A Survey on the Screening and Diagnosis of Unilateral Spatial Neglect (Work in Progress)

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Background

- Unilateral Spatial Neglect (USN) is a syndrome which manifests as marked inattention of contralesional space and is often accompanied by poor prognosis in terms of functional recovery (1-4).
- Several tools are available for screening and diagnosis of USN. This is an important step for clinicians before formulating a clinical care plan, however there is no universally-agreed gold standard for diagnosis and no universally-agreed operational definition of neglect for guidance (1, 5).

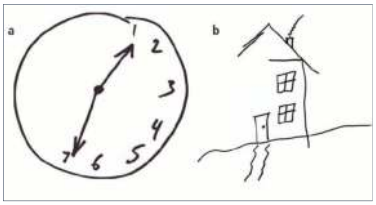

Figure 1: Depiction of drawing tests for identifying USN

- Selection of tools may vary among clinicians depending on differing definitions and perceived urgency of USN. Clinical training and expertise may also be a factor in the selection of different tools and assessments (1, 6, 7)
- Our aim is to identify current practice with a view to forming consensus on how best to screen and diagnose USN.

Research Questions

Our study will answer the following questions and this poster begins to answer Q1:

1. Which screening and diagnostic tools are used by which professional groups in which countries?

2. Why are these tools preferred by clinicians?

3. Which tools (or combinations thereof) listed or unlisted in the survey are considered particularly useful in screening and diagnosis of USN?

Methods

This international online survey consisted of closed and open questions about clinicians' use of screening and diagnostic tools in the following four categories:

i) **Cognitive** Tools (e.g. cancellation, drawing tests)
ii) **Functiona**l Tools (e.g. Catherine Bergego Scale, Functional Independence Measure)
iii) **Neurological** Signs & Symptoms (e.g. extinction, anosognosia, motor neglect)
iv) **Neuroimaging** (free text regarding imaging for screening/diagnosis of USN)

- Categories **i-iii** contained a list of tools and assessments. Respondents were asked to indicate for each one whether or not they **use it routinely**, by indicating whether this is due to **institutional policy** or **professional choice**, or if they **do not use** it at all.
- The survey was hosted on the online platform SelectSurvey, and distributed amongst potential respondents via professional organisations internationally, and via Twitter. Individuals were also invited to distribute the survey within their own networks.
- Participants were eligible to participate if they were clinicians currently practising in the rehabilitation of stroke patients with USN.
- To fully answer questions 1 & 2, we will use multifactorial logistic regression analyses to identify factors influencing the selection of individual tools for USN.

Respondent Characteristics

- The survey attracted **454** responses from 12 professional groups based in the UK, USA, Italy, 17 other European countries, and 13 non-EU / non-US countries across **5** continents.
- Most respondents were from the **UK** (172), **USA** (99), and **Italy** (76), and had a median **10 years** of clinical experience. Respondents reported seeing more than one patient with USN every 2 months (67%).
- Respondents were predominantly **occupational therapists** (179), **psychologists** (84), **medics** (70) and **physiotherapists** (55) working in an **in-patient** setting (50%).

Results

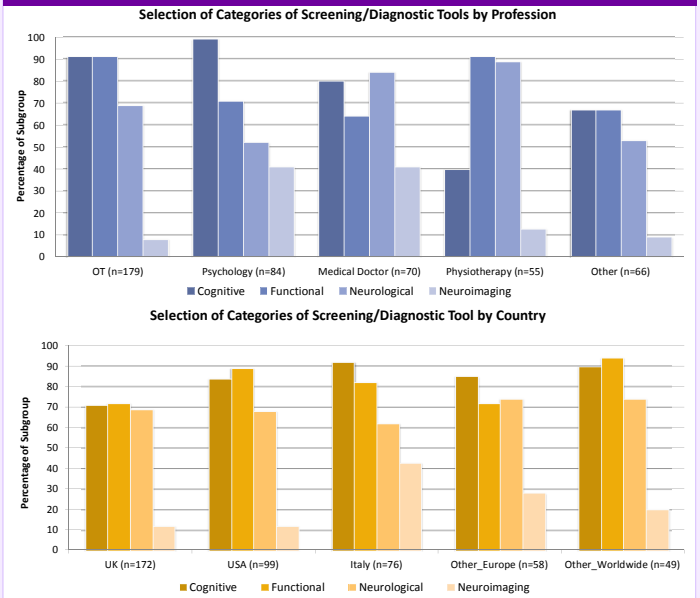

Figure 2: Percentage of professional subgroups (2A) and country subgroups (2B) who indicated use of each **tool category**.

- **368** (82%) respondents use **cognitive** tools. Psychologists were most likely, with medics, 'others' and physios all significantly less likely. Active researchers and those outside of Europe/USA were also more likely.
- **361** (80%) respondents use **functional** tools. OTs and physios were most likely, with other professions significantly less so. Use was higher in Italy and 'other worldwide'**.**
- **311** (69%) respondents use **neurological signs/symptoms**. Physios were most likely, with psychologists and 'others' least likely. Active researchers and those working in outpatient settings were also more likely.
- **91** (20%) respondents use **neuroimaging**. Medics and psychologists were most likely, and use was higher in Italy. Those working in outpatient settings were also more likely.
- We have started to examine the tools used in each category. The most popular, for Cognitive, Functional and Neurological respectively, were **line cancellation** (292), **functional observation** (309), **and neurological observation** (293).
- Next steps: further analyses to answer all the research questions. Free text responses will also be included to enhance the richness of data from practising clinicians.

Preliminary Conclusions

- The results demonstrate that professional group is consistently associated with tool category selection. Country and research activity are also relevant factors.
- There are professional differences in the selection of certain tool categories: cognitive tools, for example, are used the most by psychologists and the least by physiotherapists.
- There are also differences between countries: respondents from Italy use neuroimaging the most compared to other countries.
- Full results are expected to be published in a special issue of Neuropsychological Rehabilitation in early 2020.

References & Notes

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