

Minute of the Derby Medical Society Open, Meeting 4th December 2018
Derby Medical School Lecture Theatre
Breathe Magic

Apologies

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Introduction

A warm welcome was extended to all attendees from the President, Miss Hewitt. A special mention was made for Inayah Farooq, aged 10, the youngest attendee to a Derby Medical Society Meeting.

Skye , Richard and Rosie from Breathe Magic were introduced.

Skye is an experienced paediatric OT and works for the NHS. Her role is to have clear and effective outcomes for the work done with the children who work through the Breathe Magic programme.

Miss Hewitt introduced Graham Johnson (Consultant in Adult and Paediatric A&E at RDH). He has an 8 year old son who had a neonatal stroke leaving him with a right sided hemiplegia and other neurological effects. Harry doesn't let it hold him back. Graham and his wife have tried various things over the years to help with activities of daily living and he has also had various operations over the years to help with his progress. As he grew older, he began to get negative and become neglectful about his physical impairments.

Graham had heard about Breathe Magic through various media and met them earlier this year. Harry was assessed and started their Easter camp in 2018. For Harry and his family, it has proven to be the single best intervention. The intensive course increased his confidence and has made a huge difference to his QoL. Harry is now much more confident and independent in his functioning as a direct result of the course he completed with this organisation.

Presentation

Skye, a paediatric OT gave a presentation about the organisation. Her personal background is that she is from Australia where she started work for 15 years ago and began working in the UK 9 years ago.

She set the scene by asking the audience to imagine a magician walking into the hospital. This is how Breathe Magic project began. The intensive therapy programme is a part of the work that this charity does. It is a programme for children with hemiplegia and brain injury with asymmetrical loss of function.

From inception, Breathe Magic has won numerous awards from NHS improvement as well as multiple other organisations in recognition of the work that they do. Breathe Magic is involved in lots of different projects.

Breathe Magic Mission

Programmes are there to provide a service for volunteers, carers, team members and all other people who come across the programme to help or work with the team. The charity exists to make long term changes.

The ambition is that it becomes mainstream and that participants get the persistent, long term changes from the programme.

All the programmes are internally and externally researched so that arts and health are represented with an evidence base to allow the greatest impact with each programme that is run.

Statistics

1/1300 young people have hemiplegia.

60% experience psychological and mental well-being challenges.

Every 30 mins, a child experiences a brain injury and 20% will be moderate to severe.

It is well known that therapy can be boring, repetitive, intensive and then frustrating for the users.

This programme allows the use of the magic to help physical and mental health well-being.

The programme is goal-orientated and modelled on HABIL (Hand-arm bimanual intensive therapy). They work to promote confidence, resilience and self-esteem and also give the skills to cope in today's society.

What is bimanual intensive therapy?

This is the acquisition of two-handed skills through the repetition of carefully chosen, goal-specific, bimanual activities and magic tricks.

Basic skills include putting on coat, two-handed handshake, pushing a door open with both hands. The workers at Breath Magic employ the use of magic tricks to develop these skills.

The magic tricks mean the children have an empowering experience as they have skills other children do not have

The course involves 60 hours of 1 to 1 intensive therapy. This is with a 10 day camp delivered over a 12 day period. This is then followed by a further 18 hours over 6 months. A total of 78 hours direct therapy is completed by the end of the programme. These sessions are delivered through clubs to enhance the magic skills and the activities which they have learnt. By continued therapy, it allows introduction of new magic tricks.

In addition, pre-post assessments, post-course assessments and 6 month assessments are undertaken to allow an objective measure of improvement through the programme.

It is also helpful for the research undertaken by the team to assess the success of the work being undertaken.

Model of Breathe Magic

The age range is 7-18 years old and has a group model. This allows teaching of functional activities with a scaled progression. Active learning is undertaken which is enabling and also positive.

A 1 to 1 interventionist and a magic trainer completes the course with the patient. This helps with enabling and nurturing the child and allows developing of a relationship with a single contact within the organisation. Furthermore, it allows each child to actively learn and developing throughout the course.

Magic Time

Skye then introduced Richard. He has been doing magic for 30 years and mainly does small magic which is what they teach on the course.

He then performed magic with a piece of thread and a cup of tea.

In Breathe Magic, there are 7 magicians and 5 are in the inner magic circle. A variety of magic tricks are taught to the children. He explained that there is lots going when magic is being performed as there is dual-reality and lots of it is about communicate. This develops further skills for the children.

Richard then performed a magic trick of the jumping balls.

This is the trick shown by an OT and the movements which are needed in order to do the trick. The tricks allow development of motor skills. Each skill can be applied to real life situations including supination, elbow extension, wrist extension, two-hand interplay etc.

The intensity of the magic which drives the programme forward is due to the drawing point for the children.

During the course, children are encouraged to put their coat on a hanger, carry boxes with magic kit inside, put on their name badges and also complete practice diaries which are specific tasks that they need to be working on and practice them. This further develops their motor skills.

Bimanual play

The children are also taught circus tricks and whole body movement is needed for these tricks. Relay races, ball games and anything needing bimanual activities is encouraged. If the helper hand (the side of the hemiplegia) is not used then you are kept out of the game.

Cutlery skills are also developed during the course and these skills are practiced during snack and lunch time. Food has to be navigated by the children. Magic trainers and clinical leads are present throughout to help problem solve and develop those skills.

Every minute of the course is utilised and the break time is still scaffolded learning for the children.

Costumes

During the course, the children also have to make their own costumes. After 2 weeks, they have made their own costumes and also performed using those costumes. They sew, thread needles, make knots with thread and keep their boxes safe. They also have glitter bomb days using crafts and learn how to make bow ties. All the items that they have crafted are then put on show at a performance at the end of the course. The children do this well despite their initial reluctance.

Why use bimanual intensive therapy?

Supported by NICE spasticity guidelines as well as European Consensus. Intensive therapies research has shown that it improves functional benefits compared with medical interventions such as botox.

Bimanual therapy is an effective evidence based intervention for CP children.

Outcomes

The research from assessing outcomes has shown the following:

1. Post-course hand use increased to 93% and 86% at immediate and 6 month follow-up.
2. 94% goal attainment at 3 months with either maintenance or further improvements at 6 months.
3. Improvements in spontaneous use also increased using assisted hand assessment (used for more dense loss)
4. Two minute improvement in speed of grasp and release of items.
5. Reduction in care support hours - up to 4 hours / day
6. Impairment severity did not impact on the degree of change.

Furthermore, there are neurological changes following bimanual intervention on fMRI. The children have an “It’s ok to be me” attitude and the “magical effect” on their self-confidence.

The charity can help with individual funding requests and also considering setting up more local groups.

To finish, there was a short video showing children showcasing the skills they had learnt through the course.

In 2019, further courses are planned for Gloucestershire, London and the Midlands.

Prior to closing the session, there were questions from the floor.

Summary:

Breathe Magic gave an inspirational talk about the incredible work they do by combining the power of magic to enable young people to lead more fulfilled lives by allowing them to develop skills needed to function as a part of society.

3 key learning points:

- 1) Magic Circle magicians teach magic tricks which have been designed to develop hand and arm function, cognitive abilities, self-confidence and independence
- 2) Children and their carers can be affected long-term with the psychological impact of physical disability. Programmes such as Breathe Magic allow an increase in confidence and also improve long-term outcomes for developing skills to allow the children to manage independently
- 3) Magic can be incorporated in many different aspects of healthcare to improve outcomes for neurological deficit rehabilitation and allows “medical to meet magical”.