Nomination for Tom Trauer Evaluation and Research Award

Dr Fiona Shand

Entry Summary

Working as Clinical Psychologist in a busy and diverse inner city practice has given Dr Fiona Shand a strong awareness of current mental health service limitations. Driven by her experiences, Dr Shand has focussed her research career on helping those who are most often marginalised by current services – people living with addiction disorders, those with a history of suicidality, and the Indigenous community.

Dr Shand's current program of research covers treatments for people at risk of suicide, the use of technology for suicide prevention, intervention following a suicide attempt in order to prevent further attempts, the health service experience of people after a suicide attempt, and multi-pronged strategies to reduce suicide at the community level.

Organisational Summary

Black Dog Institute is internationally recognised as a pioneer in the identification, prevention and treatment of mental illness and the promotion of wellbeing.

We aim to improve the lives of people affected by mental illness through the rapid translation of high quality research into improved clinical treatments, better access to mental health services and delivery of long-term public health solutions. We also place emphasis on teaching people to recognise the symptoms of poor mental health in themselves and others, as well as providing evidence-based education and training to health professionals.

Black Dog works directly in all parts of the community as well as guiding the development of new and improved policy. We place focus on those with specific mental health needs like young people, Indigenous communities, men, and high-risk workforces.

Award Criteria

Evidence of contribution to, or potential impact on, mental health service improvement

Working as Clinical Psychologist in a busy and diverse inner city practice has given Dr Fiona Shand a strong awareness of mental health service limitations. Driven by her experiences, Fiona has focussed her research on helping those who are most often marginalised by current services – people living with addiction disorders, those with a history of suicidality, and the Indigenous community.

Much of her work focuses on improving access to mental health care. Firstly, through the introduction of safe, effective and tailored technological solutions and secondly, through the development and implementation of evidence-based improvements into existing services. Two examples of this are provided below.

1) Lifespan Integrated suicide prevention (lifespan.org.au)

Suicide is the most common cause of death of Australians aged between 15-44yrs. With rates appearing to increase each year, suicide is becoming a significant public health crisis.

Suicide prevention has traditionally been a piecemeal affair, with both funding and services fragmented socially and geographically. Further to this, suicide prevention activity has often been guided by the heart not the head, with no clear emphasis given to programs with a strong evidence-base.

In 2015, Dr Shand was key member of the part of the Black Dog Institute team that developed a new way of thinking around suicide prevention. Referred to as “Lifespan Integrated suicide prevention”, this ground-breaking model was based entirely on clinical research outcomes from here and overseas. It involves the simultaneous implementation of nine key strategies shown to reduce suicide when embedded into a community. Comprehensive modelling has estimated that this new “systems approach” to suicide prevention will reduce suicide deaths by 20% and suicide attempts by 30%.

With the support of a significant private donation, Lifespan is now being trialled in four NSW regional centres. Dr Shand is the lead researcher for this program and is ultimately responsible for the development of research, clinical and ethical protocols.

Whilst Lifespan promises to have significant impacts on the suicide rate, the individual components of the program will also break new ground, providing tailored ongoing resources and support for communities. Under the guidance of Dr Shand, the Lifespan program will integrate and update existing services, forming a safety net for people with a history of mental illness and suicide attempt. The introduction of universal evidence-based education programs for the wider community will reduce the potential for suicidality by raising awareness and reducing the stigma of help seeking. Finally, specific training in suicide prevention for gatekeepers and GPs will catch those at risk at an earlier stage.

2) iBobbly (blackdoginstitute.org.au/ibobbly)

Compared to their non-Indigenous counterparts, Indigenous youth aged 15-24 have four times the risk of suicide, and those aged 25-34 have almost three times the risk.

Despite many policies, programs and funding initiatives, rates of suicide are rising across the Indigenous community and very few indigenous people intend to seek help before acting on suicidal thoughts. There are many reasons thought to be behind this including the stigma of seeking help and lack of access to culturally appropriate mental health care.

iBobbly is the world’s first suicide prevention app designed especially for use by Indigenous Australians. Funded by an NHMRC Project Grant to Dr Shand, and developed in partnership with Indigenous communities, researchers and health specialists, iBobbly uses song, imagery and storytelling to deliver evidence-based psychological therapy – specifically Acceptance and Commitment Therapy.

iBobbly is designed to overcome both stigma and lack of access and engages users through familiar tools – Smartphones or tablets. It is a downloadable app that does not require consistent internet access, and password security means the app can be used by multiple users on the same device.

Initial pilot trial results from the Kimberley region in Western Australia showed a 42% reduction in symptoms of depression, a 30% reduction in suicidal ideation, and a 28% reduction in distress.

Following the success of the pilot, version 2.0 has been developed, incorporating community feedback. A wider trial of the updated app is currently being undertaken across four sites: Broome and the West Kimberley (WA), Northern NT, Darling Downs (QLD) and Hunter New England (NSW).

3) Review of opioid prescribing in Tasmania
In 2010, Dr Shand was a chief investigator on a tendered grant from the Tasmanian Department of Health and Human Services that reviewed opioid prescribing in Tasmania. This state-wide project involved literature reviews, extensive data analysis, consultation processes with stakeholders, clinical experts and regulatory officers, and interviews with prescribers. The project's recommendations are expected to influence regulatory and clinical practice in Tasmania, with flow on effects at the national level.

Evidence of participation of mental health consumers, in the planning, implementation and evaluation as relevant.

Dr Shand strongly supports the inclusion of lived experience at all points in both research and clinical delivery and the iBobbly and Lifespan programs are an example of this.

Collaboration with Indigenous partners has been central to the development of iBobbly. In addition to partnership and consultation with a range of organisations including the Broome-based Alive and Kicking Goals youth suicide prevention program, Indigenous artists and graphic designers created original imagery to represent the key messages and activities of the therapeutic content. Indigenous youth voiced the content, as well as providing feedback that was incorporated into the later version of the App.

Following the development phase, Dr Shand has worked closely with Indigenous Elders and Aboriginal Health Services to expand the iBobbly program in line with community requirements. In 2016, she successfully applied for philanthropic funding from AON Foundation to support the recruitment of an Indigenous cadet to work on the iBobbly program.

In 2015, Dr Shand led the Care After A Suicide Attempt (CAASA) study funded by the National Mental Health Commission. This national trial used both quantitative and qualitative methods to explore the experiences of people who had survived a suicide attempt and their families. The Lifespan model, and indeed the working draft of the 5th National Mental Health Plan, incorporates much of these findings. Dr Shand works closely with the Lifespan Lived Experience Panel, comprising of people from all backgrounds, to obtain advice and expertise for the ongoing implementation and evaluation of the trial.

Evidence of research excellence
Dr Shand completed her Clinical Masters in 2007 and PhD in 2010. She has 31 scientific publications, contributed ten book chapters and has presented at over 30 local and international conferences including the European Symposium on Suicide and Suicidal Behavior, World Congress of Behavioural and Cognitive Therapies, International Association for Suicide Prevention Conference and the International Society for Internet Interventions. A full publication list is included in the Appendix, key publications are listed below.

1. Tighe J, Shand F, Ridani R, et al. Ibobbly mobile health intervention for suicide prevention in Australian Indigenous youth: a pilot randomised controlled trial. BMJ Open 2017;7: e013518.
2. Torok M, Calear A, Shand F, Christensen H. A systematic review of mass media campaigns for suicide prevention: understanding their efficacy and the mechanisms needed for successful behavioural and literacy change. Suicide and Life Threatening Behavior, In press.
3. McKay K, Shand F. Child-Sized Gaps in the System: Case Studies of Child Suicidality and Support Within the Australian Healthcare System. Australian Educational and Developmental Psychologist (in press).

4. Spittal M, Shand F, Christensen H, Brophy L, Pirkis J. Community mental health care after self harm: A retrospective cohort study, Australian and New Zealand Journal of Psychiatry (in press)
5. Krysinska K, Batterham PJ, Tye M, Shand F, Calear AL, Cockayne N, Christensen H. Best strategies for reducing the suicide rate in Australia. Australian and New Zealand Journal of Psychiatry (in press). (Accepted: 5/11/2015).
6. Fiona L Shand, Judy Proudfoot, Michael J Player, Andrea Fogarty, Erin Whittle, Kay Wilhelm, Dusan Hadzi-Pavlovic, Isabel McTigue, Michael Spurrier, Helen Christensen. What might interrupt men's suicide? Results from an online survey of men, BMJ Open, 5: e008172 (2015).
7. Campbell G, Bruno R, Darke S, Shand F, Hall W, Farrell M, Degenhardt L. Prevalence and correlates of suicidal thoughts and suicide attempts in people prescribed pharmaceutical opioids for chronic pain. Clinical Journal of Pain (2015).
8. Player M, Proudfoot J, Fogarty A, Erin Whittle E, Spurrier M, Shand F, Christensen H, Whilhelm K, Hadzi-Pavlovic D. What Interrupts Suicide Attempts in Men: A Qualitative Study. PLOSone (2015).
9. Ridani R, Shand FL, Christensen H, McKay K, Tighe J, Burns J, Hunter E. (2014). Suicide prevention in Australian Aboriginal communities: A review of past and present programs. Suicide and Life Threatening Behavior, 45, 111-140.
10. Torok M, Darke S, Shand F & Kaye S. (2014). Violent offending severity among injecting drug users: examining risk factors and issues around classification, Addictive Behaviors. 39 (12), 1773-1778.
11. Shand FL, Ridani R, Tighe J, Christensen H. (2013). The effectiveness of a suicide prevention app for indigenous Australian youths: study protocol for a randomized controlled trial, Trials, 14:396. doi:10.1186/1745-6215-14-396.
12. Shand F, Campbell G, Hall W, Lintzeris N, Cohen M, Degenhardt L (2013). Real time monitoring of schedule 8 medicines in Australia: Evaluation is essential. Medical Journal of Australia, 198, 80-81.
13. Shand FL, Degenhardt L, Slade T, Nelson EC (2011). Sex differences amongst dependent heroin users: histories, clinical characteristics and predictors of other substance dependence. Addictive Behaviors, 36, 27-36.
14. Shand FL, Slade T, Degenhardt L, Baillie A, Nelson EC (2011). Opioid dependence latent structure: two classes with differing severity? Addiction, 106, 590 – 598.
15. Shand FL, Degenhardt L, Nelson EC, Mattick RP (2009). Predictors of social anxiety in an opioid dependent sample and a control sample. Journal of Anxiety Disorders, 24(1), 49-54.
16. McEvoy PM and Shand F (2008). The effect of comorbid substance use disorders on treatment outcome for anxiety disorders. Journal of Anxiety Disorders, 22(6), 1087-98.
17. Shand F, Topp L, Darke S, Makkai T, Griffiths P. (2003). The monitoring of drug trends in Australia. Drug and Alcohol Review, 22 (1), 61-72.
18. Shand F and Mattick RP. (2002). Results from the 4th National Clients of Treatment Service Agencies census: changes in clients' substance use and other characteristics. Australia New Zealand Journal of Public Health, 26(4),352-357.

Evidence of her research reputation is her success in obtaining prestigious peer reviewed research funding. Since 2007, Dr Shand has been a Chief Investigator on fifteen research grants including NHMRC, Australian Department of Health, National Mental Health Commission, Society for Mental Health Research and Beyond Blue. A full list is below.

1. Tye M, Shand F. The Good Behavior Game (early intervention). Society for Mental Health Research. $20,000, 2017.
2. Christensen H, Tye M, Shand F, Batterham P, Calear A, Cockayne N. Implementing a systems-based approach to suicide prevention in NSW, Ramsay Foundation, 2016-2022, $14.7m.

3. Christensen H, Tye M, Shand F, Cockayne N. Provision of a supporting resource for Primary Health networks on evidence-based suicide prevention strategies. Australian Government Department of Health, 2016, $97,982.
4. Larsen M, Shand F. Reconnecting After a Suicide Attempt (RAFT): developing a mobile-phone based brief intervention. Ottomin Foundation, 2015-2018, $100,000.
5. Shand F, Christensen H, Ridani R. Getting iBobbly to market: redeveloping the iBobbly suicide prevention app. New South Wales Mental Health Commission, 2015, $178,000
6. Christensen H, Batterham P, Tye M, Shand F, Calear A. Systems approach to suicide prevention and geospatial mapping, New South Wales Mental Health Commission, 2015, $131,000
7. Shand F, Christensen H, Jackson Pulver L, McKinnon A, Hunter E, Burns J, Shanahan M. Using an app for suicide prevention amongst young Indigenous Australians: a randomised controlled trial. NHMRC, 2014-8, $918,809 (CIA).
8. Shand F, Christensen H, Pirkis J, Spittal M, Woodward A, Buckley H. Study of peoples' experiences following a suicide attempt. National Mental Health Commission, $306,191, 2013-2014 (CIA).
9. Marel C, Teesson M. Evaluating the CAYLUS Youth Worker Brokerage. Central Australian Youth Link Up Service (CAYLUS), $33,025, 2014 (Consultant).
10. Christensen H, Beautrais A, Shand F, O'Neill D, Buckley H, Petrie K. Report Card suicide prevention literature review. National Mental Health Commission, $39,996, 2013 (CIC).
11. Proudfoot J, Christensen H, Wilhelm K, Hadzi-Pavlovic D, Shand F. Men's depression and suicide, beyondblue, $99,997, 2013-14 (CIE).
12. Degenhardt L, Hall W, Lintzeris N, Cohen M, Nielsen S, Bruno R, Shand F, Farrell M. Pharmaceutical opioid prescription in Australia: Trajectories of prescribing, risk of adverse events, and predictors of harm, NHMRC, $1.04m, 2012-2017 (CIG and main author of the grant)
13. Mattick RP, Degenhardt L, Hall W, Lintzeris N, Cohen M, Shand F. A review of opioid prescribing in Tasmania. Tasmanian Department of Health and Human Services $279,974, 2010-2011 (CIF)
14. Shand F, Gates J. Students and Alcohol Education grant, AERF, $16,000, 2003 (CIA)

Evidence of Partnerships and Linkages (collaboration for continuity between organisations).

As mentioned previously, Dr Shand places great emphasis on collaboration and has worked extensively with individuals and groups to translate research into reality.

An example of this is her research leadership of the Lifespan trial. For this trial to succeed, there must be a successful and productive collaboration at each trial site between Primary Health Networks, Local Health Districts, community service providers, lived experience networks, schools, emergency services, Local Council and clinical providers. Establishment of these relationships has never been attempted before on this scale.

Along with the Lifespan team, Dr Shand has successfully negotiated these networks to enable safe, effective and ethical delivery of the program. In addition to local networks, Dr Shand is working with agencies such as the Australian Institute of Health and Welfare and NSW Coronor to establish effective monitoring processes, and researchers from around Australia and the world to ensure appropriate evaluation and reporting.

Verification and Evaluation of the research effectiveness in achieving the goals of the investigation

For this criteria, we will use the iBobbly trial as an example.

1. Project aim and background

Suicide rates continue to rise amongst the Aboriginal and Torres Strait Islander community, despite many policies, programs, and funding initiatives. A handful of therapies have been found effective in reducing suicidal thoughts, however, they have not been trialled in Aboriginal communities. Young people who are most at-risk may be disconnected from formal education, work, culture, family, and community. Their disconnection makes them difficult to reach via conventional means. Around 10% of all Aboriginal people who die by suicide are likely to have sought assistance in the three months before their suicide, so increasing access to effective help is essential.

An app which uses evidence-based and culturally suitable content represents a feasible way to reach young people who have very low levels of help-seeking. Barriers to help-seeking include: lack of anonymity, especially where individuals are part of a closely interwoven community and health workers are known to the help-seeking individual; shame, stigma, and the need to maintain esteem within the community; cost; and service availability and suitability. With the rise in smart phone and tablet use in Indigenous communities, apps are a viable means to deliver interventions in hard-to-reach communities.

2. Pilot Trial

Following initial development, a pilot trial was conducted in the Kimberley Region of WA in partnership with local suicide prevention organisation Alice and Kicking Goals.

61 participants were recruited and randomised to receive either ibobbly over 6 weeks or were waitlisted for 6 weeks and then received the app for the following 6 weeks.

The primary outcome was the Depressive Symptom Inventory — Suicidality Subscale (DSI-SS) to identify the frequency and intensity of suicidal ideation in the previous weeks. Secondary outcomes were the Patient Health Questionnaire 9 (PHQ-9), The Kessler Psychological Distress Scale(K10) and the Barratt Impulsivity Scale (BIS-11).

Results showed preintervention and postintervention changes on the (DSI-SS) were significant in the ibobbly arm ($t=2.40;df=58.1;p=0.0195$), however, these differences were not significant compared with the waitlist arm ($t=1.05$; $df=57.8;p=0.2962$). However, participants in the ibobbly group showed substantial and statistically significant reductions in PHQ-9 and K10 scores compared with waitlist. No differences were observed in impulsivity. Waitlist participants improved after 6 weeks of app use.

Importantly, this trial showed that an App was a feasible and acceptable method of intervention delivery for the Indigenous community.

3. Evaluation and consultation

Consultation and engagement with Aboriginal and Torres Strait Islander communities has been paramount in the development and extension of the iBobbly app and a participatory research model has been employed within this project.

Consultations were initially conducted with 18-25 year olds from the Young and Well Cooperative Research Centre (YAW-CRC) First Peoples Youth Council, community groups and young people from the Kimberley Region.

Following outcomes from the first pilot trial and before expansion of the trial, a research officer within each trial region was employed to conduct focus groups, workshops, and community events whereby consultation occurred and feedback was obtained. In many of these regions, the research officer was of Aboriginal or Torres Strait Islander background and thus had a strong understanding of the cultural factors necessitating consideration

throughout the research process. A number of regions from WA, QLD, NSW and NT were included in this process.

An iterative approach was used to incorporate feedback regarding the app. As each round of feedback was received from each region, it was incorporated into the app and given back to the community for re-evaluation. The process was then repeated with each community providing feedback that was incorporated into the app, which then went out to the community once again. This process continued until there were no more changes to be incorporated from community members and the majority were satisfied with the end product.

4. Outcomes

The iBobbly research project has broken new ground on a number of levels. Firstly, it has advanced our understanding of what suicide prevention interventions can be effectively delivered to the Aboriginal and Torres Strait Islander community. Secondly, it has demonstrated that technology is a feasible solution for overcoming issues of access and stigma within the Indigenous community. Finally, it has provided an excellent model for how community and research can work together to achieve effective change and improve health outcomes.

Conclusion

In conclusion, we strongly believe that Dr Fiona Shand would be an excellent recipient of the Tom Trauer Evaluation and Research Award. Her proven ability to translate research into effective clinical outcomes and her focus on those in need epitomises the work of Tom Trauer.