



FOCUS ON RESEARCH

IMPROVING STROKE CLINICAL TRIAL DESIGN USING CLINICAL TRIAL DATA

Researchers:

Dr M Ali, Prof KR Lees, Prof I Ford & Prof M Brady

Aim

Examine the effect of stroke-related problems on stroke survivors' quality of life.

Project Outline/Methodology

People with visual or communication problems may be excluded from some types of stroke research due to difficulty in informing, consenting and collecting information from them. If these patients are not included in stroke research then we lack good information on how to treat them. Recovery and quality of life in these stroke survivors are poorly described. As quality of life measures are not usually collected in some types of stroke research, it is important to examine how the information that is collected relates to quality of life.

We used a database of anonymised stroke survivor information to look at:

- How many patients with communication and visual problems were included in stroke clinical trials
- What recovery was like in these stroke survivors
- The relationship between movement-related problems after stroke and quality of life
- How well commonly used stroke trial measures reflect quality of life in stroke survivors.

Key Results

1. Those with communication problems were well represented in stroke clinical trials (~30% of those in a trial). Many stroke survivors (24%) still had speech problems at 3 months after stroke. Visual problems affected 28% of people after stroke. Of those who were involved in a clinical trial, 21% still had visual problems at 3 months after stroke.
2. Movement problems appeared to be more closely associated with poorer quality of life when compared with non-movement issues such as speech & visual impairment.
3. The modified Rankin Scale, which is commonly used in stroke trials, was more closely

associated with stroke survivors' quality of life than any of the other common measurements used in stroke trials.

Conclusions

We examined populations of stroke survivors for whom there is little good quality information. We used thousands of stroke survivors' data to answer these questions, making our findings very robust. We described how common these problems are and the recovery profile for these patients. We examined their quality of life and made recommendations of which of the common stroke trial measures best take into account the stroke survivors perspective.

What does this study add to the field?

Much research relating to communication or visual deficits after stroke are based on small samples or specific subgroups of stroke patients; we described how many people were affected, how many recovered and their quality of life using data from thousands of patients. Quality of life is an important issue but hasn't been examined well in emergency stroke research. Our study also provided those who run clinical trials with important information on which measurements also give a good indication of stroke survivors' quality of life.

Implications for Practice or Policy

Our findings help to plan new trials of treatments for visual problems after stroke by describing how many people are affected and at what time points treatments could be started. It also gives trialists an idea of which measurements will take into account stroke survivors' quality of life, so that this can also be considered when deciding whether a treatment has an overall benefit.

Where to next?

Our work on visual and communication problems after stroke will help to plan new trials. We are planning several projects including looking at the best method to identify visual problems after stroke, and what happens to people in the NHS after a visual problem has been identified.

Further details from:

Dr. Myzoon Ali, NMAHP Research Unit, Buchanan House, Glasgow Caledonian University, G4 0BA
myzoon.ali@gcu.ac.uk