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The long-term impact of bullying victimization on mental health

There is little doubt today that being bullied in childhood is an adverse experience that casts a shadow on children's and adolescents' mental health and wellbeing. After several decades of general skepticism about the true impact of bullying victimization, accumulating evidence now demonstrates a detrimental effect on youth's mental health and reveals other poor outcomes including low self-esteem, self-harm and academic failure. Recently, emerging findings have pointed toward a possible long-lasting effect of bullying beyond the childhood and adolescent periods. The impact of bullying on the young victims may therefore persist once the bullying has long stopped. This conclusion would imply a profound shift for prevention and intervention strategies, which commonly focus on the perpetrators of bullying, in the direction of greater attention to the victims, with the aim of reducing the burden of bullying victimization on individual lives and societal costs.

To date, three longitudinal cohorts have documented the adult outcomes of bullying victimization in childhood: the Epidemiologic Multicenter Child Psychiatric Study in Finland, the Great Smoky Mountains Study in the US, and the National Child Development Study in the UK. Studies indicated that young victims of bullying have higher rates of agoraphobia, depression, anxiety, panic disorder and suicidality in their early to mid-20s, compared to those who have not been bullied in childhood[1-3]. Child victims of bullying also have an increased risk of receiving psychiatric hospital treatment and using psychiatric medications in young adulthood[4]. Another study found that victims of bullying in childhood report high levels of psychological distress at age 23 but, most importantly, also at age 50[5]. Adults who were victims of frequent bullying in childhood had an increased prevalence of poor psychiatric outcomes at midlife, including depression and anxiety disorders, and suicidality. The effects were small, but similar to those of other adverse childhood exposures measured in that cohort study, such as placement in public or substitute care, or exposure to multiple adversities within the family.

These findings are based on observational data and thus do not allow causal inferences. The consistency of the results across three separate cohorts is, however, compelling. The three cohorts: a) used prospective measures of bullying victimization in childhood and later outcomes in adulthood; b) controlled for mental health problems in childhood, indicating that bullying victimization contributes either to new or to additional mental health problems in later years; c) accounted for a range of potential confounders, including childhood IQ, parental socio-economic status and gender; d) are representative of the population of three different countries. Conclusions from these studies cannot be ignored.

The developmental processes that translate childhood bullying victimization into health problems later in the life course are poorly understood. To identify targets for intervention programs aimed at reducing the harmful outcomes of being bullied in childhood, we need a better understanding of these processes. One such possible process relates to theories of the biological embedding of stress. Studies of monozygotic twins discordant for bullying exposure indicate that bullying victimization in childhood is associated with a blunted cortisol response[6], which in turn is associated with problems in social interaction and aggressive behavior[7]. A further study showed that the bullied twins had higher methylation levels on the serotonin transporter gene compared to their non-bullied co-twins[8]. These higher levels of methylation were associated with lower levels of cortisol response. Effects of this kind may serve as an interface between childhood bullying victimization and later vulnerability to stress and psychopathology.

Other studies have indicated that those who were victimized by bullies also showed problems with social relationships, poor physical health and financial difficulties in adulthood[5]. This suggests that other processes could involve a detrimental effect of being bullied on life opportunities for building the human and social capital that young children need to overcome adversity and have successful and fulfilling lives. Another process refers to the fact that poor health outcomes are a function of symptoms that developed at the time of the bullying exposure. For example, mental health problems like depression and anxiety are likely to persist, especially when they manifest early in life. Untreated signs of psychological distress that appear early in life, or markers of physical illnesses, may be the precursors to a life of poor health, both mental and physical. The possibility of poly- and re-victimization should also be considered, whereby being bullied in childhood may generate further abuse from peers or adults, forming the first stage in a cycle of victimization that perpetuates over time and across situations[9].

Although described separately, these processes are likely to operate together in contributing to adverse outcomes. Multidisciplinary research across different levels, from biological embedding of stress to poly-victimization and genetic influences, will be essential to understand the underpinnings of men-

tal health difficulties among victims of bullying. Animal models may provide useful insights, because they allow for a better control of the bullying experience and offer an opportunity to explore biological mechanisms in more depth. For example, an experiment on mice demonstrated the role of brain-derived neurotrophic factor in the mesolimbic dopamine pathway to explain social aversion among mice exposed to repeated aggression[10].

Tackling bullying behaviors could not only reduce children's and adolescents' mental health symptoms but also prevent psychiatric and socio-economic difficulties in adulthood. Anti-bullying programs show promise in controlling bullying behaviors[11]. However, the chances of eradicating bullying completely are minimal and we need to acknowledge that, despite such programs, a considerable proportion of young people will not escape this form of abuse. Intervention efforts should therefore also focus on limiting distress among young victims and possibly, by the same token, preventing long-lasting difficulties in later life. A new innovative strategy could aim at preventing children from becoming the targets of bullying in the first place. Such a public health approach might be a more effective way to reduce the bullying-related burden.

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Suicide risk assessment: tools and challenges

The World Health Organization estimates that over 800,000 people die by suicide each year, and for each suicide as many as 20 more individuals have attempted suicide[1]. The assessment and management of suicide risk is considered a core competency for psychiatrists, yet guidelines diverge in their recommendations and there is no universally accepted model. Risk assessment and management is best conceptualized as a process – not a single event – that includes structured evaluation, intervention, and re-assessment. Here, we comment on benefits of risk assessment, tool selection, risk assessment in self-injurious patients, and the unique challenge of working with patients who harbor thoughts of suicide that they do not disclose.

Some psychiatrists are reluctant to use risk assessment suicide tools, worrying that risk stratification is too inaccurate to be useful; that suicide-specific treatments, including medications and psychotherapies, are unavailable or do not improve outcomes; or that an over-emphasis on risk management might lead to defensive medicine. Although tools are imperfect, most experts agree that a structured assessment, meaning a consistent way of assessing and integrating risk and protective factors, is more likely to elicit relevant patient information and produce consistent risk formulations. Additionally, several evidence-based suicide-specific treatments exist, including commonly available medications, increasingly available psychotherapies, and relatively simple multidisciplinary interventions[2]. While uncertainty about a patient's suicide risk might lead to conservative recommendations, using and documenting a risk assessment process that educates patients about their risk, while prioritizing autonomy and outpatient treatment, should result in the most appropriate individualized care, effective communication with other providers, and medico-legal protection.

A growing literature supports this assertion. The Collaborative Assessment and Management of Suicidality (CAMS) model is a prototype clinical framework organized around the cooperative completion of the quantitative and qualitative Suicide Status Form (SSF). This model, which encourages problem-solving to reduce the suicide "drivers" and boost coping, is designed to enhance the patient-clinician alliance, build motivation, and avoid inpatient hospitalization. Completion of the initial SSF identifies suicide drivers, and the abbreviated follow-up form tracks improvement[3]. Drawing on CAMS, military-sponsored researchers developed a more complete and flexible approach, the Therapeutic Risk Management (TRM) framework. In this framework, clinicians augment evaluation with a risk assessment tool of their choosing, to stratify risk in terms of severity (low, medium, or high) and temporality (acute or chronic), and to collaboratively develop a safety plan based on a six step template[4]. The CAMS and TRM models share a clinically-motivated emphasis on avoiding involuntary hospitalization, arguing that it can damage the alliance and result in psychosocial setbacks that might exacerbate long-term suicide risk.

For psychiatrists not trained in CAMS, we recommend the TRM framework, including use of an assessment tool. When selecting a tool, consider whether it has been validated, has a quantitative component, can be repeated, is not diagnosis-specific, is available in a variety of formats, and is available in relevant languages. In our view, the Beck Scale for Suicide