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Authors: A. Hebda-Boon, B. Zhang, A. Amankwah, A. Shortland, D. Morrissey

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O 045 - Factors influencing gait analysis related decision-making of clinicians managing children and young people with cerebral palsy: A qualitative study.

A. Hebda-Boon¹, B. Zhang¹, A. Amankwah¹, A. Shortland², D. Morrissey¹

¹Queen Mary University of London, Sport and Exercise Medicine, London, United Kingdom

²School of Biomedical Engineering and Imaging Science, King's College London, London, United Kingdom

Introduction

Analysis of gait is embedded in assessment and treatment planning for children and young people with cerebral palsy(CYPwCP). The reasons for using gait analysis(GA) outputs vary between professional groups and between individuals within each group and can be often underused or not fully understood by clinicians. Training opportunities should enable professionals to achieve the required expertise to ensure decision-making processes optimally impact on patient outcomes.

Research Question

We aimed to explore the interaction of training, expertise and application of GA methods to inform enhanced educational initiatives to improve the clinician's engagement and utilisation of with GA therefore maximising the chances of intervention effectiveness and improvement of patient outcomes after GA.

Methods

Semi-structured interviews were conducted with a purposive sample of 20 clinicians with varying level of practice in GA, varying level of experience (but >6 months), varying professions, training in GA and mixed sex. Interviews were audio-recorded, anonymised, transcribed and analysed using the Framework method(Ritchie 2014).

Results

Factors that influence the way that GA is used for CYPwCP were grouped in three domains: access to training; access to equipment/GA outputs and a role/reasons to use GA. Experience was a common enabling factor, particularly to role and training. Initial descriptive analysis has enabled construction of an analytical framework (Fig 1).

Discussion

Our findings show that it was difficult for clinicians to be at complementary levels across domains.

Some participants reported facilitators in two domains but barriers within the third leading to *frustrated or hesitant user status* and compromised treatment decisions. Participants in position of *confident non-users* were no longer using GA for clinical decision-making for CYPwCP but were highly trained with access to GA equipment. *Confident experts* were participants who had an appropriate level of training matched with adequate equipment or received and could expertly interpret adequate GA outputs for the purposes of recognised in-role clinical decision-making. Confidence and expertise gained at any level of practise can initiate a virtuous circle of *Experience* and continuous advancement for clinician themselves and for others (by teaching, service development, career progression). Operating at lower level in one or more domains may interrupt the *Experience* loop and result in failure to progress. This study introduces the ***Experience-Equipment/Roles/Training (Exp-ERT) Framework*** which identifies the interrelation of domains impacting on how GA is used in practice. Here, the prerequisite to achieving expertise may not only be the seniority of position but gaining experience within the domains at the complementary levels. The Framework may serve as a useful analysis tool to diagnose individual clinician's barriers to confident expertise and support professional development planning. The transferability of the framework to similar clinical tasks is worthy of parallel study.

References

Ritchie J., (2014) Qualitative Research Practice: A Guide For Social Science Students And Researchers. 2nd Ed. Sage: London ISBN 978-1-4462-0911-0

Figure 1 The EXP-ERT Framework (Experience - Equipment/Roles/Training). The interrelation of domains and themes identified in the study.

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