

Health Care Professionals' Perceptions of a Vision Screening Service

Warrington and Halton Hospitals
NHS Foundation Trust



Kathryn Jarvis¹, Emily Grant¹, Fiona Rowe^{1,2}
¹School of Health Sciences, University of Liverpool, UK

² Department of Ophthalmology, Warrington and Halton Hospitals NHS Foundation Trust, Warrington, UK



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LIVERPOOL

Introduction

Whilst primary visual and visual perceptual deficits are recognised to have an effect on rehabilitation (Bowen and Lincoln, 2007; Clavagnier et al., 2007; Ma-Wyatt and McKee, 2007), there are no published studies addressing the impact of a vision screening service on the recovery of function following stroke.

In a collaboration between an Institute of Higher Education and a NHS Hospital Trust, a multi-disciplinary research team aimed to address the question 'Does objective information about the nature of visual impairment post stroke, influence functional outcome?' This research comprised a quantitative study (pilot Randomised Controlled Trial) and a qualitative study.

The Quantitative Study required the provision of a vision screening service to a stroke rehabilitation unit. All patients with suspected visual impairment post-stroke were referred to an orthoptist for a full vision assessment. Where a patient was found to have a visual deficit as a result of the stroke, met the inclusion criteria for the Randomised Controlled Trial (RCT) and consented to participate, they were enrolled in the RCT. The results of the quantitative study will be published at a later date.

The Qualitative Study is the focus of this poster. This study aimed to capture the health care professionals' perceptions of the vision screening service provided as a part of the quantitative study.

Primary Aim

To use a focus group to address the question 'What are health care professionals' perceptions about a vision screening service on a stroke rehabilitation unit?'

Methods

This study received favourable ethical opinion by NRES on 25th July 2007.

All health care professionals who had been involved in the quantitative study were invited to participate in a focus group. The focus group took place on the stroke rehabilitation unit. A 'SWOT' framework was used to lead the group (n=4) in a semi-structured format. The facilitator structured the focus group by establishing the Strengths, Weaknesses, Opportunities and Threats of having a vision screening service on the stroke unit.

The facilitator used a social constructionism theoretical approach to guide the focus group; participants were encouraged to express their views and consider their own views in the light of other opinions expressed. The focus group was audio-recorded and transcribed verbatim.

The data were analysed using a congruent methodological approach (Duggleby, 2005) which is compatible with a social constructionism perspective. A thematic analysis was undertaken and themes were established. The data were revisited considering the group interactions, with the aim of establishing whether there was evidence that the interactions supported these themes. The NVivo 8 software package was used to support the data analysis.

References

Bowen, A. and Lincoln, N. (2007) Cognitive rehabilitation for spatial neglect following stroke. *Cochrane Database of Systematic Reviews* 2007, Issue 2. Art. No.: CD003586. DOI: 10.1002/14651858.CD003586.pub2.
Clavagnier, S., Prado, J., Kennedy, H. and Perenin, T. (2007) How humans reach: distinct cortical systems for central and peripheral vision. *Neuroscience Update*, 13 (1), 22-7.
Duggleby, W. (2005) What about focus group interaction data? *Qualitative Health Research*, 15, 832-40.
Ma-Wyatt, A. and McKee, SP. (2007) Visual information throughout a reach determines endpoint precision. *Experimental Brain Research*, 179, 55-64.

Results

Five main themes were identified during thematic analysis of the focus group.

Multi-Disciplinary Team Awareness of Vision

All participants in the focus group indicated that they thought a visual screening service was important. The vision screening service was viewed as promoting knowledge of visual problems, raising their priority and identifying their impact on general rehabilitation.

Impact on Rehabilitation Process

There was evidence of information from the visual assessment being used to inform clinical reasoning when deciding whether additional therapy would be beneficial.

Identification of Methodological Flaws in RCT

The participants reported that practice on the Unit had changed as a result of the research and the accompanying vision screening. Staff had begun to consider the general impact of visual impairment and were trying to ensure that the environment was adapted to suit the patient's visual status. This change in practice was identified as a potential source of contamination between the two groups in the pilot RCT.

The Future-Without the Vision Screening Service

Participants were asked how they felt about the termination of the vision screening. There was evidence of a sense of loss for the routine vision screening service. The participants indicated that the vision screening service was a valuable asset to an organised stroke service.

The Ideal Vision Service

It was felt that it was important that the vision service was provided by a eye specialist with recognised skills in assessing and treating stroke survivors. The service should be responsive and flexible; this was identified as particularly important for service-users who are an in-patient for a short time.

this [research] changed how we look at things and how we assess



And I think by having the study, it's like giving us a taste of...what [we] could have as an addition to the...the service we already provide

I think the minimum [vision] service would be at least somebody there, a specialist with an interest in stroke or neuro deficit, on the other end of the phone and maybe even for a written referral, to go to further assessment

we too frequently forget about visual field defects and strokes

if it makes one or two people think well actually yeah I'm probably not safe to just go and drive

my gut feeling is that there won't be much difference between the two groups because I think just us knowing that they [the patient] had a visual deficit, regardless of what that visual deficit was, I think we changed our practice.

Conclusions

- The vision screening service had changed practice of health care professionals
- The termination of the vision screening service was perceived as a reduction in quality of the stroke service.
- The health care professionals' increased awareness of vision may have impacted on the validity of the RCT results, through contamination of intervention between the groups.
- The mixed methodology of quantitative and qualitative studies was a strength of this research and provided different information giving a more complete answer to the research question.
- The main limitations of this study was the lack of service-user input