Identifying suicide risk factors in children is essential for developing effective prevention interventions

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Suicide is a leading cause of death among children and adolescents, yet there is a dearth of high quality, large-scale research focused on children. This paucity of research is a concern in light of robust evidence that rates of suicidal ideation and suicide attempts in this age group have increased markedly over recent years.[1] Therefore, Delfina Janiri and colleagues' study[2] of almost 8000 children published in *The Lancet Psychiatry* is particularly welcome. Indeed, given that eight of every 100 children in their sample reported some aspect of suicidality (most commonly suicidal ideation), family members, teachers, and clinicians need to be vigilant.

This study has many strengths.[2] It reports on a large and nationally representative sample of 9–10-year-olds, it includes independent child and caregiver reports of wellbeing and suicidal history, and it incorporates a diverse range of measures assessing personal, family, and social characteristics. To our knowledge, this report is the largest and most detailed population-based study of suicidality (ie, suicidal ideation, suicidal plans, and suicide attempts) in this age group. For the most part, Janiri and colleagues' findings[2] complement existing evidence from adolescents and older age groups by highlighting the role of child psychopathology and child-reported family conflict in the emergence of suicidality. If we are to develop effective suicide prevention interventions, it is essential that we identify and target these childhood risks. In particular, greater effort to protect children from early life adverse experiences is vital, given that family conflict was associated with between a 30% and 75% increased risk of suicidality, even when taking into account the effect of psychopathology.

The findings related to suicidality and screen-use are novel. Janiri and colleagues[2] found that higher weekend screen use time was associated with an increased risk in child-reported suicidality and this relationship appeared to be stronger in boys than in girls. This is a potentially interesting insight, but the nature of the relationship needs to be investigated and the direction of the relationship requires clarification. Similar to a 2019 study of adolescent wellbeing,[3] the association between digital technology use and suicide risk is likely to be small, and it is not clear from the present analyses whether the relationship holds over time. Moreover, and as noted by the authors,[2] future research is required to determine which factors account for the relationship between screen time and suicide risk. As digital technology use confers benefits as well as risks, screen time use might be too blunt a measure to pinpoint the specific pernicious aspects associated with suicide risk. Negative social comparison processes[4] and cyberbullying[5] have been implicated in suicide risk in adolescents and young adults and might offer two possible explanatory mechanisms within the association between screen time and suicide risk.

The surprisingly poor child–caregiver concordance in the reporting of suicidality is a potentially important and noteworthy contribution to the methodological and clinical literature.[2] In short, if we wish to learn about a child's suicidality or to assess suicide risk, we need to ask the young person directly. In this age group, it seems that caregiver report is an unreliable method of assessment. More widely, these findings might also warrant a review of the extant literature on childhood suicidality, as present findings would suggest that a reliance on caregiver-reported suicidality might underestimate the prevalence of suicidal phenomena in children.[2]

Too often, studies in the suicide prevention field have focused on risk factors and, as a result, it is often difficult to identify protective factors to target in psychosocial interventions. Therefore, it is rewarding that the focus of this study includes potential buffers,[2] and it is valuable to see parental and positive school involvement emerge as robust factors associated with reduced suicide risk in children. It would be useful to better characterise which components of parental involvement are most important in protecting against suicide risk. The findings for positive school involvement add to the growing evidence that school-based interventions might reduce suicide risk.[6] Given the poor child–caregiver concordance in reporting of suicidality, raising awareness in teachers of potential warning signs of suicidality in children might be appropriate and an important component in the development of school-based interventions.

The findings of this study make an important contribution to extending the existing literature on suicidality in younger children;[2] however, they are limited by being cross-sectional and by the small number of children who had formulated a suicide plan or attempted suicide. Consequently, it was not possible to discern factors that differentiated between suicidal thoughts and suicidal acts. This is unfortunate given the growing recognition that factors associated with the emergence of suicidal thoughts are distinct from those that govern a suicide attempt.[7,8] Therefore, a key focus for future research should be factors that facilitate as well as impede the transition from suicidal thoughts to acts of suicide. Finally, a more in-depth appreciation of the process of behavioural enaction could lay foundations for the development of suicide prevention interventions targeted at childhood risks.

We declare no competing interests.

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1 Plemmons G, Hall M, Doupnik S, et al. Hospitalization for Suicide Ideation or Attempt: 2008-2015. *Pediatrics* 2018; **141:** e20172426.
2 Janiri D, Doucet GE, Pompili M, et al. Risk and protective factors for childhood suicidality: a US population-based study. *Lancet Psychiatry* 2020; published online March 11. https://doi.org/10.1016/S2215-0366(20)30049-3.
3 Orben A, Przybylski AK. The association between adolescent well-being and digital technology use. *Nat Hum Behav* 2019; **3:** 173–82.
4 Wetherall K, Robb KA, O'Connor RC. Social rank theory of depression: a systematic review of self-perceptions of social rank and their relationship with depressive symptoms and suicide risk. *J Affect Disord* 2019; **246:** 300–19.
5 Sedgwick R, Epstein S, Dutta R, Ougrin D. Social media, internet use and suicide attempts in adolescents. *Curr Opin Psychiatry* 2019; **32:** 534–41.
6 Zalsman G, Hawton K, Wasserman D, et al. Suicide prevention strategies revisited: 10-year systematic review. *Lancet Psychiatry* 2016; **3:** 646–59.
7 Mars B, Heron J, Klonsky ED, et al. Predictors of future suicide attempt among adolescents with suicidal thoughts or non-suicidal self-harm: a population-based birth cohort study. *Lancet Psychiatry* 2019; **6:** 327–37.
8 O'Connor RC, Kirtley OJ. The integrated motivational-volitional model of suicidal behaviour. *Philos Trans R Soc Lond B Biol Sci* 2018; **373:** 20170268.

Advancing the study of local ethnic density and psychosis

Most studies of neighbourhood ethnic density and psychosis have used cross-sectional data to explore the association between the two. Specifically, evidence predominantly emanating from European countries (eg, the UK, the Netherlands) has supported the ethnic density hypothesis—namely, that living in a neighbourhood with a lower proportion of one's own ethnic group is associated with a higher risk of psychosis.[1,2] Findings from studies that ascertain neighbourhood ethnic density at or near illness onset are vulnerable to interpretations of social drift across neighbourhoods over time.[3] Those at higher risk of psychosis might have accrued such risks during childhood in ethnically dense areas, only later drifting to more socially isolated neighbourhood areas due to the ramifications of illness. This is especially a concern since other outcomes, such as depression and anxiety, which are less vulnerable to social selection processes, show weaker and less consistent associations with neighbourhood ethnic density.[4]

While researchers using a Danish registry[5] were the first to address this vulnerability by supporting the ethnic density hypothesis longitudinally, the study by Jennifer Dykxhoorn and colleagues[6] published in *The Lancet Psychiatry* is the first to do this while differentiating first-generation from second-generation migrant density and probable visible minority status from probable non-visible minority status. A large prospective Swedish population registry captured the neighbourhood ethnic density of 468 223 migrants and their children at age 15 years, or when migration to Sweden occurred if later than 15 years of age. This cohort was tracked until emigration, death, or study end (Dec 31, 2016) for the outcome of a an ICD-10 diagnosis of non-affective psychosis (F20–29). In addition to replicating the ethnic density finding (ie, a 5% decrease in own-region migrant density corresponded to a 3% increase in psychosis risk), which got stronger after controlling for known neighbourhood-level confounders such as deprivation and population density and individual-level factors such as familial socioeconomic indicators (hazard ratio 1·05 [95% CI 1·03–1·06]), they found increased risk in both migrants and children of migrants. This study also showed that, for migrants, reduced generation-specific own-group migrant density was associated with risk of psychosis (hazard ratio 1·07 [1·04–1·11] per 5% decrease in density).

Living day to day among other first-generation migrants from the region of origin could be particularly important given migrants are generally less acculturated


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