Newsletter

ISSUE 2 MARCH 2016

WELCOME TO THE SECOND QUARTERLY NEWSLETTER OF THE NEW ZEALAND PEDIATRIC TRAUMATIC BRAIN INJURY CONSORTIUM (PTBIC)

A concerted effort has been made to distribute this newsletter in time for Brain Awareness Week 2016! For those of you who have not attended before, this is an annual, interactive public event organised by the University of Auckland in partnership with the Neurological Foundation of New Zealand and Brain Research New Zealand (BRNZ). The week starts with *Brain Day – Your Amazing Brain* on Saturday, 12 March from 9.00 am to 3.00 pm. This interactive event will be held at The University of Auckland's Tamaki Innovation campus, 261 Morrin Road, St Johns, Auckland.

In addition to Brain Day, the 15th, 16th and 17th March will see a series of research panel discussions being held from 6–7:30 pm at the Centennial Theatre, Auckland Grammar School on Mountain Road. The panel discussions include: "The Young Brain"; "The Creative Brain" and "The Changing Brain" chaired respectively by Dr Jessie Jacobsen, Associate Professor Ralph Buck and Associate Professor Cathy Stinear. For more details and to register for the evening panels, see http://brainweek.co.nz/events/

We look forward to seeing some you at the NISAN stand on the Saturday!

Regards,

Kelly Jones

Senior Research Fellow, National institute for Stroke and Applied Neurosciences (NISAN), Auckland University of Technology (AUT)

MISSION STATEMENT

Our goals are to 1) expand understanding of TBI during childhood and adolescence and 2) improve outcomes of affected children and their families by promoting a collaborative approach to research.

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Teacher knowledge of TBI symptoms

Dr Rosalind Case
Cairnmillar Institute

In conducting the initial phase of the Consequences of Brain Injury In Childhood (COBIC) study, led by Associate Professor Nicola Starkey, we examined children's functioning 12 months after mild traumatic brain injury (mTBI). As part of this process, we were privileged to receive a great deal of support and encouragement from local schools around Hamilton and the greater Waikato district. Many schools provided space and support for research assistants to assess children within the school setting. Numerous teachers completed a battery of questionnaires regarding children's functioning. Additionally, a number of schools facilitated the recruitment of matched cohort participants who were free from TBI. During this time, there was much engagement and liaison with schools around the region, and my interest naturally turned to that of families' experiences of the return to school post-mTBI. Thus, two new sub-studies were designed.

The first, a qualitative investigation, sought to investigate teachers' knowledge and perceptions of child TBI. Nineteen primary school teachers in the Waikato and Bay of Plenty regions engaged in semi-structured interviews that covered their understanding of TBI and its potential consequences. Teachers also discussed potential programme adaptations for children following TBI, and what barriers they felt they experienced as educators. Our findings showed that most teachers had a limited understanding of TBI and its potential implications for children in school settings. None of the teachers had received any prior education regarding TBI nor were they aware of any professional development opportunities in this area.

The second sub-study involved the development, delivery and evaluation of a brief professional development workshop regarding mTBI for educators which was delivered to 38 teachers across three primary schools. The evaluation of this workshop showed that teachers' knowledge regarding mTBI significantly improved following participation in the workshop, and that teachers were keen to use a range of suggested techniques to support children following TBI. These results are encouraging and highlight great opportunities for those in the TBI field to consider what types of resources might best support educators working with children who experience persistent difficulties after an injury.

Rosalind Case

A Good Night's Sleep is Important to Facilitate Recovery from Brain Injury

DR ALICE THEADOM

Whilst it is becoming more widely known that traumatic brain injury (or TBI) can lead to persistent symptoms, long-term cognitive impairment, low mood and behaviour problems in children, it is less widely known that sleep difficulties can also occur after a brain injury. A study conducted by researchers at Auckland University of Technology, led by Dr Alice Theadom, recently found that 40% of children aged between 8 and 16 years who had experienced a mild TBI were experiencing poor sleep one month after injury.

When these 109 children were followed up over the subsequent year, this number only reduced to 28% of children experiencing sleep difficulties 12-months after injury. Researchers found that poor sleep was associated with increased frequency and severity of symptoms and poorer behavioural outcomes at one year. These children were also three times to have sleep problems at one year after injury when compared to TBI–free children of a similar age.

Therefore, sleep difficulties may be more common and may persist longer after mild TBI than we thought. Given the link with longer recovery, sleep quality should be screened for and problems addressed as part of a broader treatment programme to help optimise outcomes for children after brain injury.

Alice Theadom

CONFERENCE DETAILS FOR YOUR DIARY –
New Zealand Applied Neurosciences Conference 2016
Auckland, 24-26 November. Further details will soon be available at http://nzanc.aut.ac.nz/

Next Issue:

BRAIN INJURY WHANAU

ACTION PROJECT

(BIWAP)

ELISA LAVELLE

TOPS-NZ

TEEN ONLINE PROBLEM SOLVING-NEW ZEALAND

The TOPS project

DR KELLY JONES

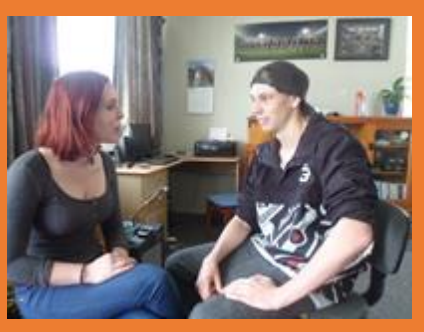
Adolescents face greater risk of TBI compared to other age groups. Subsequent behavioral difficulties include poorer attention, more emotional problems, and increased aggression than teens free from TBI, often leading to significant distress for families and whānau. Cognitive-behavioral therapy (CBT) has been shown to aide teen recovery post-TBI, however, access to services is limited. CBT treatment delivered via the Internet offers an accessible alternative, with one US online intervention showing evidence for reducing teen problems post-TBI ('Teen Online Problem Solving'; TOPS).

The potential acceptability of this online program for use in New Zealand has now been evaluated by teenagers, their families and health professionals. Subsequent adaptations have included greater localisation to the NZ content (including video of local teenagers sharing their TBI experiences, actors role playing scenarios, and the recording of more than 400 audio clips), improved visual appeal of the programme, and several technical enhancements.

The modular website and online therapy sessions cover teen thinking, problem solving, and behavioral skills as well as family education in stress management, planning and organisation, communication, anger management and self-regulation. Discussions are currently underway with ACC and rehabilitation providers around the design of a pilot trial to ensure maximum benefits for teenagers impacted by TBI and their families. Please feel free to contact me if you would like to know more about this newly available programme – kejones@aut.ac.nz.

If you would like to profile your research here please email a brief project description to Dr Kelly Jones kejones@aut.ac.nz.

TOPS development ….



CHECK OUT OUR

DEVELOPING WEBSITE

WWW.NISAN.AUT.AC.NZ/

PEDIATRIC-TBI-

CONSORTIUM

AUCKLAND UNIVERSITY OF TECHNOLOGY
PRIVATE BAG 92006 AUCKLAND 1142 NEW ZEALAND