Pragmatic language disorder

Communication disorders arising after an acquired brain injury can be broadly divided into three (3) main groups:

- disorders of *speech production* due to impairments in the movement of the speech muscles (e.g. lips, tongue, voice box) – including strength and weakness or, coordination of speech muscles;
- 2. disorders of the language system that impact on the *understanding and production* of words and sentences includes listening, talking, reading and writing; and
- disruptions in *understanding*, *expression*, *and social interaction* due to cognitive impairments in associated areas such as memory, attention to task, problem solving, and flexible thought.

The last group of these disorders is known as "cognitive-communication disorders" and in the traumatic brain injury group (TBI) it is estimated that between 80-100% of survivors have this type of disorder.

One of the most crippling forms of impairment with this larger disorder is *pragmatic language disorder*. The term "pragmatic" means *social language use* and therefore this disorder effects how we USE LANGUAGE to interact with others. Impairments in social language use lead to unsuccessful social interactions in a range of places; home, the workplace or school, or during leisure and social activities. This means that people with pragmatic language disorder following TBI can have problems gaining or maintaining work, difficulty maintaining relationships with other people (be they family or friends), and lose involvement in leisure activities and independence in the community which can lead to isolation and loneliness.

Using language appropriately in social situations requires a number of different systems to work together and includes the understanding and expression of both non-verbal and verbal communication skills in social interactions. It also requires people to concentrate on verbal and non-verbal communication occurring, organise and plan their involvement, self-monitor their performance, and change their communication style based on the social context. Communicating well in social situations is a highly complex skill.

Non-verbal communication skills refers to ways we communicate without using words, such as eye contact, facial expression, melody in the voice, gesture, and body position. In people with a pragmatic language disorder they may difficulty using these non-verbal skills when interacting with others. Alternatively they may have difficulty reading these non-verbal means of communication when they are talking with others. Examples of non-verbal behaviours a person with pragmatic language disorder following TBI might display include:

- making no eye contact with, or appears to be staring at the other person to whom they are talking
- being restless and fidgety during a conversation
- the person's voice does not rise or fall naturally when they are talking
- the person's face does not show emotions that reflect what they are saying (e.g. smiling while talking about a sad topic)
- the person standing very close to the person they are talking such that makes the other person feel uncomfortable

Similarly, the person may be unable to read non-verbal information used during social interactions, such as:

- facial expressions that relate to emotions being felt by the speaker
- understanding how different tones of voice change the meaning of words, for example rising inflection at the end of sentence is used in some cases to indicate it is a question
- observing a change in body position that indicates the speaker is directing a statement to another person in the group.

Verbal communication skills relate to how words and sentences are used to effectively maintain social interactions, and could be thought of as conversational skills. Ways that verbal communication skills could be affected by pragmatic language disorder following TBI include:

- the inability to start or introduce a topic of conversation within social settings
- being unable to take turns during a conversation either through continually talking, or unable to contribute to a conversation by taking their turn
- provides too little information during a conversation, and the information may appear incomplete or insufficient
- provides excessive information during a conversation never seems to stop talking

- provides inappropriate information (overly intimate or poor topic choice) for the social context of the conversation
- makes up stories or over-exaggerates the truth of the information they are providing
- the inability to use humour or sarcasm appropriately
- the flow of the conversation does not follow a logical sequence, it may appear to move off topic
- difficulty listening to others which may be seen as giving inappropriate responses to questions, interrupts inappropriately when others are talking

Understanding others and expressing yourself during social interactions is a complex communication task that relies not only on your understanding of, and ability to produce words and sentences but also a person's ability to do so within social rules. It is no wonder that pragmatic language disorder can have such a devastating impact on a person with TBI's life.