



## Letters

### Encounter mental health in Tuvalu: The prior study

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#### To the Editor

Tuvalu is a Polynesian island country located in the Pacific Ocean, about midway between Hawaii and Australia. It has a total land area of 26 square kilometres across nine coral atolls, with a population of 11,192 (Commonwealth Health Online, 2019; The World Bank, 2017). A limited medical service is provided by the only hospital, Princess Margaret Hospital (PMH); no psychiatric specialist services are available.

Cooperative projects between PMH and the Chung Shan Medical University Hospital (CSMUH) of Taiwan have operated since 2006. In 2016, at the request from PMH, between October 18 to 27, a mobile team provided the first psychiatric intervention in Tuvalu. One psychiatrist who is also a board-certified child and adolescent psychiatrist from CSMUH began to conduct assessments and interventions, including the use of medication and psychotherapy.

During six working days in this period, 31 patients made a total of 62 visits to psychiatric services. The majority were female (64.5%), single (64.5%),

**Table 1.** Distribution of psychiatric disorders.

	Case (N = 31)	%
Psychosis, schizophrenia, delusional disorder	7	22.6
Depressive disorder/mood disorders	7	22.6
Adjustment disorder/sleep disorders	5	16.1
Anxiety disorder/panic disorder/social phobia	5	16.1
Autism spectrum disorder	3	9.7
Attention deficit/hyperactivity disorder	2	6.5
Developmental delay	2	6.5
Special issues		
Intellectual disability	11	35.5
History of head injury/epilepsy/meningitis/ cerebral palsy	10	32.3
Domestic violence/child abuse/rape	4	12.9
Alcohol-related disorders/problems	3	9.7
Internet gaming disorder	1	3.2

educated to elementary school level or below (48.3%) and were aged between 4 and 66 years (mean age of 30.5). As shown in Table 1, the major psychiatric disorders seen included psychosis, depressive disorders, adjustment disorder/sleep disorders, anxiety disorders, autism spectrum disorder, attention deficit/hyperactivity disorder and developmental delay. Special issues such as intellectual disability, a history of brain injury/neurological illness, domestic violence/child abuse, alcohol-related disorders/problems and Internet gaming disorder were also noted.

First, local PMH medical staff referred 23 patients with potential psychotic symptoms, impaired cognitive functions or alcohol-use problems. These individuals were being cared for within the wider family/society, where there is a local culture of

sharing. The successful referral rate was about 60.9%. After this, other patients who suffered from neurotic symptoms or family issues came by themselves. These patients were repressing their symptoms in their daily lives.

It is difficult to conduct cross-cultural diagnosis and interventions, especially in island countries with limited resources and relevant literature (Allan and Hunter, 1985). To our knowledge, this is the first report concerning mental health conditions in Tuvalu. Since 2000, the threat of rising sea levels has caused about a third of Tuvalu's population to resettle to New Zealand (Commonwealth Health Online, 2019). With the current growth in globalization and migration, it is important to understand more about mental health conditions in

Tuvalu, where alcohol use, Internet/electronic gaming and Westernization are complicating local mental health problems which then require further intervention.

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## Science needs better reporting to improve translational mental health research

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To the Editor

Increasingly, results of clinical trials of psychological interventions are glossing over science in favour of a positive narrative. This practice adversely affects the establishment of basic science (i.e. the mechanisms by which interventions may work), the application of basic science to practice and patient outcomes. Practitioners and patients need accurate science-based information about likelihood of treatment effectiveness to make informed decisions. One example is antidepressants. While they are widely prescribed, they only improve symptoms in approximately 20% of patients (Institute for Quality and Efficiency in Health Care, 2006). The effectiveness for specific patient groups are needed to inform practitioner and patient decision-making is often very difficult to decipher in publications when nuanced information is omitted.

Other common reporting problems found in peer-reviewed journal papers include global statements of intervention effectiveness, using symptoms, such as anxiety and depression, as synonymous for psychiatric disorders, using parametric, rather than nonparametric tests, when statistical assumptions are violated, using *p*-values to imply effect size, omitting details of the proportion of the sample that achieved reliable change to demonstrate the likely real-world impact of the results, and not interpreting results within the limitations of the measures used and the positive and negative results of the study.

The identification of initial elevation bias, whereby self-report measures of internal negative mental states have elevated results at the first administration (Shrout et al., 2018), as one example, has significant implications for psychological and psychiatric research methodologies, especially in interpreting cross-sectional studies of prevalence of self-reported negative symptoms to calculate the prevalence of mental illness in population studies. Similarly, in a recent study I conducted with university students, the K10, a commonly used measure of psychological distress in clinical and epidemiological research, had an unacceptable 1 month test–retest reliability of .55. While this may have been sample-specific, population-specific, a measure characteristic, initial elevation bias or something else, it highlights the need for the limitations of self-report measures to be given more consideration when interpreting and reporting results.

While publication bias has been widely discussed as a cause for fewer

published negative scientific findings (e.g. DeVito and Goldacre, 2019), in the ever-increasing quest for headlines by publishers and authors, more nuanced, factual, and balanced reporting can be counterproductive. However, better mental health outcomes for patients depend on publishers, authors and reviewers demanding higher standards. Rather than glossing over inconvenient truths, better science may beget better science and allow us to more quickly identify and disseminate effective treatments for mental illnesses.

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