

CHILDREN WITH INTELLECTUAL DISABILITY AND ADOLESCENTS: BURDEN, SETTINGS OF CARE, AND EMERGING APPROACHES

Bisma Imtiaz^{a*}

^aDepartment of Human Development and Family Studies, University of Home Economics, Gulberg, Lahore, Pakistan.

*Correspondence to: Ms. Bisma Imtiaz, Department of Human Development and Family Studies, University of Home Economics, Gulberg, Lahore, Pakistan. Email: zarich914@gmail.com

KEYWORDS

Adolescent Mental Health,
Depression and Anxiety, School
Mental Health, Suicide Prevention,
Resilience

CITE THIS ARTICLE:

Imtiaz, B. (2026). Children with
intellectual disability and
adolescents: burden, settings of
care, and emerging approaches.
Pakistan Journal of Positive
Psychology, 3(1), 42-53.

ABSTRACT

The Mental disorders in children and adolescents represent one of the largest unaddressed health burdens globally. Approximately half of all lifetime mental disorders begin before the age of eighteen (Solmi et al., 2022; Kessler et al., 2005), yet most affected young people never receive formal care, and the treatment gap is widest in low and middle income countries (Kieling et al., 2011; Patel et al., 2007). This paper reviews five interconnected domains of youth mental health: depression and anxiety, school based mental health systems, suicide prevention, digital mental health interventions, and the relationship between trauma exposure and resilience. Evidence was drawn from systematic reviews, meta analyses, randomised trials, and institutional reports published mainly from 2010 onward, and synthesised narratively. Three consistent findings emerge across domains. First, prevalence estimates for internalising symptoms rose measurably during and after the COVID-19 pandemic, particularly among adolescent girls (Racine et al., 2021). Second, effective interventions exist at every level of the care pyramid, but implementation fidelity, workforce capacity, and sustained funding determine outcomes more reliably than the choice between comparably evidenced intervention models (Durlak and DuPre, 2008; Werner-Seidler et al., 2021). Third, protective factors operating at family, school, and community level account for a substantial share of variance in outcomes following adversity (Masten, 2014; Ungar, 2011), which shifts the policy question from deficit reduction alone toward the deliberate construction of protective environments. The paper concludes with implementation priorities for resource constrained settings, including task shifting to supervised non specialist providers (Singla et al., 2017; van Ginneken et al., 2021), integration of mental health into existing school health platforms (Fazel et al., 2014), means restriction and responsible media reporting as population level suicide prevention measures (Gunnell et al., 2017; Niederkrotenthaler et al., 2020), and cautious, evidence anchored deployment of digital tools (Grist et al., 2019; Torous et al., 2018).

I. INTRODUCTION

Adolescence and late childhood constitute the peak risk period for the onset of mental disorders. Pooled epidemiological evidence indicates that the median age of onset across all mental disorders falls in the mid-teens, with approximately one third of disorders emerging before age fourteen and close to half before age eighteen (Solmi et al., 2022; Kessler et al., 2005). This developmental clustering is not incidental. It coincides with rapid remodelling of prefrontal and limbic circuits and with heightened sensitivity to social and cultural input (Blakemore

and Mills, 2014), with the consolidation of identity and peer relationships, with transitions through educational systems, and, in many societies, with first exposure to economic responsibility, migration, or early marriage (Patton et al., 2016; Sawyer et al., 2018). The consequences of untreated childhood mental illness extend well beyond the clinical encounter. Longitudinal cohort evidence links common childhood psychiatric problems to reduced educational attainment, unstable employment, poorer physical health, higher rates of substance use, and elevated mortality in adulthood, with effects observable even for subthreshold childhood symptoms (Copeland et al., 2015). Because these outcomes accumulate across the life course, delayed intervention in adolescence produces compounding social and economic costs (Patton et al., 2016). Global service coverage remains poor. WHO Mental Health Atlas data show that child and adolescent services are the least developed component of most national mental health systems, with dedicated child psychiatry workforces measured in single digits per million populations in many countries and effectively absent in others (World Health Organization, 2021a). Even in high income settings with well-developed infrastructure, only about half of adolescents with a diagnosable disorder access any service, and a smaller proportion receive care specifically for that disorder (Merikangas et al., 2011; Whitney and Peterson, 2019). In low and middle income countries the figure is typically far lower, and specialist services are concentrated in a small number of urban tertiary centres (Kieling et al., 2011; Rathod et al., 2017). Pakistan illustrates the pattern, with fewer than one psychiatrist per hundred thousand populations and only a small number of child and adolescent specialists nationally (World Health Organization, 2021a; Rathod et al., 2017). In this paper I synthesise evidence across five domains that together define the contemporary child and adolescent mental health agenda. I have written it as a narrative review, with the aim of mapping the evidence base and identifying implementation priorities rather than generating pooled effect estimates.

I chose this topic because I lived through the period it describes. My final year of intermediate coincided with the arrival of COVID-19 in Pakistan. Colleges closed in March 2020, teaching moved to whatever internet connection each student happened to have at home, and the examination system that my entire year had been preparing for was suspended, revised, and revised again. For months nobody could say with any confidence whether we would sit papers, be promoted, or be assessed on some formula that had not yet been written. That uncertainty sat on top of an academic year that was already the most consequential one most of us had faced. What I observed during that period is essentially what the literature reviewed in this paper describes, only without the terminology. Students who had been ordinary and functional stopped attending online classes and stopped replying to messages. Sleep schedules inverted completely. Screen time expanded to fill the space left by school, friends, and physical movement. Households under financial pressure became tense, and young people absorbed that tension without any language for what was happening to them. Distress was commonly read as laziness, weak character, or a failure of faith rather than as something that could be treated. Almost nobody I knew went to a professional, and my college, like most in Pakistan, had no counsellor to go to in the first place. That experience shaped three of the choices made in this paper. It is why school mental health is treated as a delivery system rather than as an add on service, since school was the only institution that could plausibly have reached us and it was not equipped to. It is why the discussion of academic pressure, examination uncertainty, and sleep is given weight alongside clinical variables. And it is why the paper repeatedly returns to low resource implementation, because recommendations written for systems with school psychologists and referral networks do not transfer to a district where neither exists. I am aware that personal experience is not evidence, and nothing in the sections that follow rests on it. What it provided was the question. The evidence had to answer it on its own terms, and in several places it corrected assumptions I began with, most notably on the weakness of individual risk prediction and on the limited effect of awareness campaigns delivered without services behind them.

II. METHOD

I followed a narrative synthesis design. I identified literature from peer reviewed journals in psychiatry, paediatrics, public health, and educational psychology, supplemented by institutional reports from the World Health Organization, UNICEF, and the Inter-Agency Standing Committee. I gave priority to systematic reviews, meta analyses, randomised controlled trials, and large longitudinal cohorts published from 2010 onward, and retained earlier landmark studies where they remain foundational to the field (Felitti et al., 1998; Kessler et al., 2005). I defined five domains a priori: depression and anxiety, school mental health, suicide prevention, digital mental

health, and trauma and resilience. Within each domain I organised the evidence under three headings: epidemiology and mechanisms, intervention evidence, and implementation considerations. I selected a narrative approach because the five domains differ substantially in outcome measures, study designs, and units of analysis, which precludes meaningful quantitative pooling across them. Narrative reviews are vulnerable to selection bias, and the underlying evidence base is itself skewed toward high income, English speaking populations (Singla et al., 2017). Where evidence from low and middle income settings is thin, I have said so explicitly rather than smoothing over the gap.

III. RESULTS

Depression and Anxiety

Epidemiology

Meta analytic estimates of worldwide child and adolescent mental disorder prevalence converge on approximately thirteen percent for any disorder, with anxiety disorders the most common category at around six to seven percent and depressive disorders at approximately three percent in pre pandemic samples (Polanczyk et al., 2015). These figures mask substantial variation by age, sex, and measurement method. Anxiety disorders typically emerge earlier, often in middle childhood, while depressive disorders rise sharply from age twelve onward with a marked female predominance appearing after puberty (Thapar et al., 2012; Solmi et al., 2022). Pandemic era data indicate meaningful deterioration. A meta-analysis of studies conducted during COVID-19 estimated pooled prevalence of clinically elevated depressive symptoms at approximately twenty-five percent and anxiety symptoms at approximately twenty percent in youth samples, roughly double comparable pre pandemic estimates, with higher estimates in older adolescents and in girls (Racine et al., 2021). These are symptom scale estimates rather than diagnostic interviews, so they should be read as indicating elevated distress rather than a doubling of clinical caseness (Polanczyk et al., 2015; Racine et al., 2021). Nonetheless, the direction and consistency of the finding across countries is difficult to dismiss.

Mechanisms and Risk Architecture

Risk for internalising disorders is multifactorial. Heritability estimates for adolescent depression cluster around thirty to forty percent, indicating substantial but far from deterministic genetic loading (Thapar et al., 2012). Environmental contributors with the strongest evidence include family conflict, parental mental illness, bullying victimisation, academic pressure, poverty and food insecurity, and exposure to violence (Thapar et al., 2012; Arseneault, 2018; Hughes et al., 2017). Three mechanisms are particularly relevant to intervention design. Depressed and anxious young people show systematic biases toward threat detection and negative self-referential processing, and these biases are modifiable and form the target of cognitive behavioural approaches (Thapar et al., 2012; James et al., 2020). Adolescent sleep restriction is both a consequence and a predictor of depressive symptoms, and functions as a bidirectional maintaining factor (Lovato and Gradisar, 2014); it is also one of the few modifiable targets that is socially acceptable to discuss in settings where mental illness is stigmatised, which makes it strategically useful as an entry point. Finally, adolescent neural reward and threat systems are unusually responsive to peer evaluation (Somerville, 2013; Blakemore and Mills, 2014), which underlies both the potency of bullying as a risk factor (Arseneault, 2018) and the ambiguous role of social media platforms structured around quantified peer feedback (Odgers and Jensen, 2020).

Intervention Evidence

Cognitive behavioural therapy has the strongest evidence base for youth anxiety, with Cochrane review evidence showing remission rates following adequate courses that substantially exceed those of waitlist controls (James et al., 2020). Cognitive behavioural therapy and interpersonal psychotherapy for adolescents are both supported for depression, although effect sizes for depression treatment are generally more modest than those observed for anxiety (Thapar et al., 2012; Arango et al., 2018). For moderate to severe adolescent depression, network meta analytic evidence identifies fluoxetine as the agent with the most favourable balance of efficacy and tolerability, and it is generally recommended in combination with psychological therapy rather than as monotherapy (Cipriani et al., 2016; March et al., 2004). Prescribing to minors requires careful monitoring, particularly in the early weeks of

treatment, given the documented signal for treatment emergent suicidal ideation in this age group (Cipriani et al., 2016). Preventive interventions show small but real effects, with indicated and selective prevention generally outperforming universal prevention for depression outcomes (Werner-Seidler et al., 2021; Arango et al., 2018). The practical implication is that broad, low intensity psychoeducation campaigns should not be expected to reduce clinical caseload on their own.

School Mental Health

Schools are the only institution that reaches almost all children for a sustained period, which makes them the highest leverage platform for population level mental health work (Fazel et al., 2014). School based services also reduce the access barriers that suppress help seeking elsewhere, including cost, transport, parental gatekeeping, and the stigma attached to entering a psychiatric facility (Fazel et al., 2014; Kieling et al., 2011).

Models of Delivery

School mental health provision is usefully described as a tiered system (Fazel et al., 2014).

At the universal tier, whole school approaches are directed at all students and include social and emotional learning curricula, anti-bullying programmes, and staff training in mental health literacy. Meta analytic evidence indicates that social and emotional learning programmes improve social skills, emotional adjustment, and academic performance, with modest average effect sizes (Durlak et al., 2011). Whole school anti bullying programmes have among the most consistent evidence in this tier, with meaningful reductions in both perpetration and victimisation when implemented with fidelity (Gaffney et al., 2019; Ttofi and Farrington, 2011). At the selective and indicated tier, group interventions are delivered to students identified as at elevated risk through screening or referral. Evidence for classroom delivered cognitive behavioural programmes is mixed, with small average effects and notable heterogeneity, largely attributable to differences in facilitator training and programme dosage (Werner-Seidler et al., 2021). At the targeted clinical tier, individual treatment is delivered on site by counsellors, psychologists, or visiting clinicians, or through structured referral pathways to external services (Fazel et al., 2014).

Implementation Determinants

Programme effects depend heavily on implementation quality, and reviews across prevention science consistently find that programmes delivered with high fidelity produce effect sizes several times larger than those delivered poorly (Durlak and DuPre, 2008). Recurring failure modes include delivery by untrained teachers already carrying full teaching loads, which produces curriculum drift and reduced dosage; absence of a functioning referral pathway, so that screening identifies need the system cannot meet; short funding cycles that end programmes before institutionalisation; and screening conducted without consent protocols or confidentiality safeguards, which erodes student trust (Fazel et al., 2014; Durlak and DuPre, 2008). Universal screening should not be introduced unless identified cases can actually be served. Screening in the absence of downstream capacity generates identified need, family anxiety, and institutional liability without improving outcomes, a pattern also observed in the suicide prevention literature where screening arms without linked service capacity failed to outperform controls (Wasserman et al., 2015).

Relevance to Low Resource Settings

In systems where school counsellors are rare or absent, the realistic entry points are teacher mental health literacy training, structured anti bullying policy, referral linkage to a named community health worker or primary care facility, and modification of examination and academic pressure practices (Kieling et al., 2011; Rathod et al., 2017). Each is low cost and does not depend on specialist workforce availability, which is consistent with the broader evidence supporting non specialist delivery in resource constrained systems (van Ginneken et al., 2021).

Suicide Prevention

This section discusses suicide in an epidemiological and public health frame. Consistent with safe messaging guidance, it excludes any description of methods (World Health Organization, 2021b; Niederkrotenthaler et al., 2020).

Epidemiology

Suicide is among the leading causes of death in the fifteen to twenty-nine age group globally, and the large majority of these deaths occur in low and middle income countries (World Health Organization, 2021b; Hawton et al., 2012). Self-harm without fatal intent is considerably more common than suicide death and is the single strongest predictor of subsequent suicide, which makes presentation for self-harm a critical intervention point rather than a behavioural problem to be managed and discharged (Hawton et al., 2012; Franklin et al., 2017). National data quality is a serious constraint. In countries where suicide has historically been criminalised or is heavily stigmatised, deaths are systematically misclassified and official statistics substantially understate true incidence (Khan and Hyder, 2006; Shekhani et al., 2018). Pakistan is one such context, and decriminalisation in 2022 removed one structural barrier to accurate reporting, although civil registration systems remain incomplete (Shekhani et al., 2018).

Risk and Protective Factors

Established risk factors include prior self-harm, mood and substance use disorders, exposure to suicide in family or peer networks, bullying and cyberbullying victimisation, childhood maltreatment, and access to lethal means (Hawton et al., 2012; Arseneault, 2018; Hughes et al., 2017). Acute precipitants in adolescents frequently involve interpersonal conflict, academic failure or examination results, relationship breakdown, and public humiliation, often compressed into a short window before the act (Hawton et al., 2012). A meta-analysis of fifty years of prediction research found that individual risk factors predict suicidal thoughts and behaviours only weakly, with predictive accuracy barely better than chance and little improvement over recent decades (Franklin et al., 2017). This finding argues against reliance on individual risk stratification and in favour of population level and environmental strategies. Protective factors with reasonable support include family connectedness, school belonging, help seeking attitudes, and restricted access to means during periods of acute risk (Zalsman et al., 2016; Gunnell et al., 2017).

Intervention Evidence

Systematic reviews spanning two decades identify a small set of strategies with reasonable support (Mann et al., 2005; Zalsman et al., 2016). Population level restriction of access to lethal means has the strongest and most consistent evidence of any suicide prevention strategy. In agricultural economies, national bans of highly hazardous pesticides have been followed by substantial declines in overall suicide rates without corresponding rises in other methods or reductions in agricultural yield (Gunnell et al., 2017; Zalsman et al., 2016). Adherence to safe media reporting guidelines is associated with reduced imitative behaviour, while sensationalised or method specifying coverage, particularly following the death of a well-known individual, is associated with measurable short term increases in suicide rates (Niederkrotenthaler et al., 2020). School based programmes show promise when they engage students directly. The SEYLE trial, a multi country cluster randomised study in European schools, found that a universal awareness programme delivered to students significantly reduced incident suicide attempts and severe ideation at twelve month follow up, while gatekeeper training of staff and professional screening arms did not show the same effect (Wasserman et al., 2015). Structured follow up after presentation for self-harm, including brief contact interventions and collaborative safety planning, reduces repeat presentation, although the overall evidence base for self-harm interventions in young people remains limited by small trials and heterogeneous outcomes (Stanley and Brown, 2012; Hawton et al., 2016). Gatekeeper training is widely deployed and popular with funders. Evidence reliably shows improvement in knowledge and confidence among trainees, but evidence of downstream reduction in suicidal behaviour is weak (Zalsman et al., 2016; Wasserman et al., 2015). It should be treated as one component of a system rather than as a standalone intervention.

Implementation Priorities

For resource constrained systems, the highest yield sequence is to establish means restriction policy where a dominant local method is identifiable, implement media guidelines with national broadcast regulators, build a functioning follow up protocol for self-harm presentations at emergency departments, and only then invest in broad awareness campaigns (Gunnell et al., 2017; Niederkrotenthaler et al., 2020; World Health Organization, 2021b).

Digital Mental Health

The Access Argument

Digital interventions are attractive because they address the two dominant barriers in youth mental health, namely workforce scarcity and stigma (Grist et al., 2019; Rathod et al., 2017). Smartphone penetration among adolescents is high even in lower income settings, and digital delivery offers anonymity, scheduling flexibility, and marginal cost close to zero once development is complete.

Evidence Status

Computerised and internet delivered cognitive behavioural therapy for youth anxiety and depression shows small to moderate effects relative to waitlist controls, with effects attenuating when compared against active controls (Grist et al., 2019). Guided interventions, in which a human provides even minimal support and accountability, consistently outperform fully self-guided ones, a finding replicated across adult and youth samples (Baumeister et al., 2014; Grist et al., 2019). This is the single most robust and practically important finding in the field. Three problems constrain the evidence base. Real world engagement is poor: objective usage analysis of publicly available mental health applications shows median retention falling to low single digit percentages within thirty days, far below the engagement observed in monitored trial samples (Baumel et al., 2019; Torous et al., 2018). The gap between evidence and market is wide: evaluations of app store listings find that the overwhelming majority of mental health applications make scientific sounding claims without supporting published evidence, and that marketplace ranking reflects marketing and interface quality rather than clinical effect (Larsen et al., 2019). Finally, safety and privacy protections are frequently inadequate, with unreliable risk detection, absent or nominal escalation pathways, and data handling practices poorly suited to a population of minors, in a regulatory environment that lags the market substantially (Torous et al., 2018; Larsen et al., 2019).

Social Media as a Distinct Question

Social media use should be analysed separately from digital intervention. Large scale analyses of population datasets find associations between adolescent digital technology use and wellbeing that are statistically robust but very small in magnitude, comparable to associations with mundane variables such as regular potato consumption or wearing spectacles (Orben and Przybylski, 2019). Causal direction remains contested, associations appear somewhat stronger for girls, and content type together with displacement of sleep and offline interaction may matter more than total screen time (Odgers and Jensen, 2020; Twenge et al., 2018; Lovato and Gradisar, 2014). The current evidence therefore supports concern about specific mechanisms, particularly appearance comparison, cyberbullying, and sleep displacement, rather than blanket claims about screens as such (Odgers and Jensen, 2020).

Implementation Guidance

Digital tools are best positioned as a tier within a stepped care system rather than as a replacement for services (Grist et al., 2019; Torous et al., 2018). Reasonable deployment criteria include published efficacy evidence for the specific product, some form of human guidance, an explicit risk escalation pathway, a transparent data policy, local language and cultural adaptation rather than direct translation, and functionality on low specification devices and intermittent connectivity (Larsen et al., 2019; Singla et al., 2017).

Trauma and Resilience

Adverse Childhood Experiences

The adverse childhood experiences framework established a graded, dose dependent relationship between cumulative childhood adversity and adult health outcomes (Felitti et al., 1998). Meta analytic work confirms that exposure to four or more adverse experiences is associated with substantially elevated risk of depression, anxiety, problematic substance use, interpersonal violence, and suicide attempt, alongside increased risk of cardiovascular and metabolic disease (Hughes et al., 2017). Proposed mechanisms include chronic dysregulation of the hypothalamic pituitary adrenal axis, altered threat processing, disrupted attachment and emotion regulation development, and downstream behavioural pathways including substance use and interrupted education (Hughes et al., 2017; Masten, 2014). The cumulative score requires an important caveat. It was developed as a population epidemiological instrument, and analyses in birth cohorts show that while it predicts group level risk reliably, it

performs poorly as an individual predictive screen, with high rates of misclassification in both directions (Baldwin et al., 2021). It also treats qualitatively different adversities as equivalent and omits contextually critical exposures including community violence, displacement, discrimination, and poverty (Baldwin et al., 2021; Miller and Rasmussen, 2010). Its use as a clinical triage tool for individual children is therefore not well supported.

Context Specific Adversity

In conflict affected, displaced, and disaster exposed populations, trauma exposure is often collective and ongoing rather than discrete and historical (Inter-Agency Standing Committee, 2007). Post traumatic stress prevalence in such populations is elevated but highly variable, and daily stressors including insecure housing, family separation, and loss of education frequently predict distress as strongly as the index traumatic event itself (Miller and Rasmussen, 2010). This finding matters operationally, because it implies that livelihood, shelter, and schooling interventions function as mental health interventions in these settings (Miller and Rasmussen, 2010; Inter-Agency Standing Committee, 2007).

Resilience

Resilience research has moved decisively away from the notion of an exceptional personal trait toward a systems account. Positive adaptation after adversity is common rather than rare (Bonanno, 2004), and is predicted by a recurring set of ordinary protective factors: at least one stable and responsive caregiving relationship, functioning self-regulation capacity, a sense of self efficacy, connection to a supportive school or community institution, and cultural or religious belief systems that supply meaning (Masten, 2014). Resilience is further shaped by the availability and cultural relevance of resources in a young person's social ecology rather than by individual disposition alone (Ungar, 2011). The practical implication is that resilience is engineerable at the environmental level. It is more tractable to strengthen caregiving capacity, school connectedness, and community support structures than to train individual children to endure adversity (Masten, 2014; Ungar, 2011), and the former does not carry the ethical problem of locating responsibility for survival in the child.

Intervention Evidence

Trauma focused cognitive behavioural therapy has the strongest evidence base for children with post-traumatic stress symptoms, and is recommended as first line psychological treatment in international guidance (World Health Organization, 2021b; Purgato et al., 2018). Parenting interventions that improve caregiver responsiveness and reduce harsh discipline show effects on child emotional and behavioural outcomes and are deliverable by trained non specialists (Barlow et al., 2016). In humanitarian settings, the stepped model set out in the Inter-Agency Standing Committee guidelines, moving from basic security and psychological first aid through community and family supports to focused non specialist care and finally specialist services, remains the operational standard (Inter-Agency Standing Committee, 2007). Task shifting to trained lay providers under supervision has demonstrated efficacy across multiple trials in low and middle income and humanitarian settings and is the only realistic route to scale in most such contexts (Purgato et al., 2018; Singla et al., 2017; van Ginneken et al., 2021).

IV. DISCUSSION

Cross Cutting Findings

Onset is early and detection is late. The gap between typical age of onset and typical age of first treatment contact is measured in years and, for some disorders, in more than a decade (Wang et al., 2005; Solmi et al., 2022). Any strategy that does not compress this delay will have limited population impact regardless of treatment quality.

Implementation dominates modality. Across school programmes, digital tools, and community interventions, variation in outcome is driven more by fidelity, dosage, workforce training, and supervision than by the choice between comparably evidenced approaches (Durlak and DuPre, 2008; Werner-Seidler et al., 2021; Torous et al., 2018). Funders and ministries consistently underinvest in the implementation layer relative to the intervention itself. Environments outperform individual level fixes. Means restriction, anti-bullying policy, caregiver support, and school connectedness operate at the level of the environment and show more reliable population effects than approaches requiring individual behaviour change from adolescents already under load (Gunnell et al., 2017; Gaffney et al., 2019; Masten, 2014). The weakness of individual level risk prediction reinforces this conclusion

(Franklin et al., 2017). The evidence base is geographically skewed. The great majority of trials originate in high income Western settings, and direct transplantation of manualised programmes without cultural adaptation has repeatedly produced attenuated effects (Singla et al., 2017; Rathod et al., 2017). Adaptation is not a courtesy; it is an efficacy requirement.

Priorities for Low and Middle Income Settings

First, task shift to trained and supervised non specialists as the default delivery model, with specialists functioning as trainers and supervisors rather than as primary providers (van Ginneken et al., 2021; Singla et al., 2017). Second, integrate mental health into existing platforms including school health programmes, maternal and child health services, and primary care, rather than constructing parallel systems (Fazel et al., 2014; Kieling et al., 2011). Third, prioritise means restriction and media guidelines as the suicide prevention measures with the strongest evidence and lowest recurring cost (Gunnell et al., 2017; Niederkrotenthaler et al., 2020). Fourth, invest in caregiver and family level intervention, given the centrality of caregiving quality to both risk and resilience (Barlow et al., 2016; Masten, 2014). Fifth, build data systems, since absent or unreliable surveillance makes it impossible to detect either deterioration or programme effect (Shekhani et al., 2018; World Health Organization, 2021a). Sixth, address stigma structurally through legal reform, media practice, and school policy rather than through awareness campaigns alone (Kieling et al., 2011; Niederkrotenthaler et al., 2020).

Research Gaps

Priority gaps include long term follow up of school based and digital interventions beyond twelve months (Werner-Seidler et al., 2021; Grist et al., 2019), adequately powered trials in low and middle income and conflict affected settings (Purgato et al., 2018; Singla et al., 2017), mechanistic work on social media effects using within person and longitudinal designs rather than cross sectional correlation (Orben and Przybylski, 2019; Odgers and Jensen, 2020), implementation science addressing sustainment after external funding ends (Durlak and DuPre, 2008), and development of prediction approaches for self-harm that improve on current clinical judgement, which remains close to chance at the individual level (Franklin et al., 2017).

Limitations

This review is narrative rather than systematic, and I did not perform a formal risk of bias assessment. Domain boundaries are analytically convenient but clinically artificial, since comorbidity between depression, anxiety, trauma related disorders, and suicidal behaviour is the norm rather than the exception (Polanczyk et al., 2015; Hawton et al., 2012). Prevalence figures drawn from symptom scales are not equivalent to diagnostic prevalence, and I have reported them as such where relevant (Racine et al., 2021). Finally, the literature I reviewed reflects the geographic skew described above, which limits the confidence with which these recommendations can be extended to settings underrepresented in the evidence base (Singla et al., 2017; Rathod et al., 2017).

V. CONCLUSION

Child and adolescent mental health is characterised by early onset, late detection, and a treatment gap that is widest precisely where the population burden is largest (Solmi et al., 2022; Kieling et al., 2011). The evidence I have reviewed here points in a clear direction. Effective interventions exist across all five domains, but their impact is determined by implementation quality and by the environments in which young people live rather than by the sophistication of the intervention model (Durlak and DuPre, 2008). Schools remain the highest leverage delivery platform (Fazel et al., 2014). Suicide prevention gains are most reliably achieved through population level measures, particularly means restriction and responsible media practice (Gunnell et al., 2017; Niederkrotenthaler et al., 2020). Digital tools offer real reach but require human guidance, published evidence, and safety infrastructure to deliver on that promise (Grist et al., 2019; Larsen et al., 2019). Resilience is best understood as a property of protective systems that can be deliberately built rather than as an individual capacity to be summoned (Masten, 2014; Ungar, 2011). The central policy implication is that improving youth mental health outcomes at scale depends less on discovering new treatments than on building the delivery systems, workforce, and protective environments capable of applying what is already known.

Disclosure Statement

No potential conflict of interest was reported by the authors.

Funding

The author received no funding from any organizations.

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