that nurses approach the patient as a person, then give the authority or power to that person to get back the confidence, the creativity and freedom required to control life and independence.

Rose was so frustrated because she was not able to find the right words; in order to support Rose, the nurse conversed with her with adult language to not make her feel as if she was a child, making eye contact when talking to her. Conversation with a dysphasic patient like Rose is a good and especially useful patience exercise. Despite everything, however, sometimes the communication fails; the nurse had to keep trying and not be discouraged, let Rose rest and resume the conversation later; at a second attempt the conversation went better. Nurses realized how much was important to allow time for Rose to understand: sometimes this was a lot longer than they expected. It is important to add that sometimes Rose used to say yes to mean no and vice versa (Clarkson, 2010), frequently she avoided eye contact and looked down, trying to concentrate to get the right words. It's useful encourage any attempt of autonomy manifested by Rose in the activities of daily living, suggesting practical solutions to communication problems, mobility, power and personal hygiene and in particular by encouraging all the ways of communication (speech, writing, gestures, facial expressions). The dysphasia is always responsible for alterations in all aspects of oral communication (speaking, writing, reading, understanding), but Rose can continue to have a wide variety of communication resources. In fact, put in appropriate conditions, Rose can communicate effectively using a few words disconnected fragments of sentences, movements of the head gestures, facial expressions, special intonations of voice and graphic expressions. (Balzer-Riley, 2015).

Rehabilitation, planned for Rose, was a complex activity that required contributions from many members of the healthcare team: first, the Speech and Language Therapist focuses on therapy designed to enable Rose to confront her dysphasia directly, to understand it, and to try to live more overtly with it (Byng, 2006). Patients like Rose may require additional services to direct the communication disability on the ward and also in the everyday life, at home and in the community (Bartlett et al., 2008; Hemsley, Werninck, & Worrall, 2013). It is necessary to consider the frequent circumstance for which the dysphasic person through depressive phases of considerable extent, linked also an intrinsic characteristics of the language rehabilitation that have great weight on the welfare of layer dysphasic person and on his quality of life (Worrall et al., 2011). The Multidisciplinary care of Rose, directed by Speech and Language Therapist, assisted Rose keeping in mind few important elements: it is important to not rush, introduce the conversation talking in

simple words; nurses did make sure they had Rose's attention before they start communicating with her, sitting in front of her while talking, so nurses were able to see the lips and facial expression. The nurses talked slowly, used short sentences and emphasized the intonation of the most important words of the sentences pronounced, repeating what the Doctor has said and writing it, leaving to her the sheet so that it could be used to remind Rose of what was discussed. Nurses used gestures, drawings and other non-verbal means, encouraging Rose to do the same. Sometimes it was useful to browse along a vocabulary to look for right word. The body expressions and manifestations as well are important elements to the process of communication because of its wide use (Souza and Arcuri, 2014). To overcome communication barriers, nurses must implement the appropriate communication strategies on the ward, based on the clinical context. Several studies showed that the patient communicates first of all with the nurse, this is why the nurse must help the patient to increase confidence when communicating: in this way the patient is able to make decisions about his care and the nurse as well can act in the best interest of the patient (Clarkson, 2010). From the first assessment on the ward, nurse needs to start a supportive process, modify their ordinary communicative actions and increasing their communication ability (Papathanasiou, Coppens, and Potagas, 2012). Many researchers in the area of rehabilitation of language disorders have introduced the distinction between linguistic competence and communicative competence. The same authors have suggested that the rehabilitative approach should not be addressed exclusively to the recovery of language skills, but also to develop their communication skills (Mazzucchi, 2012).

Professional development emerges from the experience of neurosurgery in large part via relation and communication with colleagues and clients (Asher, McCormick, and Kondziolka, 2013). Training courses should be attended by nursing staff on progressing nurses' proficiency in language disorders, increasing training in essential speech therapy, and psychological consequences. When the condition occurs, it is not only the corporeal speech gear that is lost: the sensations of self and relationship-constructive skills that are essential to wellbeing are also at risk. The nurse's role is therefore to identify patients affected by dysphasia, by assessing the impact not only on post-operative recovery, but also on the family and private relationships, working with the department team to get maximum positive results (Balzer-Riley, 2015).

The underlying message of this assessment is the encouragement of all attempts at communication by a dysphasic patient, using whatever means possible. Some level of communication can be achieved, even for those whose prognosis is unfortunate. A significant element of Rose-centred care is the capacity of nurses and doctors to communicate in a different way that lets any member of the staff to see the patient's needs: by improving communication, patients will be less nervous and

caregiver interactions less difficult (McGilton et al., 2012). A better knowledge of the problem by the nurses might otherwise ensure an increase in the quality of service provided by them, as well as the degree of satisfaction with their work (Balzer-Riley, 2015). From this perspective, to achieve its aims, the rehabilitation process will necessarily be focused on the person with disabilities and require active cooperation of operators, family and/or caregiver. In fact, just by sharing a common heritage of knowledge related to the problem dysphasia and for the administration and through the subsequent comparison of different perspectives, we could develop a "global action" as expected in the "holistic" approach to the person (Roddam and Skeat, 2010): this is the reason why this essay was directed toward an area of patient care that deserves greater attention than it often is given.

References

- Alexander, S. et al., (2014) Care of the adult patient with a brain tumor.
- Asher, A.L., McCormick, P.C. and Kondziolka, D. (2013) 'Introduction: The science of practice: Addressing the challenges of modern health care', *Neurosurgical Focus*, 34(1), p. Introduction.
- Balzer-Riley, J. (2015) *Communication in nursing*. Edited by Jeff Downing and Allison L. Brock. 6th edn. Mosby.
- Barlow, P. (2012) 'A practical review of the Glasgow Coma Scale and Score', *the surgeon* 10, pp. 114-119.
- Bartlett, G. et al., (2008) 'Impact of patient communication problems on the risk of preventable adverse events in acute care settings', *Canadian Medical Association Journal*, 178(12), pp. 1555–1562.
- Byng, J.D. (2006) *The Aphasia therapy file: Volume 2*. Edited by Sally Byng, Judith Felson Duchan, and Carole Pound. Hove: Psychology Press.
- Davie, G. L. et al., (2009), Aphasia in patients after brain tumour resection. *Aphasiology*, 23, 1196-1206.
- Davis, A.G. (2013) *Aphasia and related cognitive-communicative disorders*. Boston: Pearson Allyn & Bacon.
- Harding, M. (2014) Dysarthria and Dysphasia. Medical information. Patient. Available at: <http://patient.info/doctor/dysarthria-and-dysphasia>
- Hemsley, B., Werninck, M. and Worrall, L. (2013) "'That really shouldn't have happened": People with aphasia and their spouses narrate adverse events in hospital', *Aphasiology*, 27(6), pp. 706–722.
- Hickey, J. 2014. *The clinical practice of neurological and neurosurgical nursing*. Lippincott Williams and Wilkins. USA.
- Kersner, M. and Wright, J.A. (eds.) (2013) *Speech and language therapy: The decision-making process when working with children*. London, United Kingdom: Routledge.
- Kolb, B. and Whishaw, I.Q. (2010) *An introduction to brain and behavior: International edition*. 3rd edn. Basingstoke: Worth Publishers Inc.,U.S.

Lubin, M.F., Dodson, T.F. and Winawer, N.H. (eds.) (2013) *Medical management of the surgical patient*. 5th edn. Cambridge: Cambridge University Press.

Matis, G., and T. Birbilis. 'The Glasgow Coma Scale - a Brief Review Past, Present, Future', *Acta Neurologica Belgica*, vol. 108/no. 3, (2008), pp. 75-89.

Mazzucchi, A. (2012) *La riabilitazione neuropsicologica. Premesse teoriche e applicazioni cliniche*. Edited by Elsevier. 3rd edn.

Nursing Midwifery council. 2015. *The Code professional standards of practice and behaviour for nurses and midwives*. London.

Papathanasiou, I., Coppens, P. and Potagas, C. (2012) *Aphasia and related neurogenic communication disorders*. United States: Jones and Bartlett Publishers.

Petrides, M. (2013) *Neuroanatomy of language regions of the human brain*. United States: Academic Press.

Reeves, C. (2015) *Oligodendrogliomas (ODs): Diagnosis, outcomes and prognosis*.

Riccio, C.A., Sullivan, J.R. and Cohen, M.J. (2010) *Neuropsychological assessment and intervention for childhood and adolescent disorders*. Chichester, United Kingdom: Wiley, John & Sons.

Roddam, H. and Skeat, J. (eds.) (2010) *Embedding evidence-based practice in speech and language therapy: International examples*. Chichester, United Kingdom: Wiley-Blackwell (an imprint of John Wiley & Sons Ltd).

Washer, P. (ed.) (2009) 'Communication skills - communicating with disabled people', *Independent Nurse*, 2009(12). doi: 10.12968/indn.2009.4.12.77149.

Whitworth, A., Webster, J. and Howard, D. (2013) *A cognitive neuropsychological approach to assessment and intervention in aphasia: A clinician's guide*. New York: Psychology Press (UK).

Wu, A.S. et al., (2011). Neurocognitive function before and after surgery for insular gliomas. *Journal of Neurosurgery*.

Appendix

Case study

Name: Mrs Rose

Age: 51

PMH: nil

Present problem/ Diagnosis: experienced few days of headaches and partial seizures with nausea and vomiting was referred to the hospital and had a CT scan and biopsy which diagnosis left temporal tumour.

Social: lives with husband and children

Vital signs before surgery:

GCS 14/15

Blood pressure: 170/90

Heart rate: 70

Respiratory rate: 16

Oxygen levels: 98%

Temperature: 36.3

Pain score: 8/10

Biopsy confirmed a large left temporal Oligodendroglioma.

Vital signs post surgery:

GCS: 14 due to dysphasia

Blood pressure: 140/70

Heart rate: 90

Respiratory rate: 16

Oxygen levels: 98%

Temperature: 36.4

Pain score: 6/10 complained of a headache

Surgery: elective craniotomy and debulking.