Developmental Trauma – A Wicked Problem

The three biggest challenges for humankind

1. Climate change – existential threat – solutions developing, maybe not fast enough, but action is being taken
2. Developmental trauma – the main driver of ill health, suicide, accidents, bad behaviours, crime, and early death – some solutions known now, but not applied.
3. Pandemics – potential, unable to design specific solutions until it happens

We can act now on developmental trauma if we have the political will!

Whole of government actions are required to implement solutions for this somewhat wicked and challenging set of problems. If left to the private and academic markets, we may wait another 30-50 years for only piecemeal actions, while the benefits can begin to be extracted right now, for the common good, with coordinated government action. The size of the problem is huge, but mostly ignored or resisted, because it requires a lot of changes in professional practice, academic processes, and funding sources, volume and methodologies. The political attitude has to change from costs to taxpayers to investments with clear public dividends. It will be a great example of value economics – ambitious but directly improving peoples lives.

The developmental traumas are a wide range of types, experienced at different times in life from conception. They include neglect; emotional abuse (most common); physical and sexual abuse; vicarious trauma from domestic violence and family break-up; bullying; born LGBTQI. They interact with individually unique genetics and epigenetics, that will not result in nice groupings of symptoms, unitary disorders, such as the DSM-5 and ICD-11 attempt to do. The trauma causes changes in brain structure and functions, expressed through bio-rhythms, brain controlled hormones, leading to biochemical expression throughout the body. Some of these are evolutionary protective mechanisms, to help the child survive until at least puberty to produce the next generation. To reverse the effects of the toxic environment of developmental trauma, we need to reverse the process, by creating nurturing positive and rewarding environments.

However, we have discovered that this is very often not enough to switch gene and epigenetic expression back to normalcy and positive growth. The brain needs to be nudged to re-set its structure and functions. To expect permeating the brain with medications to do this is fanciful, as the chemical abnormalities are the result of changes of gene expression due to psychological stress, not the cause. Talking therapies are also often not powerful enough to make the necessary changes, as much trauma occurs before the child develops language and at times of trauma, the language networks tend to close down, as language is not needed to fight, run away or play dead and dissociate. However, once the brain is calmed and re-set, psychotherapies, body work, social remediation and medications are much more effective and the individuals and the therapists become much more productive.

Many people currently diagnosed with treatment resistant disorders respond to brain networks re-balancing, so that up to half can lose their diagnosis, or if they still have the diagnosis, only need half the medication dosage. This was shown with people with schizophrenia, who lost their symptoms, becoming much more confident, articulate, able to concentrate, not wanting to use alcohol or illicit drugs, with real improvement in productivity and life performance. Long term follow-up has shown the effects are virtually permanent.

Quantitative EEG analysis can examine the organ being treated to provide indicators for treatments. Biofeedback methods can gently, but effectively, assist the brain to calm down and re-set normal functioning, each finding its own unique solution. There are many known and potential methods

that may work, but there is no systematic process to evaluate them and better identify individual therapy matches to individual needs and disorders. There is no systemic process for training staff and the delivery of effective programs.

The Adverse Childhood Experiences (ACE) studies (Centers for Disease Control & Prevention, USA) concluded that child maltreatment was the most costly public health issue in the United States, calculating that the overall costs exceeded those of cancer or heart disease, and that eradicating child abuse in America would reduce the overall rate of depression by more than half, alcoholism by two-thirds, and suicide, serious drug abuse, and domestic violence by three quarters. It would also have a significantly positive effect on workplace performance, and vastly decrease the need for incarceration. Around 17% have four or more types of trauma, with very significant effects on mental and physical health, and if six or more, life expectancy is reduced by 20 years (e.g. first nations people). Developmental trauma affects physical health as much as mental health, because the brain controls almost everything and maltreatment is a known major risk factor for many medical disorders (cancer, heart, liver, digestive, and respiratory diseases). PTSD gets the publicity, but it is only a minority sub-set of responses to developmental trauma.

Solutions need to take this complexity into account, in hierarchies of assessment, treatment and social support models, to find the unique pathway to recovery for each person. The overarching framework needs to remain open to innovation, technical advances and new therapies. Artificial intelligence will have a role in helping us find indicators for matches between needs and solutions.

The mission needs to address prevention, the pre-distribution of better life performance by getting the conditions right in the first place.

A national plan of action is absolutely required for this, as small projects will compete for insufficient funds and maintain the current fragmentation of programs now funded. But the only away to more quickly sort through the complexities and achieve the expected massive improvements in the personal, family, social and economic pain, will be to adopt the mission economy approach espoused by Mariana Mazzucato. The process can only be run by government, as it has to cut right across the established silos of service delivery with their vested interests, and there are massive education and training needs.

Australian fiscal imbalances means state and federal governments need to act in collaboration, as the value investments must come from both and the value benefits feedback to both.

States are providers of school education, secondary and tertiary health services, first responders, justice and corrections system, social support services. The NSW government commissioned 2018 report “Forecasting Future Outcomes” by Taylor Fry actuaries, using 8 million data points, showed that 7% of the NSW population would use 50% of the state resources by the age of 40. The Dunedin longitudinal study showed that 22% of the cohort would use 80% of resources. In both cases developmental trauma is the major factor, but state programs do not effectively prevent or treat developmental trauma.

Federal government provides higher education, primary and some secondary health, income supports, NDIS, employment services, etc. Currently the universities are not properly training the professions to recognise or effectively treat developmental trauma.

Private companies are paying higher prices for workers compensation insurance, sick leave and poor productivity, in the absence of prevention and treatment of developmental trauma.

Governments need solutions, not problems – we need mission oriented policies to tackle developmental trauma now. This means determining the problems that must be solved and

solutions rewarded, then people will come up with solutions. The research market has failed to respond, so we need commissioned research and pilot programs, but with sufficient critical mass to achieve statistical power and adaptive platform trial methods to enable faster establishment of positive directions. It is not about governments picking winners, but picking the willing to undertake the challenging tasks.

Just as important as the content of a program is the design of the delivery vehicles and methods of payment, as you get exactly what pay for, shaped by how you pay for it. With the saving that we can expect, they should be re-invested in expanding the successful programs.

Proposal

Organise a national round table process with stakeholders to produce a draft national plan and framework, with goals, measurable targets, timelines, strategies and division of responsibilities. We need to formulate a mission map.

Suggest a Mission Board (as used in the EU) to bring leadership and rigour.

In the absence of government or major philanthropic funding to run the initial planning process, get a consultancy firm to provide pro bono secretarial and functional supports (e.g. Nous). I did this before with PwC for the roundtable on mental health funding methodology and governance, published by the AHHA in 2008.

Invite Philanthropy Australia to participate to bring in potential philanthropists

Get a senior respected person to chair the process, to facilitate access to the best people in the public service, relevant science and information (e.g. Peter Shergold and/or Jennifer Westacott).

Invite senior players in Premiers/Prime Minister & Cabinet, Finance, Treasury, Productivity Commission etc.

Invite people with the best knowledge bases around the problems we need to solve (consider contributions from international experts).

Avoid some representatives of certain vested interests (e.g. certain private practice professionals, academics or unions who would prefer the status quo) until ready to manage the messaging and controlled consultations.

Run the initial process quietly to avoid early prodding of hornets nests, but plan for much wider stakeholder involvement in further planning, once there is sufficient political buy-in.

Conclusion

If this mission is achieved, the learnings will go way beyond Australia, as developmental trauma and its effects are universal. Australia has a history of social innovations and we can again provide world leadership.

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March 2023