

Snips from the Journals

## Current trends, models of assessment and interventions for suicide and self-harm: an update

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The World Health Organization (WHO) has recognized that the prevention of suicide is a public health priority and the mental health action plan 2013-2030 of the WHO includes working towards the global target of reducing the suicide rate in countries by one-third by the year 2030 (1).

We present the latest updates on the current trends, models of assessment and interventions regarding suicide and self-harm.

**The majority of global suicide deaths occur in the low-income and middle-income countries (2)**

Knipe et al., look at the differences in suicide and self-harm between low-income and middle-income countries (LMICs) and high-income countries (HIC) and highlight that 80% of global suicides occur in LMICs (2). However, as only 15% of research in this area originates from the LMICs they question the applicability of interventions and prevention strategies based on evidence from HICs in the LMICs (2).

Knipe et al., mention that the available evidence indicates that the risk of suicide or self-harm (including repeat self-harm) is lower in minority ethnic groups when compared with their majority ethnic counterparts (2). The exception to this appears to be the Indigenous populations who have higher rates of suicide and self-harm compared to the major ethnic group (2).

They also highlight the effectiveness of psychological therapies in the prevention of self-harm and suicide as has been shown in HICs but point out that brief interventions and digital interventions may be useful in resource-poor LMIC settings (2-4).

**Time to rethink whether risk assessment scales per se are enough to identify high-risk patients, their needs and treatment (5)**

Franklin et al., draw attention to the value of risk factors in predicting suicidal thoughts and behaviours and report that the prediction of such behaviours based on risk factors is only slightly better than chance for both suicidal behaviours and thoughts (5).

Several other experts in this area also highlight this point and state that risk assessments such as the unassisted clinician classifications or the use of risk scales per se may be insufficient to predict future suicidal behaviours and in the categorization of patients as high, medium, or low risk of suicide (2,5,6). They suggest several new approaches such as the Implicit Association Test, computerized adaptive tests and the use of machine learning algorithms as more effective risk assessments for predicting suicides and self-harm (2,5,7).

Graney et al., also emphasise the above in a study conducted in the United Kingdom where most patients who died by suicide had been assessed as low risk in their last contact with mental health services (6). The National Institute for Health and Care Excellence (NICE) guidelines and other experts emphasise that risk assessment tools should not be used to predict future suicide or repetition of self-harm but recommend that clinicians should focus first on the assessment of the needs of the person and then how best to support his/her immediate and long term safety (8,9).

Lucey and Matti report the frustration expressed by the patients due to the excessive focus on risks by the clinicians which the patients claim to have diverted the attention of the clinicians away from the patient's needs (10). They suggest a more integrated and collaborative assessment and care-planning around both "risk" and "safety" than is practised now (10).

**Safety planning-type interventions (SPTIs) for patients at risk of suicide may help prevent suicidal behaviours (11)**

The National Institute for Health and Care Excellence (NICE) recommends safety planning type interventions (SPTI) for patients presenting with attempted suicide and self-harm (8). The techniques in developing the SPTIs are derived from cognitive behavioural therapy for suicide prevention, which includes several predetermined coping strategies and resources an individual may use during a crisis to avert the thoughts or urges of suicide (11-13).

However, previous studies on SPTIs have reported mixed results (13-16). Nuij et al., in a recent meta-analysis, looked into the effectiveness of SPTIs such as safety plans, coping strategies, sources of support, and personal warning signs of an impending suicidal crisis, in reducing suicidal behaviour and ideation (11). They report that the relative risk of suicidal behaviour among patients who received SPTIs compared with the control group was 0.570 (95% CI 0.408-0.795,  $P=0.001$ ) with a number needed to treat (NNT) of 16 (11). They recommend that safety planning should be recognized as the best practice for the prevention of suicidal behaviour in individuals at risk of suicide (11). Studies on suicide prevention also support the use of psychological interventions such as cognitive behavioural therapy, dialectical behaviour therapy and brief interventions (17,18).

Digital interventions that deliver psychological self-help provide the opportunity to reach individuals at risk of suicide who do not access mainstream health services (19)

Torok et al., in their meta-analysis, looked into research on the web or app-based interventions that are self-guided with no outside coaching or support that delivered theory-based therapeutic content, based on interventions such as cognitive behavioural therapy (CBT) or dialectical behaviour therapy (DBT), in relation to suicidal ideas, plans or attempts (19). They aimed to determine whether direct digital interventions targeting suicidality and indirect digital interventions targeting depression, are effective in reducing suicidal ideation and behaviours. They report that the primary outcome of the overall post-intervention effect for suicidal ideation was small, however, it was significant immediately following the active intervention phase (Hedges'  $g$  -0.18, 95% CI -0.27 to -0.10,  $P<0.001$ ;  $I^2=0\%$ ,  $I^2$  CI 0-47.9) (19). Their secondary analysis, which compared the direct and indirect interventions show that the direct interventions targeting suicidality significantly reduced suicidal ideation at post-intervention (Hedges'  $g$  -0.23, 95% CI -0.35 to -0.11,  $P<0.001$ ;  $I^2=17.6\%$ ,  $I^2$  CI 0-58.6), but indirect interventions targeting depression failed to reach significance (Hedges'  $g$  -0.12, 95% CI -0.25 to 0.01,  $P=0.071$ ;  $I^2=0\%$ ,  $I^2$  CI 0-30.7) (19). The authors suggest that such digital interventions should be promoted and disseminated especially when there is a lack of or minimal access to services (19).

A systems approach to suicide prevention could be successfully implemented within mental health services with modest additional resources when supported by leadership and the organisation (20)

Many states across Australia are now adopting the Zero Suicide Framework (ZSF), a major reform in suicide prevention (20). Turner et al., report that this framework has been implemented because of several problems encountered in the existing practices such as ongoing dependency on risk-based predictions, limited ability to respond to clients in crisis, and lack of focus on meaningful interventions (20). They describe the pitfalls and successes in the implementation of ZSF in the Gold Coast Mental Health and Specialist Services and further highlight the importance of paying attention to factors that contribute to the work performance of the staff such as their purpose, identity, and mastery. They also emphasize the need for cultural change in the workplace, the importance of clear leadership and commitment to running the programme as well as that such leadership should occur at every level of the organisation (20). Turner et al., also state the importance of training the staff through attitude and skills development and inclusion of evidence-based practices and emphasize that continuous quality improvement approaches are needed to run such a programme successfully (20).

### Statement of contribution

Both authors contributed equally to the selection of articles and summarising the findings and writing. Both authors have approved the final version.

### Conflicts of interest


None declared.

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