Chapter 17

Mental Health Issues in Clients with Severe Communication Impairments

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Learning Objectives

Readers will be able to:

1. Describe how communication and sensory impairments can have a negative effect on clients' social and emotional functioning.
2. Determine conventional and non-conventional forms of communication.
3. Identify strategies to enhance clients' communication skills and how these may improve their mental health.
4. Identify changes in clients' behaviour that may indicate the need for a medical and/or mental health assessment.

Introduction

The purpose of this chapter is to discuss mental health issues in individuals with severe communication impairments. We refer specifically to clients who are primarily nonverbal (i.e., who have little or no expressive speech skills). We have chosen to focus on this particular group because it often presents the greatest challenge to health professionals and caregivers.

In contrast to the usual situation in which the client is interviewed directly as part of the evaluation process, clinicians must rely instead on information that is provided by other people (e.g., family, support workers). As a result, the clinician needs to reconcile different points of view that often arise, and must also make inferences about the client's internal state from the information that is available. On a personal level, professionals often feel uncomfortable or even inadequate in situations where they have difficulty communicating directly with a client. Moreover, many of these clients use nonverbal or behavioural means (such as aggression or self-injury) to communicate their emotional and physical needs, which may be frightening or incomprehensible to the onlooker. With training and experience, clinicians can overcome their apprehension and take on significant roles in the provision of services to this population.

We begin the chapter with a general overview of communication, followed by an outline of communication issues in clients with developmental disabilities. We then comment briefly on sensory impairments and the additional challenges they create. We also link communication and sensory impairments to mental health issues, and review strategies to enhance clients' communication skills in order to improve their social-emotional functioning. Finally, we talk about difficulties in assessing mental health problems in clients with severe communication impairments, and offer some ideas regarding how to overcome these challenges.

Before we begin, we would like to share the following principles which underlie our clinical approach to working with nonverbal clients with mental health issues:

- the ability to communicate effectively is essential for optimal mental health;
- communication and sensory impairments can have a negative impact on a client's social and emotional well-being;
- aberrant behaviour (which may be viewed as a non-conventional form of communication) is a primary reason for referrals to health professionals;
- strategies that enhance a client's ability to use conventional forms of communication can improve his/her social-emotional functioning.

Overview of Communication

What is communication?

Communication is an exchange of information and ideas between two or more people -- the message sender and the message receiver. In general, the *message sender* must determine exactly what information or idea he/she would like to exchange and send this information to the *message receiver*, who must make sense of and act on this information. *A 'communication breakdown'* can occur at any point in this process, leaving the message sender or receiver (or both) dissatisfied or frustrated. This process is not as clearly defined in the case of clients with severe intellectual and communication impairments (e.g., with regard to the client's communicative intent and the reciprocity or exchange of information), with the result that the client's thoughts and feelings must be inferred on the basis of behavioural indicators and other considerations.

Why do we communicate?

We communicate because exchanging information and ideas

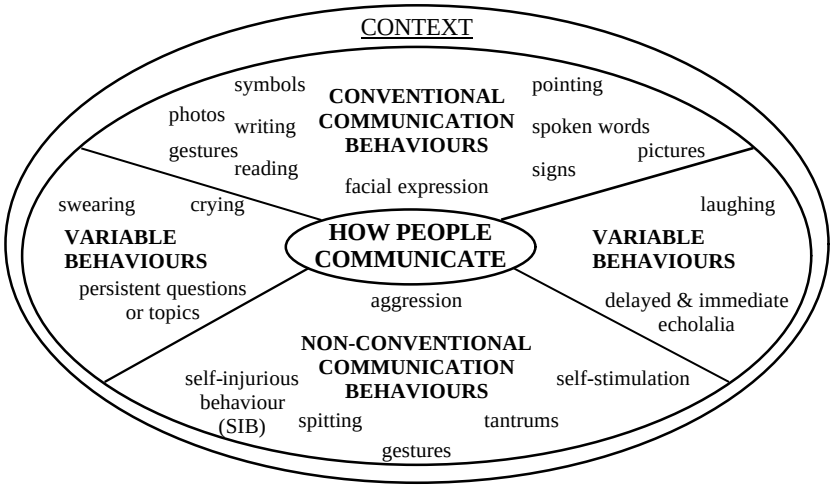
with another person serves one or more purposes in our lives. Through communicating we are able to:

- express our wants and needs so that they can be more easily met
- share information in order to be seen as an individual
- develop social closeness in order to maintain relationships
- conform to social conventions in order to be accepted as a member of society (Beukelman & Mirenda, 1992)

How do we communicate?

All forms of communication can be divided into one of three categories -- conventional, non-conventional, and variable communication behaviours.

Figure 1- Categories of Communication Behaviours (adapted from Wyngaarden, Honeyman & Tweedie, 1996).



1. Conventional Communication Behaviours

These consist of verbal communication forms (speech) or augmentative and alternative communication forms (AAC). AAC is any approach that is designed to support, enhance or augment the communication of individuals who are not independent verbal communicators in all situations (Beukelman, Yorkston & Dowden, 1985). Examples of AAC approaches include written language, sign language, pictures/photos, gestures, and facial expression.

Conventional communication behaviours tend to lead to more successful communication events, and are often considered more 'acceptable' means of communication.

2. Non-Conventional Communication Behaviours

These are the forms of communication that typically are seen as 'behavioural' in nature and that cause much stress, anxiety and frustration for both the message sender and message receiver. They are also a primary reason for referral to mental health professionals (AACAP, 1999). Examples include aggression, self-injury, and noncompliance. Non-conventional communication forms tend to be more difficult to understand, are viewed as being disruptive, may pose a degree of risk to the message sender and message receiver, and are often considered to be a 'less acceptable' means of communication. They are often the focus of clinical intervention, e.g., behaviour therapy, pharmacological treatment and/or teaching conventional forms of communication to take their place.

3. Variable Communication Behaviours

These are the forms of communication that can fall into any of the above categories depending on the situation. For example, crying as a means to express sadness at a funeral would be considered to be a conventional form of communication; however, crying every time one is expected to perform a chore may be considered non-conventional and a less 'acceptable' means of communicating a message.

What factors affect communication?

Individual, interpersonal and environmental characteristics influence communication. Individual characteristics include the person's personality, skill level, sensory abilities, stress/ arousal level and internal state. Interactions between individuals are influenced by the complex interplay of these factors. Environmental factors include lighting, noise, temperature, and the number of people present.

Link Between Communication and Sensory Impairments and Mental Health Issues

A number of factors may be implicated in the development and expression of mental health problems in clients with severe communication impairments. First, a client's ability to learn and use conventional forms of communication is generally related to his/her level of intellectual functioning, such that the greater the degree of intellectual impairment, the less likely the client will independently develop speech and other symbolic means of communication. It follows, therefore, that he/she will rely primarily on non-conventional (behavioural) forms of communication when interacting with others, which,

as discussed earlier, tend to be more difficult for the communication partner to understand, and less likely to produce the desired outcome for the client. As a result, the client may feel frustrated, angry, anxious or socially isolated. Conditions such as autism and pervasive developmental disorders are associated with particularly severe communication and social impairments.

Second, an increased incidence of biomedical concerns (such as neurological conditions, sensory and motor impairments) is reported among clients with more severe levels of intellectual impairment (DSM-IV, 1994). Neurological damage in and of itself may be a predisposing factor for mental health problems. As well, sensory impairments (e.g., vision and hearing disorders) may contribute to mental health problems or mimic their effects. Hearing loss, for instance, may further impair a client's language and cognitive skills, negatively affect his/her interpersonal relationships, and produce behavioural patterns that resemble psychiatric symptoms. For example, a client who has an unrecognized hearing loss and misperceives people's comments may appear to be "paranoid" to others. Consider a client with a visual impairment who shows an intense fear response in a particular situation (e.g., when required to walk down a flight of stairs). This may be viewed incorrectly as an irrational fear or phobia and treated with medication rather than ensuring that the stairs are well-lit.

Did You Know?

- compared to the general population, sensory impairments are much more common among clients with developmental disabilities (Beange, McElduff & Baker, 1995).

- vision and hearing disorders are present in approximately 10% of clients with severe intellectual impairment (McQueen, Spence, Garner, Pereira, & Winsor, 1987).
- this figure may be higher in groups with specific syndromes or disorders – e.g. sensori-neural hearing loss develops in up to 40% of individuals with Down Syndrome (Gedye & Russell, 1995).
- sensory impairments can be caused by infections during pregnancy, such as rubella
- sensory impairments may be present at birth or can develop over time.
- early detection and proper treatment are essential, yet caregivers are not always aware of risk factors and service needs (Murphy, Paquette, Ouellette-Kuntz, Stanton, & Garrett 1999).

The ability to communicate effectively is essential for a client's emotional and physical well-being. It is necessary, therefore, to look beyond basic physiological needs and consider psychological needs (e.g., affiliation, achievement, affirmation), and the impact of not having these needs met on the client's mental health (e.g., feelings of low self-worth, depression).

Interventions to Enhance Communicative Functioning

Approaches to addressing mental health issues in clients with severe communication impairments involve providing them with a conventional means of communicating that will enhance their expressive and receptive communicative abilities,

and increase the likelihood that their social-emotional needs will be met. Strategies to enhance communication are typically used in conjunction with behavioural approaches, in which conditions are arranged to promote the occurrence of "acceptable" behaviour (i.e., behaviour that enhances the client's social and personal well-being) and reduce the occurrence of "problem" behaviour (e.g., Carr & Durand, 1985).

The following steps are involved in assessment of and intervention for communication impairments:

- evaluate the client's current skills and forms of communication.
- determine the communicative function of the non-conventional behaviour.
- assess the client's symbolic level of understanding.
- use the information to develop an approach to enhance his/her conventional forms of communication.

How to assess a client's current communication skills and forms of communication

1. Observe how the client communicates:

    - greetings (hello and good-bye)
    - wanting food/drink
    - wanting activity
    - needing help
    - needing a break
    - affirmation (yes)
    - negation (no)
    - getting attention
    - about his/her physical state

- about his/her feelings
- humour
- boredom
- needing information
- sharing information

2. How s/he makes connections with people (family, staff, peers, others).

3. His/her style of interacting with others (e.g., does he/she initiate spontaneously or does he/she respond to others?).

4. His/her comprehension abilities in regard to a number of factors (e.g., familiar versus unfamiliar information, simple versus complex information, the number of directives he/she is able to follow).

5. His/her choice-making abilities (e.g., yes/no, two or more choices).

6. His/her ability to wait and to transition between activities, environments and people.

How to determine the communicative functions of behaviour

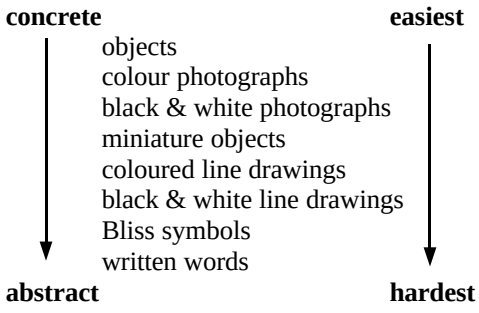
The function or reason for the non-conventional communication behaviour may be determined through direct observation, data collection (e.g., antecedent-behaviour-consequence data), manipulating conditions and determining the resulting effects on the behaviour (e.g., allowing a client to escape from a difficult task after he self-injures, and analyzing the impact on the frequency and duration of the behaviour), and/or generating

hypotheses about why the behaviour is occurring (Carr et al., 1999). This type of assessment is well-suited to a joint approach by a speech-language pathologist and behaviour therapist.

How to assess a client's level of symbolic understanding

A symbol is something that stands for or represents something else. Examples of symbols include photographs, drawings, sign language and written words. Symbols may be ordered into a hierarchy that reflects their level of abstractness and the ease with which they may be learned and used (Mirenda & Locke, 1989). Generally, symbols that bear the closest resemblance to the item they represent are easiest for the individual to understand and use. An example of a concrete symbol is a cup that a client could hand to a caregiver to request a drink. At the other extreme are symbols that bear the least resemblance to the item they represent; an example of an abstract symbol is the sign for "cup".

Figure 2- Symbol hierarchy (adapted from Mirenda & Locke, 1989).



An informal way to assess a client's level of symbolic understanding is to observe what symbols he/she may currently use in everyday situations -- e.g., looking through magazines and pointing to difficult or unfamiliar words, recognizing people in photographs, understanding community signs (male/female bathroom signs, no smoking symbols).

Tips to Help Determine Appropriate Forms of Conventional Communication for a Client

- observe which (if any) conventional forms the client is using currently.
- consider which forms he/she has had experience with in the past and how successful they were.
- which symbols does the client understand?
- does the client have any functional limitations (e.g., vision, hearing, arm/hand, mobility) that rule out certain approaches or necessitate a different type of approach?
- what are the specific situations the client is required to use a conventional form of communication or in which the caregiver needs to communicate a message?
- what are caregivers willing to work with (e.g., sign language, picture communication symbols)?

Developing approaches to enhance conventional communication behaviour

Enhancement-based communication interventions are designed to increase clients' communicative competence and decrease their reliance on non-conventional forms of communicative behaviour (such as aggression or self-injury). It stands to reason that a client who uses more conventional forms of communication is more likely to be understood, and hence to have his/her physical and social-emotional needs met, both of which impact directly on mental health. For instance, a client who is able to signal his/her need for social interaction (which is often characterized in a negative manner as "attention-seeking behaviour") by gesturing to someone to come over rather than throwing an object will likely be perceived in a more positive manner, elicit more emotional support, and be included in more events and activities. Thus, increasing a client's communicative competence has a dramatic effect on every aspect of his/her life.

Many enhancement-based strategies make use of visual cues, which, since they are continuously available, are helpful to clients who have difficulties processing verbal information or who take longer to express themselves. In addition, they are readily understood, and enjoy widespread application and acceptance (many people could not function without their address book and daily scheduler). Visual cues may be used to:

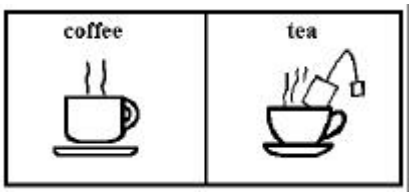
- promote more effective expressive and receptive communication
- provide reminders about behavioural expectations
- structure an activity or a period of time
- help with acquisition of new skills (e.g., following a sequence of steps)

Examples of visual aids

Choice board

A choice board provides a means to promote choice-making by a client, and can help foster a sense of control and personal independence, both of which are important for emotional well-being. It may also be used to indicate clearly when a choice is *not* available, hopefully reducing confusion and the anxiety or frustration it may bring.

Figure 3- Example of a choice board that a client may use to indicate a preference for a particular beverage (Picture Communication Symbols ©. PCS were used with the permission of Mayer-Johnson, Inc. © Copyright 1981-2002. All rights reserved worldwide).

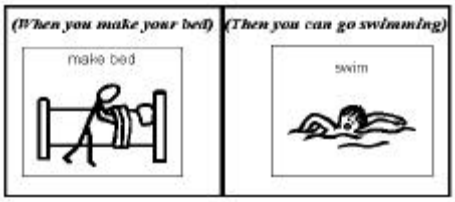


When-then' or 'first-then' board

This type of visual is used to make clear what has to be completed first, *before* a second activity can begin (often the first activity is a less pleasant or desirable one, such as making the bed before watching television). A *when-then* or *first-then* board can help decrease a non-conventional behaviour that is used as a means to escape from a less desirable task or activity by linking it (in a way the client can readily understand) with something that is more highly desired. In doing so, this may help motivate a client and increase his/her tolerance for delayed gratification. This type of board is a beginning step for teaching a schedule, educating the client that one activity can

follow another.

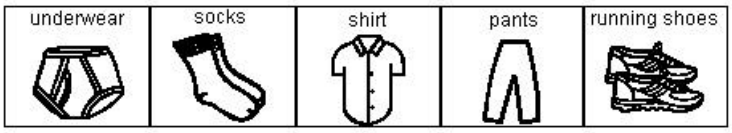
Figure 4- Example of a when-then board that can be used to help a client understand that a specific task (bedmaking) has to be completed before the second activity (go for a swim) can begin. (Picture Communication Symbols ©. PCS were used with the permission of Mayer-Johnson, Inc. © Copyright 1981-2002. All rights reserved worldwide).



Self-help board

A self-help board is used to help clients learn new skills or activities, by depicting each step in a new task. Once each step has been mastered, the self-help board may serve as a reminder should a step in the sequence be forgotten. Self-help boards may promote independence and a sense of accomplishment. They may also reduce frustration or anger related to difficulties recalling the steps in an activity.

Figure 5- Example of a self-help board that can be used to help a client master a new task or remember the steps in a sequence. (Picture Communication Symbols ©. PCS were used with the permission of Mayer-Johnson, Inc. © Copyright 1981-2002. All rights reserved worldwide).



Schedule board/calendar

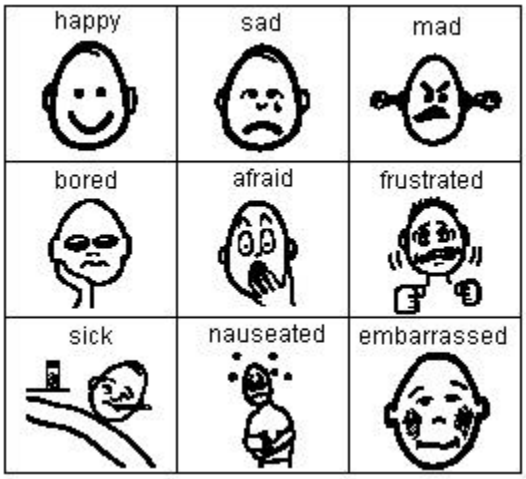
Schedule boards and calendars are used to provide structure to the client's day/life. They may help a client to see order and predictability in his/her world, prepare him/her for upcoming changes, and provide information about the activities of significant people in his/her life (e.g., when a particular staff person will be working next). Schedule boards and calendars may reduce stress and anxiety that are induced by a sense of uncertainty around transitions and changes in routine (and which may be expressed as non-conventional or maladaptive behaviours).

Figure 6- Example of a schedule board that outlines a client's daily activities. (Picture Communication Symbols ©. PCS were used with the permission of Mayer-Johnson, Inc. © Copyright 1981-2002. All rights reserved worldwide).

Specific Activity Board

A specific activity board contains the vocabulary a client may need to use in a specific situation. For instance, ordering food at a restaurant, or playing a game of bowling. A "feelings" board contains vocabulary to enable a client to express his/her feelings.

Figure 7- Example of a feelings board that a client may use to express his/her emotions or feelings. (Picture Communication Symbols ©. PCS were used with the permission of Mayer-Johnson, Inc. © Copyright 1981-2002. All rights reserved worldwide).



Other tools

Sheila Hollins and her colleagues from Britain have created a series of stories about situations or events that can be stressful or traumatic. These stories can be used to help prepare a client for an upcoming event (such as a trip to the doctor or a move to a new home), to promote disclosure of a traumatic experience (e.g. sexual abuse), or as a means to raise difficult/

sensitive issues, and provide counseling and emotional support (e.g. after the death of a parent). Coloured pictures (alone or with accompanying text) are used to convey a story about an individual who may be experiencing a similar problem, or coping with a comparable issue.

Assessing Mental Health Problems in Clients with Severe Communication Impairments

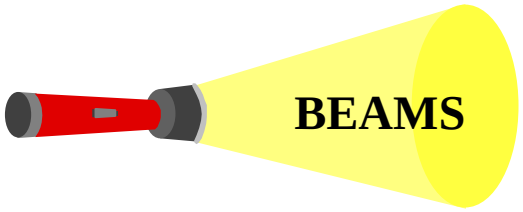
As we discussed earlier, assessing mental health problems in non-verbal clients can be a daunting task. This statement is related to several factors:

- the lack of firsthand information regarding the client's own thoughts and feelings, and the resulting need to rely on information that comes from other sources (generally, the level of inference goes up as the client's verbal skills go down).
- the presence of other conditions (e.g. medical, sensory) and/or medication side-effects which can complicate the picture by exacerbating or mimicking symptoms of mental illness.
- the need to modify standard diagnostic criteria that require verbal disclosure or which may have limited applicability to clients with severe intellectual and communication impairments (Pyles, Muniz, Cade & Silva, 1997).
- the finding that "classic" forms of mental illness (such as depression or mania) may be more difficult to identify than aberrant behaviour patterns (Cherry, Matson, & Paclawskyj, 1997).

Several instruments have been developed to assist with the identification of mental health problems in clients with severe

intellectual impairments as well as to evaluate treatment effects. These include the Aberrant Behavior Checklist (Aman & Singh, 1994), Diagnostic Assessment for the Severely Handicapped-II (Matson, 1995), Psychopathology Instrument for Mentally Retarded Adults (Matson, 1988), and Reiss Screen for Maladaptive Behavior (Reiss, 1988). These instruments are in the form of questionnaires which are completed by informants (caregivers, family members) who are familiar with the client. They may play a useful role in screening for the presence of possible mental health problems which warrant a more in-depth assessment, but should not be used as the sole means of making a clinical diagnosis.

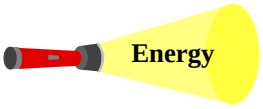
Figure 8– BEAMS (method to outline changes in client's baseline pattern of functioning)



We have developed a simple mnemonic to assist caregivers to identify when a client may require a medical and/or mental health assessment. We use the acronym "BEAMS" to outline changes (either an increase or decrease) in the client's baseline or typical pattern of functioning. Our list of behavioural equivalents for symptoms of mental health problems is not exhaustive and is intended primarily to illustrate the diversity of issues that may arise.

B 

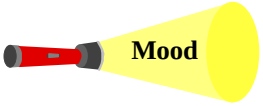
e.g., client avoids particular people or places; behaves more aggressively than usual; has started to hide possessions; runs away from staff; yells or screams for no obvi ous reason; has lost interest in a formerly preferred activity; per forms the same activity over and over.

E 

e.g., client will not go for walks; motor movements are sped up; cannot sit still; moves more slowly.

A 

(and Eating Behaviours) - e.g., client refuses to eat; throws plate on the floor; will not stop eating; eats non-food items; hides food away.

M 

e.g., client cries a lot; looks sad all the time; more irritable than usual; has frequent bouts of giddiness or silliness; does not show range of motions; looks anxious or worried.

S 

(and Night-Time Behaviours) - e.g. client sleeps a lot less than usual; cannot stay awake during the day; wakes up screaming at night; has difficulty falling asleep.

In general, these changes should be sustained over a period of approximately one week or longer (**duration**), should not occur solely within the context of a specific environment, task or person (**breadth**), and should be of sufficient magnitude to cause significant discomfort or dysfunction (**intensity**). If a caregiver has reason to suspect that a client has a medical and/or mental health problem, the steps that are listed under "How to prepare for an evaluation" in Chapter 10 may be a helpful starting point. Evaluation for underlying medical issues is extremely important since pain or discomfort may give rise to changes in behaviour (McGrath, Rosmus, Canfield, Campbell & Hennigar, 1998) and certain conditions (like hypothyroidism) can produce symptoms that resemble a mental illness. When in doubt, consult a health care professional.

Summary

In this chapter, we presented a framework for understanding and treating mental health problems in clients with severe communication impairments. We described some of the difficulties in assessing mental health problems in this population, and provided a mnemonic that may assist caregivers to identify when a client may require a medical/mental health assessment.

Do You Know?

1. How communication and sensory impairments have a negative impact on clients' social and emotional functioning?
2. What is the difference between conventional and non-conventional forms of communication?
3. Give two examples of two visual strategies?
4. What changes in a clients' behaviour indicate the need for a medical/mental health assessment?

Resources

Hodgdon, L.A. (1995). *Visual strategies for improving communication. Volume 1: Practical supports for home and school.* Troy Michigan: Quirk Roberts Publishing.

Hollins, Sheila et al. *Books Beyond Words*. Information about ordering books may be obtained from the Division of Psychiatry of Disability, Department of Mental Health Sciences, St. George's Hospital Medical School, Cranmer Terrace, London SW17 ORE, UK; Telephone 0181 725 5501 and Fax 0181 672 1070.

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