IMPACT SHOWCASE

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CLINICAL TRIAL INTERVENTIONS

A Feasibility Study of Remote Delivery of Return to Work Support after Stroke

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Background

Return to work (RTW) after stroke is an important rehabilitation outcome. In rural areas specialised RTW support might not be available. We evaluated feasibility of a telecommunication delivered RTW support service, designed to increase access to people who have had a stroke. The overall aims of the study were to evaluate intervention satisfaction and acceptability of procedures.

Methods

We recruited people aged 18-74, who experienced a stroke up to 2.5 months previously, at four Victorian sites (Barwon Health, Western District Health, Albury Wodonga Health and South West Health Care). Participants were assessed at baseline, 3- and 6-months post-stroke. Intervention satisfaction evaluated through qualitative interviews at each timepoint and the Client Satisfaction Questionnaire-8 (CSQ-8; score range 8-32). RTW rates and other employment variables, as well as measures of mood, anxiety, fatigue and cognition, were collected.

Results

Twenty-one participants were recruited. Telehealth delivery was feasible and associated with high satisfaction (CSQ-8 median score=32). Eighteen of 21 (86%) participants RTW within 6 months, with 16 of 20 (80%) participants employed and working at 6-months post-stroke. For those working at 6-months post-stroke, no change in hours of work was seen from pre-stroke (m=30.5, SD=24.1 hours/week) to 6-months post-stroke (m=29.6, SD=11.9 hours/week, t=.12, p=.91). Measures of depression, anxiety, fatigue and cognition improved from baseline to 6-months post-stroke (Cohen's d =.30 to .50).

Conclusion

Remote delivery of a RTW support service was feasible and acceptable to people who had recently experienced a stroke. High RTW rates were reported however a randomised controlled trial is required to confirm intervention effectiveness.

Advances in adjunctive minocycline for depression

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Background

Conventional antidepressants are generally useful for treating major depressive disorder (MDD), but shortfalls remain in recovery for many individuals. At present there is little to guide who is best suited to a given treatment. Immune pathways are implicated in MDD, making them an adjunctive target. Minocycline has shown efficacy as an adjunctive antidepressant. This presentation will provide an overview of the clinical findings and supporting basic science regarding adjunctive minocycline for MDD.

Methods

Over the past several years, our team have investigated the clinical potential and underlying biological treatment response of adjunctive minocycline. This presentation will review the current clinical trial data and supporting biological investigations to enhance the translation of adjunctive minocycline.

Results

Our clinical trial and our pooled data in an international collaboration have demonstrated the efficacy of adjunctive minocycline for MDD. This is supplemented by recent systematic reviews, creating sufficient evidence for adjunctive minocycline to be included in the recent Royal Australian and New Zealand College of Psychiatrist Guidelines for the Treatment of Mood Disorders. Our team is now focusing on exploring the underlying biological mechanisms associated with the treatment response to adjunctive minocycline. This presentation will explore some of that data.

Conclusion

With a paucity of novel treatment for depression and a shortfall in recovery for many individuals experiencing symptoms and diminished quality of life, adjunctive minocycline represents a safe, off-patent treatment option. Our work in understanding the treatment response will further assist in enhancing agent selection and reducing individual symptoms response variation.

An investigation of comorbid bipolar disorder and post-traumatic stress disorder in the STEP-BD cohort.

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Background

Post Traumatic Stress Disorder (PTSD) is more prevalent in the those with Bipolar Disorder (BD) compared to the general population, with rates at high as 55% in some BD cohorts. Despite this, effective pharmacotherapy treatments have not been explored in those with comorbid BD and PTSD.

Methods

The Systematic Treatment Enhancement Program for BD (STEP-BD) cohort was utilized to examine and compare symptoms and pharmacotherapy treatments between those with BD alone (n=3393), and those with comorbid BD and PTSD (n=304). Regression models were conducted comparing those with and without comorbid PTSD. Models included measures of depression, mania, functioning and quality of life over 24 months of the STEP-BD study. Baseline pharmacotherapies (lithium, valproate, antidepressants, antipsychotics, and benzodiazepines) were utilized as a predictor variable in models.

Results

At baseline, reported use of lithium was lower in the comorbid PTSD group, while the use of antidepressants, antipsychotics, and benzodiazepines was significantly higher in the comorbid PTSD compared to the BD alone group. Those with comorbid PTSD experienced higher levels of mania and depression symptoms and lower functioning and quality of life compared to BD alone. Benzodiazepine use was associated with a small improvement in depression symptom scores and poorer quality of life in those with comorbid PTSD.

Conclusion

These results highlight the importance of considering comorbidity in the treatment of mental health conditions, specifically BD. This study also emphasizes the need for a better

understanding of this comorbidity to ensure individuals achieve recovery and improve symptoms and quality of life.

TRIALS with IMPACT on translation and community engagement

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Introduction

Community engagement and translation preside at the forefront of novel research. This is in parallel with an increasing contribution of lived experience both in co-design and translation of research.

Method

In 2013, A/Prof Dean established the Community and Research Network (CARN), a forum for any health-related stakeholders to meet and provide reciprocal opportunities for research and community translation. Since then, CARN has grown to include a series of community-focused activities, seminars, and garnered philanthropic support.

Results

Examples of CARN's success include the employment of the McIntosh CARN Engagement Officer, Sarah Healy. This role was made possible by collaborative grants from the McIntosh Family and Western Alliance. Sarah is growing the CARN membership, improving the reciprocity between researchers and the community and, with the support of Western Alliance, engaging with rural and regional partners. The CARN Student Seminar Series is a further example of community engagement, led by IMPACT postgraduate students; Bonnie Beasant and Eslam Ahmed. Dr Carly Botheras' role, taking over from Dr Adam Walker, as the CARN Co-Chair has breadthened the scope of CARN; Carly also writes a community-focused blog about general science topics. Partnerships with CARN include the Geelong Music Community Collective (GMCC) - a Geelong collective aiming to promote mental health and generously providing the GMCC Dean McInnes Travel Award to IMPACT.

Conclusion

To have maximum impact, research needs to address the needs of the people it is targeting. Lived experience provides expertise that is unavailable through traditional research methods and is integral to translating high quality research. This presentation will provide an overview of ways to engage that voice within research.

Trauma and comorbid post-traumatic stress disorder in people with bipolar disorder participating in the Heinz C. Prechter Longitudinal Study.

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Background

It is estimated that up to 50% of people with bipolar disorder also have comorbid post-traumatic stress disorder (PTSD). However, little is known about the presentation and treatment of people with this comorbidity.

Methods

Data from 577 individuals diagnosed with bipolar disorder participating in the Heinz C. Prechter Longitudinal Study of Bipolar Disorder (PLS-BD) were explored at baseline, year two and year four. Three trauma groups were created according to participants' responses to the Life Events Checklist and the Diagnostic Interview for Genetic Studies: (i) one trauma (n = 75), (ii) multiple traumas (n = 417), and comorbid PTSD (n = 85). Measures of depression, mania, sleep, number of hospitalisations and suicide attempts, and medication use were analysed using regression modelling to determine differences between the three trauma groups.

Results

There was a significant increase in depression, mania, and sleep scores and a higher number of hospitalisations in participants with comorbid PTSD compared to those experiencing one trauma. A significant increase was also seen in mania and depression scores in participants experiencing multiple traumas compared to those who reported one trauma. There was no difference in medication use between those who experienced one trauma when compared to

those diagnosed with PTSD. However, participants who experienced multiple traumas were significantly less likely to use lithium compared to those who experienced one trauma.

Conclusion

The comorbidity of bipolar disorder and PTSD is associated with worse mania and depression symptoms scores and worse sleep scores compared to participants reporting one trauma.