Suicide and self-harm surveillance across the Western Pacific: A call for action

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An estimated 703,000 people died by suicide in 2019 globally with approximately one-quarter occurring in the Western Pacific Region (WPR). Many more attempt suicide or endure ideation, and impact further extends to people bereaved by suicide and/or carers. Tailored, national suicide prevention strategies should focus on restricting access to means of suicide, responsible media communication of suicidal behaviours, boosting resilience and coping skills among youth, and early identification and culturally appropriate intervention with individuals, groups and communities at risk of suicidal behaviours. This relies upon establishing and maintaining surveillance systems to provide accurate and timely national and local information on suicide and self-harm. However, this is hard to achieve in practice and requires substantial departmental collaboration, prioritisation, and funding. Furthermore, the WPR is a particularly diverse region, with vast differences in the size of land mass, populations, and economies of countries, as well as sociodemographic characteristics and cultural-linguistic backgrounds. Consequently, the quality of suicide surveillance systems vary greatly across the region, and even more so when considering reliable high quality surveillance systems of self-harm. Enhancing the quality of existing surveillance systems and establishing new systems (especially for self-harm) is essential for suicide prevention in the region and will increase understanding of local risk and protective factors and facilitate the evaluation of suicide prevention activities.

Figure 1 presents age-standardised suicide rates based on the World Health Organization (WHO) estimates by gender for the WPR. Kiribati, Micronesia, Mongolia, Republic of Korea, Solomon Islands, and Vanuatu have rates far exceeding the global average age-standardised rate of 9.0 per 100,000 (2019). Nevertheless, Joinpoint regression analyses showed a significant decline of age-standardised suicide rates for women across most countries (2000-2019). Similarly declines were observed for men in several countries; however, Papua New Guinea, Philippines and Vietnam showed a significant increase during the whole observed period (2000-2019) and an in increase was observed in Australia since 2003, in Micronesia since 2009, in Malaysia since 2013 and in Brunei Darussalam since 2014. There were notable variations by sex (from 1.8 in China to 13.4 in Solomon Islands in 2019), which are in line with previous research and may be explained by differences in gender and cultural norms. However, only high-income countries within the WPR have mortality registration systems covering the entire country and providing ‘high quality’ suicide statistics by the WHO. Whereas, in lower income countries these systems are either non-existent or of poor quality and modelling techniques are utilised for calculating the estimates. Current best practice guidelines for implementing suicide prevention activities at the national level account for these contextual differences and suggest a scaled approach to establishing or enhancing surveillance activities.

Surveillance of suicide attempts and self-harm is more challenging and currently there is one dedicated self-harm monitoring system on the emergency department (ED) level in the WPR (in Australia). Further national hospital-based registers in the WPR can be found in Japan, the Republic of Korea, and Australia. Periodical cross-sectional surveys may provide additional information about self-reported suicide attempt/self-harm prevalence as well as suicidal ideation in the community. Additional surveillance of mental health problems and suicidality can be also gathered from helpline services. Further practical advice is comprehensively detailed in the WHO manual for establishing a self-harm surveillance system, and countries across the region without such (particularly low- and middle-income countries) are encouraged to tailor these to their specific circumstances.

Despite their limitations, existing surveillance systems provide essential information regarding the directions of future suicide prevention for the region. A timely example of the use of real-time surveillance information has been to rapidly assess whether changes in suicide rates occurred during the initial period of the
ongoing Covid-19 pandemic.\(^{14}\) Regarding the WPR specifically, current information can be used to highlight certain risk groups, main means of suicide, and risk correlates to inform tailored suicide prevention strategies. For example, in a recent review the high burden of suicide in youth and cultural/ethnic minority groups across the Pacific Islands, and the importance of restricting access to highly hazardous pesticides in rural areas.\(^{15}\) Furthermore, the absence and/or poor quality of surveillance across some areas of the region reveals how crucial it is that lower income countries are supported and encouraged in establishing, maintaining, and refining their systems (especially for self-harm). There is a need for enhancing and/or developing suicide and self-harm surveillance systems across the WPR. A regional sentinel surveillance system on suicide and self-harm in...
the WPR could be an important step forward in increasing the availability and quality of data.

Declaration of interests

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Author contribution

KK: conceptualisation, data curation, formal analysis, methodology, project administration, and writing—review & editing; SM: conceptualisation, writing—original draft; AF: conceptualisation, writing—review & editing.

References