UTILISATION AND PERCEIVED EFFECTIVENESS OF TREATMENT FOR CHRONIC PAIN FOLLOWING STROKE

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BACKGROUND AND AIMS

Chronic pain (defined as pain > 3 months) is common following stroke, yet current evidence for effective treatments targeting chronic pain for this population is limited¹⁻³.

We aimed to identify current treatments utilised for chronic pain for people with stroke, and the perceived effectiveness of interventions utilised.

METHODS

Participants were directed to an online survey for people with stroke who experience chronic pain, advertised through various means including flyers, waiting room notices, newsletters, website listings and social media. Inclusion criteria included those who reported experiencing pain for at least 3 months, were over eighteen years of age and able to provide consent. Potential participants were excluded if they had been diagnosed with an additional neurological condition.

Participants completed questions regarding their demographics, duration and severity of pain (measured using the Numerical Rating Scale), any current treatments that they were receiving for pain and if they felt that these treatments were effective in treating their pain condition. They were also asked to nominate their perceived cause(s) of pain.

DATA ANALYSIS

Participant data was entered, summarized using descriptive statistics and is reported in Table 1. as either means (for age and pain intensity) or frequency (for access to treatment, reported effectiveness of treatment).

RESULTS

A total of 136 participants with chronic pain completed the survey. Most participants (N=127; 93%) reported that they were currently accessing treatment for pain. Despite good access to, and utilization of treatments for chronic pain, self-perceived effectiveness was reported to be poor for both medication and non-medication therapies, as indicated below in Table 1.

Table 1. Characteristics of participants, including utilisation of treatments, and perceived effectiveness

	Participants with chronic pain N=136
Age (mean, SD)	57 (SD 14.23)
Gender (female, frequency)	84 (62%)
Pain Intensity (mean/10, SD)	6.20 (1.81)
Accessing treatment for pain (n=)	127 (93%)
Accessing medication for pain (n=)	116 (85%)
➤ Perceived positive effectiveness	65/118 (47%)
Accessing non-medication therapy for pain (n=)	98 (72%)
➤ Perceived positive effectiveness	52 (53%)

Medication was more frequently used compared to therapy disciplines, but rates for both groups were high. The most commonly reported type of medication used for pain were anti-inflammatories, while physiotherapy was the most accessed therapy discipline. Use of multimodal approaches was common, with combination medication therapy being reported by 54 (47%) of participants taking medication, and 2 or more non-medication therapies by 43 (44%).

Figure 1. Frequency of medication use (by type) and therapy (by discipline)

Opioid medications were reported as being only the 4th most common, behind both antidepressants and anticonvulsants, which is consistent with current recommendations³ for neuropathic pain pharmacotherapy. However, participants reported that their most common type of medication used were anti-inflammatory medications, which is not supported by these recommendations.

Figure 2. Nominated cause of pain (N=136). N.B. Participants were asked to identify one or more causes that they believed contributed to their pain

Stroke survivors strongly reported that the causes of their pain were the stroke itself, followed by adaptive changes to their nervous system (Figure 2.). If these beliefs are not seem to be addressed by therapy, this could potentially contribute to a perceived lack of treatment effect.

CONCLUSIONS

Despite high utilisation of health services for chronic pain, almost half of the participants did not believe that their current treatment was effective. These findings reflect the impact of chronic pain in stroke survivors and their efforts to address this significant problem. Patients and health practitioners could be encouraged to re-evaluate the efficacy of their current pain management strategies. The findings are also a stimulus to replicate the study in the wider community, and further research to the understanding of contributions towards chronic pain following stroke, and development of more effective strategies.

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