

necessarily those of the NHS, the NIHR or the Department of Health

24 DEVELOPING THE PHYSIOTHERAPY SERVICE DURING BONE MARROW TRANSPLANT (BMT) AT GOSH

Lucy Waller, Sophie Truman, Catherine Moloney, Lucy Alderson. *Great Ormond Street Hospital for Children NHS Foundation Trust, UK*

10.1136/bmjpo-2023-GOSH.11

Background GOSH is the largest Paediatric BMT centre in the UK, performing over 100 transplant procedures per year. Patient survival is increasing; complications associated with long term survival include functional difficulties and physical comorbidities. Evidence supports increasing activity and delivering physiotherapy through BMT to benefit functional and physical outcomes.

Historically, the Physiotherapy service responding to problems in patients undergoing BMT was reactive. Referrals at crisis point were associated with loss of function and delayed discharge in some cases. With a small increase in staffing, a proactive service was developed aiming to keep children active through BMT whilst maintaining responsiveness to changing presentations.

Method To ensure our service reflected evidence and clinical expertise, we systematically reviewed literature and experience across UK children's hospitals. Consensus was sought regarding best practice within the GOSH MDT and an expert national group of Physiotherapists was established. A new Physiotherapy BMT service pathway was proposed.

Results Every family and patient listed for BMT is invited to attend a virtual pre-BMT multi-professionals clinic. Each patient completes age-appropriate baseline standardised assessments on admission and discharge. Regular, timetabled physiotherapy sessions, at least twice a week, are offered throughout admission. Increased physical activity on and off the ward is encouraged by the MDT. A physiotherapy information pack is provided on discharge and onward referrals to community services made where indicated. Anecdotally these referrals have reduced following the change in service. Physiotherapy is now also part of a complex GVHD MDT clinic.

Conclusion Physiotherapists are ideally positioned to pre-empt deterioration in function and reduce risk of secondary complications in patients going through BMT. The pro-active approach to the service changes have been well received by the MDT, families and patients. Long term follow-up by the MDT is indicated. A formal service evaluation of outcomes and experience is in process.

34 INTERNATIONAL REGISTRY OF CHILDREN WITH EPILEPSY REFERRED FOR KETOGENIC DIET THERAPY

¹Elizabeth Neal, ²Victoria Whiteley, ³Elles Van der Louw, ³Sarita Van den Berg⁴Zoe Simpson, ⁴Christin Eitze, ⁴Suresh Pujar, ⁴Isobel Hardy, ⁵Alasdair Parker, ⁵Nicole Mills, ⁶Anita Devlin, ⁶Ruth Ord⁷Lieven Lagae, ⁷Kirstel van de Kerckhove, ¹J Helen Cross, ¹Natasha Schoeler. ¹UCL Great Ormond Street Institute of Child Health, UK; ²Royal Manchester Children's Hospital, Manchester University NHS Foundation Trust, UK; ³Erasmus Medical Centre, Rotterdam, The Netherlands; ⁴Great Ormond Street Hospital for Children NHS Foundation Trust, UK; ⁵Cambridge University Hospitals NHS Foundation Trust, UK; ⁶Great North Children's Hospital, The Newcastle upon Tyne Hospitals NHS Foundation Trust, UK; ⁷UZ Leuven, Belgium

10.1136/bmjpo-2023-GOSH.12

Objective Although effectiveness of ketogenic dietary therapy (KDT) as a treatment for drug-resistant epilepsy has been demonstrated in clinical trials, key research questions remain; many best addressed by a collaborative approach. We aim to establish an international registry of individuals with epilepsy referred for KDT to determine long-term clinical and safety outcomes and identify the most suitable candidates.

Methods To determine data items for inclusion in the registry, dietitians, neurologists, nurses, clinical psychologists, biochemists and other KDT healthcare professionals were invited to partake in a two-round Delphi survey. Participants indicated the degree to which they agreed/disagreed with inclusion of each item. Pre-defined thresholds of $\geq 75\%$ (strongly) agree and $< 15\%$ (strongly) disagree were adopted. Agreed data items were entered into an electronic registry platform using RED-Cap software. Three UK and two European KDT centres are currently piloting data entry using the registry platform and will report on its acceptability and feasibility of use via a questionnaire.

Results 153 participants across six continents responded to the Delphi, including all healthcare professions within KDT multi-disciplinary teams. 70 items reached agreement threshold, including sociodemographic, medical and dietetic data at baseline (referral), follow-up (routine appointments after starting diet) and post-diet.

Feedback so far from pilot centres indicates that data items are easy to understand and time taken for data entry is 'about right', although additional funding for dietetic and clinician hours would be needed for long-term implementation.

Conclusions With support of the international KDT community, we have determined data items for inclusion in an international registry. We await full feedback on acceptability and feasibility of use of the registry platform ahead of planning for wider roll-out. Patient and Public Involvement work will explore the possibility of a patient/parent registry section.

Acknowledgements for funding or support British Dietetic Association; Nutricia Advanced Medical Nutrition

38 REDUCING NOISE LEVELS IN THE NEONATAL INTENSIVE CARE UNIT: A QUALITY IMPROVEMENT PROJECT

Michela Vozza, Ellis Scully, Cristine Sortica da Costa. *Neonatal Intensive Care Unit, Great Ormond Street Hospital for Children NHS Foundation Trust, UK*

10.1136/bmjpo-2023-GOSH.13

Background Noise in the Neonatal Intensive Care Unit (NICU) can significantly impact on the neurodevelopment of both term and preterm infants. Excessive sound stimuli may cause abnormal brain and sensory development in preterm infants, as well as potential cochlear damage and hearing loss. To mitigate these risks, the American Academy of Paediatrics recommends noise not exceeding 45 decibels (dB) in NICUs. Additionally, continuous exposure to noise in the NICU can affect the well-being of parents and healthcare professionals.

Aim Our objective was to collect data and assess noise levels on NICU to understand the factors associated with high and low levels of noise. Our further aim was to use the data to promote education about the negative impact of noise for term and preterm infants and increase staff awareness on how to reduce noise levels.