Interventions for people with perceptual disorders after stroke: the PIONEER scoping review, Cochrane systematic review and priority setting project

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Plain language summary

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Plain language summary

After a stroke, individuals may have difficulty understanding information gathered through their sense of sight, hearing, smell, taste, touch or somatosensation (body position, temperature, etc.), known as perceptual problems. We estimate perceptual problems affect around 240,000 stroke survivors in the UK, limiting their ability to understand the world around them, affecting everyday activities and reducing quality of life. Healthcare professionals may offer different treatments; medicine, brain stimulation, or rehabilitation activities including puzzles, strategies or physical therapy. We wanted to find the best treatments for stroke-related perceptual problems.

We searched for all research on sight, hearing, smell, taste, touch and somatosensation perceptual treatments to find out (1) how well they worked, (2) what the research means for stroke survivors and healthcare professionals and (3) what research is needed next. People with stroke-related perceptual problems and healthcare experts produced this research together.

We found 80 studies, involving 893 stroke survivors, describing 93 treatments. Eighteen of these studies used higher-quality randomised controlled trial designs; 535 stroke survivors took part, testing 32 treatments. Randomised controlled trials are important as one-half of those involved receive treatment and one-half do not; they provide the best evidence about whether a treatment works. Most treatments were for visual or somatosensation problems. Each study was small, provided few details about the participants or their treatment, and tested very different treatments. Few measured the effect of treatment on everyday life: only seven measured stroke survivors' ability to take part in everyday activities. No trial asked stroke survivors about their experiences with the treatments offered.

We do not have enough research to identify which treatments benefit the lives of people with strokerelated perceptual problems. We need more research into perceptual problems, especially the impact it has on stroke survivors' lives, as well as bigger studies into well-described treatments, that measure the impact of the treatment on people's lives.

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This article

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