SAC
Speech-Language & Audiology Canada

Position Statement

Role of Speech-Language Pathologists in Concussion Management Position Statement

Position

It is the position of Speech-Language & Audiology Canada (SAC) that speech-language pathologists (S-LPs) are essential to quality, person-centred, interprofessional concussion care. S-LPs have a primary role in providing individualized, evidence-informed intervention to address the diverse communication and cognitive difficulties that affect day-to-day functioning following concussion, including the identification, assessment and treatment of cognitive-communication disorders.

Background

Awareness and understanding of the impact of concussion – a form of traumatic brain injury - is increasing in Canada. Physical, cognitive, communicative and emotional symptoms may follow a concussion. Although these difficulties usually resolve within four weeks of the injury, approximately 20% of individuals experience ongoing problems that interfere with return to regular activity (Ontario Neurotrauma Foundation [ONF], 2018).

A broad range of communication impairments can result from the complex interplay of cognitive (e.g., attention, memory, organization, reasoning, executive function), emotional (e.g., anxiety, depression) and physical (e.g., sleep, fatigue, pain, visual, auditory) symptoms that persist after concussion (MacDonald, 2017). Cognitive-communication disorders are a specific type of communication difficulty that result from cognitive impairments (Togher et al., 2014) and occur frequently after concussion (Hardin & Kelly, 2019; Eshel, Bowles, & Ray, 2019; Sohlberg & Ledbetter, 2016). Cognitive-communication disorders can affect auditory comprehension and information processing, verbal expression and discourse, social communication, reading comprehension and written expression (Białuńska & Salvatore, 2017; Binder, Spector, & Youngjohn, 2012; Crewe-Brown et al., 2011; Dines & Hux, 2018; Parrish et al., 2009; Popsecu et al., 2017; Ratiu & Azuma, 2017; Sohlberg, Griffiths & Fickas, 2014; Zakzanis, McDonald & Troyer, 2011). Stuttering and motor speech difficulties may also occur, although with less frequency than cognitive-communication disorders (Binder et al., 2012; Cherry & Gordon, 2017; Jang & Seo, 2016; Norman, Jaramillo, Amuan, Wells, Eapen, & Pugh, 2013; Roth, Cornis-Pop, & Beach, 2015). Communication and cognitive difficulties can significantly impact an individual's day-to-day functioning, social relationships and well-being, as well as return to work, school and play (MacDonald, 2017).

Speech-language pathologists (S-LPs) have specialized knowledge of communication disorders that follow traumatic brain injuries of all severities, as well as the interaction between cognition and communication (Katz & Kennedy, 2002). S-LPs are established members of brain injury rehabilitation teams (Togher et al., 2014; Scottish Intercollegiate Guidelines Network, 2013), and participate in interdisciplinary concussion care (Eshel et al., 2019; Hardin & Kelly, 2019; Ketcham et al., 2017; Knollman-Porter et al., 2019; Martino, Gardiner, & Wiseman-Hakes, 2019; ONF, 2014, 2017, 2018; Vargo, Vargo, Gunzler, & Fox, 2016) to provide support to people experiencing communication and cognitive difficulties.

While S-LPs may contribute to general concussion screening (Salvatore & Fjordbak, 2011; Dachtyl & Morales, 2017), speech-language pathology interventions primarily focus on alleviating prolonged communication and cognitive symptoms. The S-LP's role in concussion management includes assessment, as well as education and counselling for people with a concussion and their families. Speech-language pathology interventions emphasize functional reactivation of communication and cognitive skills, and include individualized strategies, accommodations and environmental modifications that facilitate optimal communication in daily activities (Eshel et al., 2019; Hardin & Kelly, 2019; Ketcham et al., 2017; Knollman-Porter, Constantinidou, Beardslee, & Dailey, 2019; Krug & Turkstra, 2015; Martino, Gardiner & Wiseman-Hakes, 2019). Evidence supports a range of speech-language pathology interventions for communication and cognitive difficulties (Cicerone et al., 2011; Cooper et al., 2017; Dahlberg et al., 2007; Dines & Hux, 2018, Kennedy et al., 2008; Mattingly, 2015; Sohlberg & Ledbetter, 2016; Vas et al., 2016).

Concussions are diagnosed by physicians, nurse practitioners or neuropsychologists. S-LPs recognize that establishing a diagnosis may be challenging in some instances (Harmon et al., 2019). Where the diagnosis of a concussion has not been confirmed or is contentious, S-LPs use judicious discussion of diagnosis and positive education while providing strategies to address the presenting communication and cognitive symptoms. S-LPs also collaborate with and recommend referrals to other health-care professionals (e.g., audiologists, occupational therapists, optometrists, physiotherapists and psychologists) to address the co-occurring conditions that are typical after a concussion.

SAC recommends consultation with S-LPs in the development of a pan-Canadian approach to concussion. Specifically, speech-language pathology services should be available as part of provincial/territorial concussion management across the lifespan, including involvement in return to learning, work and everyday life. SAC advocates for greater awareness of the impact of concussion on communication and recommends evaluation of communicative competence within concussion screening procedures. In addition, speech-language pathology university program curricula should address concussion management as a component of comprehensive brain injury education. Professional development opportunities should also be available for practicing clinicians. Development of speech-language pathology clinical practice guidelines and investment in research will help to advance speech-language pathology concussion management practices.

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