

Prevalence of clinician and patient reported outcomes after stroke in young adults: a systematic review and meta-analysis

I am a final-year medical student at University College London, and this summer I was grateful to receive a BIASP Summer Bursary for my involvement in a project with Professor David Werring's team at the UCL stroke research centre. I have been assisting with a project titled: *"Prevalence of clinician and patient reported outcomes after stroke in young adults: a systematic review and meta-analysis."*

This aimed to investigate the short and long-term affects stroke can have on the young adult population (<60 years old), including stroke recurrence, functional outcomes and non-motor outcomes. The criteria for population inclusion were populations defined as 'young adult' or similar, with ischaemic stroke or intracerebral haemorrhage from inside or outside a hospital system, and the online databases searched were MEDLINE, Embase, PsycINFO, and Web of Science using specified search terms. The outcomes searched for were: Mortality, functional outcome, fatigue, depression, anxiety, sleep disturbance, social participation, pain, recurrences, cognitive impairment, return to work, sexual dysfunction, bladder/bowel incontinence and ADLs.

7645 papers were initially included, and with 360 being selected for abstraction, which is being carried out. I have helped with developing the project protocol, systematically screening online databases (abstract and full text), developing the excel proforma for data analysis, and data abstraction. I am currently learning quantitative analysis in Stata to perform descriptive analysis of the study methods and a pooled random-effects meta-analysis of the outcome data extracted. I then aim to present results from these studies at the 2027 BIASP trainees meeting and support the group to submit for publication in a peer-reviewed journal.

Systematic reviews and meta-analyses are cornerstones of medical research and gaining experience in them early on in my medical career has been invaluable. Completing this project through the bursary has allowed me to learn a range of new academic skills, and I now feel much more confident critically reviewing research, understanding study methods, interpreting results, engaging/carrying out statistical analysis, and assessing biases.

Receiving the bursary has also allowed me to be in London throughout most of the summer, meaning that I could dedicate more time to the project and work alongside the team in their office. Working alongside a supportive team has been great for my learning, and I hope to remain with the team for the write-up and publication process.

Most importantly, I feel honoured to be able to contribute to such an important area of research. As part of my previous clinic placements, I have spoken to many patients who have experienced strokes, including younger patients, and seen first-hand the significant impact it can have on their lives, both in the short and long term. Having the opportunity to help improve understanding and research in this area is a real privilege.

The BIASP Summer Bursary has provided an invaluable opportunity to develop fundamental research skills that I hope to build on throughout my career. I am extremely grateful to the team, in particular Prof Werring, Dr Ozkan and Dr Mussa for their support throughout the project, and I look forward to continuing to work with them. I would also like to thank the BIASP team for providing me with this opportunity.