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The serious health consequences of abuse and neglect in early life

What might a proportionate clinical response look like?

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There is growing evidence that familial child abuse (physical, sexual, emotional) and neglect are associated with excess mortality during childhood^{1,2} and adulthood.^{3,4} A linked study in *The BMJ* by Wang and colleagues (doi:10.1136/bmj-2022-073613) contributes to this evidence, exploring the association between physical and sexual abuse during childhood and adolescence, and death before age 70, using 18 years of follow-up data on 67 726 female nurses.⁵ Adjusted hazard ratios were reported for all cause mortality of 1.53 for severe physical abuse and 1.80 for serious sexual abuse, and these hazard ratios were higher for death from injury, poisonings, suicide, respiratory illness, digestive system diseases, and cardiovascular disease (2.4-4.8). Tobacco smoking and depression were dominant mediators.

The authors do not infer causality because their study was observational.⁵ And yet, considering the weight of accumulated evidence, a causal association between child abuse and neglect, and poor health^{6,7} and premature death is indicated. Studies, including that by Wang and colleagues, have found a dose-response relationship: the earlier, more severe, and enduring the abuse, the larger the impact on health.¹⁻⁸ Studies in differing contexts, incorporating a range of potential confounders, consistently report these associations. Reported risk ratios can be very large; for example, a 49-fold increase in risk of emergency department attendance for mental health problems in teenagers removed from birth families due to abuse⁶; or a 10-fold increase in the risk of psychosis associated with penetrative child sexual abuse.⁸ Biologically plausible mechanisms linking child abuse with poor health are well described. These include changes in brain structure and function,⁹ and dysregulation of regulatory systems, such as the autonomic nervous system, neurohumoral systems, and immune system.¹⁰

The causes of death and illness with the strongest associations with child abuse and neglect are consistent with these mechanisms. Inflammation is implicated in depression,¹¹ bipolar disorder,¹¹ psychosis,⁸ cardiovascular disease, gastrointestinal,¹² respiratory,¹³ and autoimmune disorders. Threat based relational functioning that emerges in the context of abuse¹⁴ contributes to all forms of post-traumatic stress disorder, social isolation, interpersonal violence, and intergenerational transmission, as does epigenetics. The expected effects on risky behaviours are observed—high rates of smoking, substance misuse, suicide, self-harm,^{6,11} and teenage pregnancy.

Accepting that abuse and neglect in early life can have very serious health consequences, including early death, should mobilise a robust response from

governments, policymakers and clinicians. This response must be proportionate to the level of harm, with extra funding to better support populations at risk. Unfortunately, proportionate responses are rare—health, social, and economic consequences of child abuse and neglect remain high across the globe.¹⁵

We suggest four therapeutic pathways for reducing risk of premature death. Firstly, to work therapeutically with distressed families, to reduce ongoing abuse and disrupt intergenerational transmission—the dominant pathway.¹⁶ Successful models exist that involve trauma responsive emotional or psychological treatments.^{17,18} These models can be delivered in mental health services or other clinical settings to people with a history of abuse or neglect, including those with severe mental illness (depression, bipolar disorder, psychosis).¹⁷⁻²⁰ A further suite of promising interventions work with distress stored in the body: sensorimotor psychotherapy,²¹ trauma sensitive yoga,²² deep brain reorienting,²³ somatic experiencing,²⁴ and creative arts therapies.²⁵

Secondly, trauma based therapies could be part of all statutory child protection service responses—to address parental histories of maltreatment, child mental health, and include parent-child dyadic therapy to repair damaged relationships.¹⁸ The third pathway is to better address the harmful and risky behaviours that emerge in adolescence or early adulthood. And fourthly, to recognise that early life trauma can underlie clinical presentations across a range of health conditions—addressing the trauma might improve clinical outcomes and reduce the need for invasive investigations or medical interventions. Approaches might include the use of anti-inflammatory drugs for mood disorders.^{11,26}

Training for all professionals working with families—across health, education, and social care—to recognise and respond sensitively and with cultural awareness to child abuse and neglect is crucial to reduce retraumatisation of victims and engage highly vulnerable children and families. Workers in non-clinical community settings could be trained to deliver trauma informed services, and integration of trained peer workers in clinical teams would combine professional expertise with the credibility of lived experience.

It is now clear that health outcomes for people exposed to serious child abuse or neglect are poor and for those subject to the highest level of abuse truly disturbing. Clinicians and leaders in health and human services sectors must step up and provide the services needed. Notification to child protection services cannot be considered the end of our

responsibility—it rarely elicits the clinical and related services that families need.

Clinicians and health and community services require the capacity, skill, and funding to deliver the intensive and responsive service models needed to address the trauma underlying many, apparently intractable chronic conditions. A long term commitment to a proportionate response could reduce the disturbing health consequences observed in victims of child abuse and neglect, and prevent the transmission of abuse to another generation.

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