Ianna Journal of Interdisciplinary Studies, EISSN: 2735-9891

Volume 8, Issue 1, 2026

Stigma by Association as a Barrier to Psychosocial Resilience: Implications for Healthcare System Strengthening among Children of Parents Living with HIV/AIDS in Telangana

Ansilo Mathew
Department of Sociology & Social Work, School of Humanities & Social Science
NIMS University Rajasthan, Jaipur, Rajasthan, India
Email: ansilo.mathew@gmail.com
Dr. Lopamudra Das
Assistant Professor & Head, Department of Sociology & Social Work
Faculty of Humanities & Social Science, NIMS University Rajasthan, Jaipur, India
Email: lopamudra.das@nimsuniversity.org
Dr. Roy C. Mathew,
Director & HOD (Rtd.), School of Gandhidan Thought & Development Studies, Mahatma Gandhi University, Kottayam, Kerala
Email: drroycmathew@gmail.com

1. Introduction

HIV/AIDS remains one of the utmost consequential public health challenges of the contemporary era. Despite decades of biomedical advancement and sustained global programmatic investment, the epidemic remains to cast a far-reaching shadow on human health, social structures, and developmental outcomes across the ecosphere. According to the Joint United Nations Programme on HIV/AIDS (UNAIDS), as of 2024, about 40.8 million people worldwide were existing with HIV, of whom 1.4 million were children between the ages of 0 and 14 [1]. While significant strides have been made in reducing AIDS-related mortality and the frequency of new infections, the epidemic's range extends well beyond those directly infected. According to UNICEF, roughly 13.8 million children under the age of 18 had lost one or both parents to AIDS-related causes as of 2024, with millions more exposed to heightened risks of poverty, school dropout, discrimination, and social exclusion [2]. These figures underscore a critical yet frequently underacknowledged dimension of the epidemic: the profound psychosocial toll borne not only by individuals living with HIV, but by the children who live alongside them — a population rendered vulnerable not by infection, but by association.

In the Indian context, the HIV/AIDS burden retains considerable public health significance. The National AIDS Control Organisation (NACO) estimated that 3.14 million people were living with HIV/AIDS in India in 2023, making it home to the world's third-largest population of persons living with HIV [3]. At the sub-national level, Telangana emerges as one of the more significantly affected states. With an adult HIV prevalence of 0.49% — above the national average of 0.22% — and an estimated 1.58 lakh people living with HIV (PLHIV), Telangana carries a disproportionate share of the country's HIV burden [4]. While the state has recorded a commendable decline of nearly 71% in new HIV infections over recent decades, AIDS-related deaths and the PMTCT (Prevention of Mother-to-Child Transmission) burden continue to demand systemic attention [5]. These epidemiological realities create a substantial population of children living within households affected by parental HIV — children who are navigating complex psychosocial vulnerabilities that remain inadequately addressed within routine healthcare planning and policy frameworks.

Central to this chapter is the construct of stigma by association — a phenomenon in which individuals who are not themselves infected with HIV nonetheless experience stigmatization, social exclusion, and discrimination by virtue of their close association with someone who is. Rooted in Goffman's foundational theorization of stigma as a deeply discrediting social attribute that reduces an individual from a whole and usual person to a tainted and discounted one [6], stigma by association — also referred to in the literature as courtesy stigma or associative stigma — extends the reach of HIV-related stigma beyond the infected individual, enveloping family members, and particularly children, within its damaging social effects. Research has consistently shown that HIV-related stigma amplifies the negative effects of loss and economic deprivation resulting from parental illness, disability, and death.

Children orphaned by AIDS have been found to report significantly higher levels of mental health burden compared to children orphaned by other causes, with stigma experiences identified as a major exacerbating factor [7].

The psychosocial consequences of associative stigmatization among children of parents living with HIV/AIDS (CPLHA) are multifaceted and severe. The stressors associated with parental HIV/AIDS encompass economic deprivation, disrupted schooling, multiple losses, uncertainty regarding the clinical course of parental illness, inadequate caregiving, stigma, and social isolation — a constellation of adversities that collectively undermines children's psychological well-being, emotional development, and school functioning [8]. Empirical studies have reported that children of PLHA are at heightened risk for depressive symptoms, diminished self-esteem, behavioural problems, and impaired school adjustment [9]. A systematic review and meta-analysis on HIV-related stigma further established that stigma is significantly associated with poorer mental health outcomes, including anxiety, depression, emotional distress, and reduced life satisfaction, across both adult and paediatric populations [10]. Despite this well-documented burden, the secondary psychosocial impact on children in HIV-affected households continues to occupy a peripheral position in healthcare system planning and service delivery, reflecting a critical systemic gap that demands urgent scholarly and policy attention.

This study is theoretically grounded in two complementary frameworks: resilience theory and the social determinants of health (SDH) framework. Resilience theory posits that children possess the capacity to adapt positively in the face of adversity, and that such adaptive capacity is shaped by ecological contexts — including family systems, peer environments, school settings, community structures, and institutional supports [11]. The WHO's Social Determinants of Health framework recognises that health outcomes are significantly shaped by the conditions in which people are born, grow, live, work, and age — including structural factors such as social norms, policy environments, and institutional practices [12]. From this dual theoretical vantage point, stigma by association is understood not merely as an interpersonal experience, but as a structural determinant — a systemic vulnerability embedded in cultural norms, social institutions, and healthcare policy gaps — that directly undermines the resilience-building capacities of children in HIV-affected households.

The present chapter reports findings from an empirical study conducted in Telangana, India, examining stigma by association as a barrier to psychosocial resilience among CPLHA, facilitated through the Telangana State AIDS Control Society (TGSACS) [13]. The study pursued three specific objectives: (i) to assess the extent of stigma by association experienced by CPLHA; (ii) to examine the statistical relationship between stigma exposure and key psychosocial outcomes including self-esteem, emotional well-being, and school adjustment; and (iii) to analyse the implications of these findings for the design and strengthening of inclusive, resilience-oriented healthcare systems.

The remainder of this chapter is organised as follows. Section 2 presents a critical review of the literature. Section 3 elaborates the theoretical framework. Section 4 describes the research methodology. Section 5 presents the quantitative findings alongside supplementary qualitative case insights. Section 6 offers a discussion of the results. Section 7 translates findings into implications for healthcare system strengthening. Section 8 concludes with a synthesis of key insights, limitations, and directions for future research.

2. Review of Literature

2.1 Stigma by Association in the HIV/AIDS Context: Conceptual Origins and Evolution

The conceptual foundation of stigma by association is rooted in Erving Goffman's seminal work on stigma as a socially constructed attribute that disqualifies an individual from full social acceptance [6]. Goffman identified three types of stigmas — those associated with the body, character, and tribal identity — and introduced the concept of a 'spoiled identity' to describe the process by which stigmatised individuals are reduced to a single discrediting attribute. Crucially, Goffman observed that this stigmatising process could extend beyond the individual to those closely associated with them, a phenomenon he termed 'courtesy stigma.' In the HIV/AIDS context, this concept has been operationalised across decades of research as associative stigma or stigma by association — the experience of social discrimination and exclusion by non-infected individuals because of their relationship to a person living with HIV.

HIV-related stigma is recognised as one of the most complex and persistent forms of disease-based stigmatisation, characterised by its intersection with moral judgements, fear of contagion, and social categorisation of affected populations as deviant or blameworthy [14]. A comprehensive bibliometric analysis of HIV/AIDS

stigma research spanning from 1981 to 2024 found a dramatic growth in scholarly attention to this domain, with publications increasing nearly fourfold since 2000 — a trend that underscores both the persistence and evolving complexity of the problem [15]. Within this body of literature, stigma by association has been documented across multiple dimensions: enacted stigma, which encompasses overt acts of discrimination and exclusion; anticipated stigma, which involves the expectation of being stigmatised; internalised stigma, through which individuals absorb and accept negative social valuations; and courtesy stigma, which operates at the relational and familial level [16].

Children who are exposed to courtesy stigma through parental HIV status occupy a particularly vulnerable position, as they lack the developmental resources, social agency, and self-advocacy capacities that might partially buffer adult PLHIV from its most acute effects [17]. Research has shown that children may experience stigma more intensely than adults because they are often not in control of their circumstances, may be unaware of their rights, and are less able to contextualise or cognitively process stigmatising experiences [17]. This intensification of stigma experience is compounded by school environments, peer networks, and community settings that may amplify exclusion, bullying, and social marginalisation.

A 2023 systematic review examining HIV-related stigma and the health and well-being of children and adolescents living with HIV identified five major stigma-related challenges: disclosure-related anxiety, medication adherence difficulties, feelings of abnormality, mental health issues, and social exclusion [18]. While this review focused primarily on children who are themselves living with HIV, the psychosocial mechanisms it identifies are equally operative for CPLHA who experience stigma by association.

2.2 Psychosocial Impact on Children of Parents Living with HIV/AIDS

The psychosocial impact of parental HIV/AIDS on children is multidimensional, encompassing emotional, behavioural, cognitive, and social dimensions of development. A systematic review of global literature on the psychological well-being of children affected by parental HIV/AIDS found that children in HIV-affected households — particularly AIDS orphans — tended to demonstrate poorer psychological well-being compared to children from HIV-free families, with stressors including stigma, poverty, and multiple losses identified as significant exacerbating factors [8]. The review further noted that individual coping skills, trusting relationships with caregivers, and access to social support were the most consistently identified protective factors.

Self-esteem is among the most documented psychosocial outcomes affected by HIV-related stigma exposure in children. Children who perceive themselves as socially devalued or excluded because of their parent's HIV status tend to develop lower self-concept and diminished self-worth [9]. A cross-sectional study conducted in India using the Rosenberg Self-Esteem Scale found significant variation in self-esteem levels across adolescents from marginalised household contexts, with family environment and social inclusion identified as key determinants [19]. In the context of children of PLHA, this dynamic is amplified by the secrecy and social concealment that often surrounds parental HIV status.

Emotional well-being has been extensively documented as compromised among children in HIV-affected households. A mixed-methods study conducted at ICMR-National AIDS Research Institute in India found that emotional distress among adolescents living with perinatally acquired HIV was significantly associated with non-disclosure of parental HIV status, peer-related negativity, and parental hypervigilance [20]. Although this study focused on ALPHIV specifically, the pathways identified are directly relevant to CPLHA experiencing stigma by association.

School adjustment is a third critical domain of psychosocial functioning affected by stigma by association. Research has consistently found that children in HIV-affected households are at elevated risk for school absenteeism, academic underperformance, dropout, and social withdrawal from peer environments [7]. A study in India examining family environment, self-esteem, and school adjustment among adolescents found a significant positive association between family environment quality and adjustment behaviour [21]. A comprehensive intervention study conducted in India with HIV-positive adolescents further highlighted that low self-esteem, lack of social support, and emotional vulnerability were defining characteristics of participants who showed limited improvement following psychosocial intervention [22].

2.3 Resilience Theory and Children in HIV-Affected Households

Resilience theory provides a crucial conceptual lens through which to understand the adaptive capacities of

children living in adversity. The ecological model of resilience, developed by Ungar and colleagues, reconceptualises resilience not as a fixed individual trait but as a dynamic, context-dependent process shaped by the availability and navigation of resources within multiple ecological systems — including family, community, school, and institutional environments [11]. This ecological orientation is particularly important for CPLHA, whose capacity for resilience is profoundly shaped by structural conditions.

A conceptual framework for resilience among children affected by parental HIV/AIDS identifies four essential family-level resources that serve as protective mechanisms: parenting quality, emotional security, economic stability, and access to community resources [23]. The framework advocates for a shift from a deficit paradigm toward a strengths-based orientation that identifies and builds on the capacities of children, families, and communities.

Recent research has increasingly emphasised the role of multi-level resilience in improving outcomes for children and adolescents affected by HIV [24]. A 2024 review published in the Journal of the International AIDS Society identified that resilience among adolescents living with HIV encompasses the social and emotional skills, habits, and relational assets that facilitate overcoming adversity, and argued for adolescent-empowering care structures that actively promote the development of lifelong mental health resilience [25]. For CPLHA experiencing stigma by association, this means that stigma reduction is not merely a psychosocial nicety but a systemic prerequisite for effective resilience-building.

Studies in India have further demonstrated that comprehensive psychosocial interventions targeting self-awareness, coping, optimism, and peer support can significantly enhance resilience among HIV-affected youth [22]. A community-based participatory research (CBPR) study conducted in southern India with youth living with HIV found that integrating lived experience perspectives into research design and intervention development produced more culturally responsive and effective mental health programmes [26].

2.4 Social Determinants of Health Framework and Structural Stigma

The Social Determinants of Health (SDH) framework identifies the conditions in which people are born, grow, live, work, and age as the primary drivers of health inequity [12]. Within this framework, stigma functions not merely as an individual or interpersonal phenomenon but as a structural determinant — a systemic feature of social arrangements that differentially distributes health risk and protective resources across populations. Applied to the context of CPLHA, stigma by association functions as a structural vulnerability that operates through multiple pathways: social exclusion reduces access to peer support; school-based discrimination disrupts educational engagement; community stigmatisation restricts access to community resources; and healthcare stigma deters help-seeking behaviour among affected families.

A study examining social determinants of health and HIV care outcomes among people living with HIV identified five key SDOH domains — economic stability, education access, social and community context, health and healthcare access, and neighbourhood environment — as significant predictors of care engagement and health outcomes [27]. Among these, social and community context emerged as particularly influential.

Stigma as a social determinant of health is increasingly recognised as intersectional — operating not only along lines of HIV status but also through gender, caste, class, religion, and geographic location [10]. In the Indian socio-cultural milieu, HIV-related stigma carries additional layers of moral condemnation associated with perceived transmission routes, social norms around sexuality and disease, and caste-based discrimination, all of which amplify the stigma burden borne by children in HIV-affected households.

The UNAIDS Global AIDS Strategy 2021–2026 explicitly identifies the integration of HIV and mental health/psychosocial services as a priority target, calling for 90% of people living with or affected by HIV to be linked to people-centred, integrated services by 2025 [28]. This global mandate provides a policy framework for healthcare systems to move beyond biomedical HIV care toward holistic, SDH-informed models that incorporate psychosocial support, stigma reduction, and child-centred services.

2.5 Gaps in Child-Sensitive HIV Healthcare Systems: Indian Context

Despite the well-established evidence base linking HIV-related stigma to adverse psychosocial outcomes in children, the integration of child-centred psychosocial services within routine HIV care frameworks remains critically inadequate — particularly in India. The National AIDS and STD Control Programme Phase V (NACP-V,

2021–2026) outlines a strategic framework for HIV prevention and treatment but focuses predominantly on biomedical care pathways, with limited attention to the secondary psychosocial needs of non-infected children in HIV-affected households [29].

Research conducted in southern India as part of the I'mPossible Fellowship — a peer-led mental health and support programme for adolescents with perinatally acquired HIV — found high rates of depression and anxiety among participants, alongside significant psychosocial stressors including stigma, disclosure anxiety, and social isolation [30]. Critically, the study found that existing HIV services in India do not routinely incorporate evidence-based mental health interventions [30].

The WHO recommends the implementation of adolescent-friendly health services within HIV programmes — including peer-driven, integrated psychosocial interventions — as effective approaches to improving health outcomes [31]. In India, however, implementation of such integrated models has been limited and geographically uneven. A multi-stakeholder study on peer-led differentiated service delivery for APHIV in India found that while peer support models show promise, they tend to overlook the broader psychosocial, educational, and livelihood needs that extend beyond medical care [32].

School-based mental health programmes, which offer one promising avenue for reaching CPLHA experiencing stigma by association within institutional settings, remain underdeveloped in India. A review of school mental health initiatives in India noted significant gaps in coverage, particularly in rural areas and among marginalised populations, and called for systemic integration of mental health services within school health programmes under the Ayushman Bharat scheme [33].

The literature thus converges on a clear and urgent conclusion: existing HIV healthcare systems in India, while making significant strides in biomedical care delivery, have yet to develop comprehensive, institutionalised mechanisms for addressing the psychosocial needs of children affected by parental HIV. The present study contributes to filling this evidence gap through empirical investigation of these dynamics in Telangana, grounded in a resilience and SDH-informed analytical framework.

3. Theoretical Framework

This chapter is grounded in two complementary and mutually reinforcing theoretical frameworks: Resilience Theory, specifically informed by the ecological model of human development, and the Social Determinants of Health (SDH) Framework, as conceptualised by the WHO Commission on Social Determinants of Health. Together, these frameworks provide a robust theoretical architecture for understanding how stigma by association operates as both a psychosocial and structural force that undermines the developmental well-being and resilience of children of parents living with HIV/AIDS (CPLHA) in Telangana, India.

3.1 Resilience Theory: Ecological and Developmental Perspectives

3.1.1 Historical Development and Core Concepts

The conceptualisation of resilience has evolved considerably over the past five decades. Early formulations in the 1970s and 1980s positioned resilience primarily as an intrinsic, individual trait — a form of psychological 'hardiness' or invulnerability that allowed certain children to thrive despite adversity [34]. Pioneering longitudinal studies by Werner and Smith (1982) on resilient children in Kauai, Hawaii, challenged deficit-focused models by demonstrating that a significant proportion of at-risk children developed into competent and caring adults when supported by protective relationships within their immediate environments.

Building on Bronfenbrenner's foundational bio-ecological systems theory of human development, which conceptualises the child as embedded within a series of nested, interacting environmental systems — the microsystem, mesosystem, exosystem, macrosystem, and chronosystem — contemporary resilience theorists have progressively moved toward a multi-systemic understanding of resilience [35]. Bronfenbrenner's model identifies the microsystem (immediate family, school, peers) as the most proximal influence on child development, with progressively more distal but nonetheless significant contextual shaping provided by outer systems [36]. For CPLHA, this ecological lens is particularly illuminating: stigma by association permeates multiple ecological systems simultaneously — from peer rejection in the microsystem to discriminatory school policies in the exosystem and societal stigmatisation norms embedded in the macrosystem.

3.1.2 Ungar's Social-Ecological Model of Resilience

The most theoretically coherent and empirically supported contemporary articulation of resilience for this study's purposes is Michael Ungar's social-ecological model, which defines resilience as 'the capacity of individuals to navigate their way to the psychological, social, cultural, and physical resources that sustain their well-being, and their capacity individually and collectively to negotiate for these resources to be provided and experienced in culturally meaningful ways' [11]. This definition fundamentally reconceptualises resilience as a relational and negotiated process, one that is as much a property of environments as of individuals.

A landmark review by Ungar (2013) synthesised four decades of resilience research through the lens of Bronfenbrenner's model and identified three core principles of bio-social-ecological resilience: equifinality (multiple proximal processes can lead to equally viable expressions of well-being); differential impact (the nature and magnitude of risk factors differ across individuals and contexts); and complexity (resilience is produced through the interactions of multiple, non-linear system processes) [37]. Applied to CPLHA, these principles suggest that there is no single pathway to resilience, and that interventions must be designed with contextual variability in mind.

3.1.3 Resilience Framework Applied to CPLHA

A conceptual framework of psychological resilience specifically developed for children affected by parental HIV/AIDS, informed by both ecological systems theory and developmental psychopathology, identifies three critical and interactive levels of protective factors: internal assets (including cognitive capacity, coping skills, motivation to adapt, and spirituality); family resources (including parenting quality, emotional security, and economic stability); and community resources (including social support networks, access to services, and community cohesion) [38]. The framework proposes that these protective resources interact in accumulative and dynamic ways — the greater the adversity experienced, the greater the resources required to sustain resilience.

3.2 Social Determinants of Health (SDH) Framework

3.2.1 Conceptual Foundations

The Social Determinants of Health (SDH) framework was operationalised at the global policy level through the landmark 2008 report of the WHO Commission on Social Determinants of Health, Closing the Gap in a Generation [12]. The Commission defined social determinants as the conditions in which people are born, grow, live, work, and age — and the wider set of forces and systems shaping these conditions, including economic policies, social norms, political systems, and institutional arrangements. The SDH framework distinguishes between structural determinants (including socioeconomic position, income inequality, education, occupation, gender, ethnicity, and social class) and intermediary determinants (including material circumstances, psychosocial circumstances, behavioural factors, and the health system itself) [12].

The 2024 WHO World Report on Social Determinants of Health Equity reaffirmed that structural discrimination remains a major driver of health inequity globally, and called for urgent action to overcome structural discrimination and its health consequences across vulnerable populations [39]. Within this updated framework, stigma by association as experienced by CPLHA can be understood as a form of structural discrimination — not merely a social attitude but a systemic feature of community life that systematically disadvantages these children relative to their unaffected peers.

3.2.2 Stigma as a Structural Determinant of Child Health

The application of the SDH framework to HIV-related stigma is well-established in the literature. A comprehensive review of social and structural determinants influencing HIV risk and participation in the HIV care cascade identified stigma as a critical structural barrier — operating through multiple pathways including reduced health-seeking behaviour, impaired social support, educational disruption, and community exclusion [40]. For CPLHA, these pathways are particularly consequential during childhood and adolescence, when social belonging, academic engagement, and emotional security form the developmental foundations for lifelong well-being.

A 2024 study examining the association between social determinants of health and HIV care outcomes found that individuals reporting four or more SDOH challenges were over four times more likely to experience depression symptoms [27]. Structural determinants in the HIV context include not only socioeconomic conditions but also policy environments, legal frameworks, and institutional practices [41]. In India, the HIV and AIDS (Prevention and Control) Act of 2017 provides a legal framework protecting the rights of PLHIV and their families

from discrimination. However, the translation of legal protections into lived non-discrimination for children navigating school, community, and healthcare environments remains incomplete.

3.3 Integration of Frameworks: A Dual-Lens Theoretical Model

The present study adopts an integrated theoretical model that draws simultaneously on resilience theory and the SDH framework to conceptualise stigma by association as both a psychosocial risk process (operating through individual, family, and community pathways to undermine children's adaptive capacities) and a structural determinant of health (operating through systemic, institutional, and policy-level mechanisms that constrain the availability and accessibility of resilience-promoting resources).

The integrated framework, as applied to CPLHA in Telangana, proposes the following causal architecture: (i) At the structural level, socio-cultural HIV-related stigma generates stigma by association for CPLHA; (ii) At the intermediary level, this structural stigma produces psychosocial stressors including social exclusion, peer rejection, emotional distress, diminished self-esteem, and school adjustment difficulties; (iii) These stressors undermine children's internal assets, deplete family resilience resources, and reduce community-level protective factors; (iv) The resulting erosion of resilience produces adverse psychosocial outcomes; and (v) Healthcare systems that fail to address structural stigma perpetuate this cycle of disadvantage.

Table 1: Summary of Theoretical Frameworks Applied in the Study

Dimension	Resilience Theory	Social Determinants of Health Framework
Key Theorists	Bronfenbrenner (1979); Ungar (2011, 2013)	WHO Commission on SDH (2008); Marmot & Wilkinson; WHO (2024)
Core Concept	Resilience as a dynamic, ecological process shaped by individual, family, and community resources across nested environmental systems	Health outcomes determined by structural and intermediary social conditions — not merely individual biology or behaviour
Unit of Analysis	Child in ecological context — microsystem, mesosystem, exosystem, macrosystem	Social position and structural conditions — economic, political, institutional, and normative
Role of Stigma	Stigma depletes multi-level protective resources — eroding family bonds, social capital, and community support that sustain resilience	Stigma as structural determinant — systematically restricts access to health, education, and social resources across HIV-affected families
Application to CPLHA	Identifies protective factors (internal assets, family resources, community supports) to be strengthened through intervention	Identifies structural gaps in healthcare, school, and community systems that perpetuate psychosocial disadvantage among CPLHA
Healthcare System Implications	Resilience-oriented services: psychosocial programmes, school-based support, and community-level stigma reduction to rebuild protective resources	Structural reform: integrating child-centred psychosocial services, stigma-reduction policies, and intersectoral collaboration into HIV care frameworks

Source: Authors' own compilation based on reviewed literature.

3.4 Application of the Integrated Framework to This Study

The integrated dual-framework model guides the present study in four specific ways. First, it informs the selection of research variables: stigma by association is operationalised as the independent variable representing the structural and psychosocial risk process; self-esteem, emotional well-being, and school adjustment are operationalised as the dependent variables representing disrupted resilience outcomes. Second, it shapes the analytical approach: correlation and regression techniques are used to examine the statistical relationships between stigma exposure and these outcomes, providing empirical evidence for the theoretical proposition that stigma by

association functions as a significant predictor of adverse psychosocial development. Third, it provides the interpretive lens for the qualitative case insights. Fourth, and most significantly, the integrated framework directly informs the implications for healthcare system strengthening, positioning child-sensitive psychosocial service integration and stigma-reduction programming as structural interventions with demonstrably sound theoretical rationale [11,35,12,37,38].

4. Methodology

4.1 Research Design

This chapter employs a descriptive-analytical research design to study the nature, extent, and psychosocial consequences of stigma by association among children of parents living with HIV/AIDS in Telangana, India. A descriptive framework was adopted to systematically document the prevalence and manifestations of stigma by association across the study population, while the analytical dimension aided the identification of statistically significant relationships between stigma exposure and key psychosocial outcomes, including self-esteem, emotional well-being, and school adjustment. This dual-purpose design is particularly suited to social work and public health research, where both precise documentation and causal or associative inference are required to inform evidence-based intervention [42].

The study integrates quantitative methods as the prime analytical mode, supplemented by qualitative case insights to provide contextual depth. This mixed-methods orientation acknowledges that while statistical procedures can establish the strength and direction of associations, the lived experiences of affected children require interpretive frameworks that numerical data alone cannot fully capture [43]. The methodological approach therefore reflects an emerging consensus in stigma research advocating for pluralistic designs that bridge measurement and meaning [44].

4.2 Study Setting

The study was conducted across three districts in Telangana state, India, namely Medak, Sangareddy, and Siddipet. These districts were selected for their documented burden of HIV/AIDS prevalence as recorded by the Telangana State AIDS Control Society (TGSACS) and their socio-demographic diversity, which enhances the representativeness of the findings. Telangana, a state in southern India, continues to report significant HIV caseloads, particularly among marginalised communities, making it a critically important context for examining the downstream psychosocial impacts on dependent children [45].

The selection of three geographically proximate yet administratively distinct districts allow for intra-state comparison while maintaining cultural and linguistic coherence. Rural, semi-urban, and peri-urban settings within these districts were included to ensure diversity in socio-economic exposure and access to support services. Community-based HIV care centres, antiretroviral therapy (ART) centres, and networked non-governmental organisations operating under TGSACS were the primary access points for participant identification [46].

4.3 Sampling Strategy and Participant Profile

A random sampling procedure was employed to recruit study participants, facilitated through the institutional infrastructure of the State AIDS Control Society. The use of probability-based random sampling ensures that each eligible individual within the sampling frame had an equal chance of selection, thereby minimising selection bias and enhancing the generalisability of the findings [47]. Eligible participants were children aged between 8 and 17 years residing with one or both HIV-positive parents or guardians, enrolled in formal schooling, and willing to participate with informed parental or guardian consent.

Inclusion criteria required that children had been residing with the affected parent for a minimum of six months prior to data collection. Children with documented cognitive or developmental disabilities that would impair self-report accuracy were excluded. The sampling frame was constructed from the beneficiary registers maintained by ART centres and TGSACS-affiliated support organisations across the three study districts. A final sample representative of the demographic profile of the region, including variations in gender, age cohort, household income category, and caregiving arrangement, was secured [48].

4.4 Data Collection Instruments

Data were collected using a structured schedule comprising four standardised psychometric scales, each

targeting a distinct outcome variable central to the study's objectives. Standardised instruments were preferred for their established reliability and validity, their capacity to yield comparable data across respondents, and their alignment with the quantitative-analytical research design [49].Stigma by association was measured using an adapted version of a validated HIV-related stigma instrument contextualised for child respondents, assessing perceived social rejection, enacted discrimination, and internalised shame arising from parental HIV status [50]. Self-esteem was assessed using the Rosenberg Self-Esteem Scale (RSES), a widely administered ten-item instrument demonstrating robust cross-cultural validity and internal consistency across diverse populations, including adolescents in South Asian contexts [51]. Emotional well-being was operationalised through a validated measure capturing dimensions of psychological distress, including symptoms of anxiety, depression, and perceived social support deficits [52]. School adjustment was evaluated using a standardised scale assessing academic engagement, peer relationships, and teacher-student relational quality [53].All instruments were translated into Telugu, the primary language of the study districts, following a forward-backward translation protocol to ensure linguistic equivalence. Pilot testing was conducted with a small sub-sample prior to main data collection, and minor cultural adaptations were made to item phrasing to improve comprehension among the target age group without compromising construct integrity [54].

4.5 Supplementary Qualitative Component

In addition to the structured quantitative instruments, supplementary qualitative case insights were incorporated to contextualise statistical patterns and enhance interpretative depth. Semi-structured case narratives were drawn from a purposively selected subset of participants representing extreme or illustrative cases identified through the quantitative screening phase. These narratives explored participants' subjective experiences of stigma, their coping strategies, and their perceptions of support from family, school, and healthcare providers [55].

Thematic analysis was applied to the qualitative data in accordance with the framework proposed by Braun and Clarke [56], ensuring a rigorous and reflexive approach to coding and theme generation. The qualitative findings serve a complementary function within this chapter, enriching the statistical outcomes with first-person experiential accounts. This integration is consistent with convergent mixed-methods practice, wherein qualitative and quantitative strands are analysed independently and subsequently merged to produce a more comprehensive understanding of the phenomenon under investigation [57].

4.6 Statistical Analysis

Quantitative data were subjected to a two-stage analytical process. Descriptive statistics, including frequency distributions, means, and standard deviations, were computed to characterise the socio-demographic profile of the sample and the central tendency of each psychosocial variable. These preliminary analyses established the distributional properties of the data and guided the selection of appropriate inferential procedures [58].

In the inferential stage, Pearson's correlation analysis was employed to examine the bivariate relationships between stigma by association and each of the three outcome variables: self-esteem, emotional well-being, and school adjustment. Correlation analysis was selected for its capacity to quantify the strength and direction of linear associations between continuous variables [59]. Subsequently, multiple regression analysis was conducted to assess the predictive power of stigma by association on each psychosocial outcome variable, controlling for relevant socio-demographic covariates. Regression modelling enabled the identification of the relative contribution of stigma exposure to the variance in each dependent variable [60].Statistical significance was evaluated at the conventional threshold of $p < 0.05$, and effect sizes were computed to supplement significance testing with an assessment of practical significance. All statistical procedures were performed using IBM SPSS Statistics software. Data integrity checks, including tests for normality (Shapiro-Wilk), multicollinearity (Variance Inflation Factor), and homoscedasticity, were conducted prior to regression analysis to ensure the validity of the inferential results [61].

4.7 Ethical Considerations

The study was conducted in strict accordance with established ethical principles governing research with vulnerable child populations. Institutional ethical clearance was obtained prior to the commencement of data collection. Given the sensitive nature of the research context — involving children living in HIV-affected households — particular attention was paid to the principles of non-maleficence, beneficence, justice, and respect for autonomy [62].

Informed consent was obtained from parents or legal guardians, and child assent was secured separately from eligible participants prior to any data collection activity. Participants and their families were assured of the confidentiality and anonymity of their responses. The right to withdraw from the study at any stage without penalty was clearly communicated. Trained social work professionals conducted all data collection interactions, and referral pathways to psychosocial support services were made available to participants exhibiting significant distress indicators during the research process [63].

5. Findings and Analysis

This section presents the empirical findings of the study examining the psychosocial impact of stigma by association on 387 children of parents living with HIV/AIDS across three districts of Telangana — Medak, Sangareddy, and Siddipet. The analysis is organised across four thematic domains: the manifestations and prevalence of stigma by association; its impact on self-esteem and emotional well-being; the social exclusion experiences encountered in peer, community, and institutional contexts; and indicators of psychosocial coping and resilience.

5.1 Manifestations of Stigma by Association

Stigma by association refers to the social discrediting experienced by individuals who are affiliated with a stigmatised person, regardless of their own health status. In the present study, this phenomenon was assessed through twenty behavioural indicators spanning social, verbal, institutional, and symbolic dimensions. A one-sample t-test against a hypothesised population mean of 50 confirmed that the overall stigma by association score ($M = 54.80$, $SD = 9.18$) was significantly elevated, $t(386) = 10.28$, $p < .001$, establishing that the study population experiences stigma at a level substantially above the expected average. Table 2 presents the complete item-level frequency distribution across all twenty indicators, arranged in descending order of cumulative high-frequency exposure.

Table 2: Item-wise Frequency Distribution of Stigma by Association among Children of Parents Living with HIV/AIDS (N = 387)

Stigma Indicator	Never (%)	Rarely (%)	Several Times (%)	Most of the Time (%)	Combined* (%)
Loss of Friendship	10.59	20.93	31.52	36.95	68.47
Termination of Personal Relationships	11.89	21.71	30.23	36.18	66.41
Social Communication Rejection	12.14	22.22	28.94	36.69	65.63
Reduction in Social Visits	13.44	21.19	26.87	38.50	65.37
Social Avoidance by Others	13.18	25.84	23.26	37.73	60.99
Victimised on HIV Status	15.25	24.55	28.94	31.27	60.21
Public Mockery	14.47	26.10	25.58	33.85	59.43
Religious Blame Attribution	13.44	27.39	26.10	33.07	59.17
Verbal Scolding	14.99	26.36	24.81	33.85	58.66
Forced Social Isolation during Meals	14.47	27.13	28.68	29.72	58.40
Bad Name Calling	15.76	26.36	27.39	30.49	57.88
Voluntary Social Withdrawal	18.35	24.29	25.84	31.52	57.36
Social Segregation in Eating Practices	15.50	27.65	25.58	31.27	56.85
Physical Contact Avoidance by Others	13.70	29.46	26.10	30.75	56.85
Public Humiliation through Offensive Songs	11.11	32.30	27.91	28.68	56.59
Verbal Insult	17.57	26.61	24.29	31.52	55.81
Discriminatory Serving Practices	15.50	29.72	27.39	27.39	54.78
Social Exclusion Due to Illness Perception	21.96	32.04	23.00	23.00	46.00
Negative Future Labelling	21.96	31.27	24.29	22.48	46.77
Attempted Academic Exclusion	18.35	37.47	21.19	23.00	44.19

**Combined (%) = proportion reporting 'Several Times' + 'Most of the Time'. Items ranked by combined frequency in descending order. Total N = 387 for each indicator.*

The data reveal that relational and communicative exclusion constitute the most pervasive forms of stigma by association. Loss of friendship is the highest-reported indicator, with 68.47% of respondents experiencing this at least several times. This is closely followed by the termination of personal relationships (66.41%), social communication rejection (65.63%), and reduction in social visits (65.37%). These four indicators collectively describe a process of systematic social severance in which the child's interpersonal network is progressively dismantled as a direct consequence of parental HIV status.

Voluntary social withdrawal (57.36%) — in which the child pre-emptively removes themselves from social engagement — signals the internalisation of stigma: a shift from externally imposed exclusion to self-censorship, marking a critical juncture in the developmental impact of stigma on identity and belonging. Attempted academic exclusion, while the least frequent of the twenty indicators (44.19%), is significant because it extends stigma into constitutionally protected institutional spaces.

The one-way ANOVA across the three study districts confirms a statistically significant variation in overall stigma scores, $F(2, 384) = 76.23$, $p < .001$, with Sangareddy ($M = 58.97$, $SD = 8.90$) and Medak ($M = 57.50$, $SD = 9.09$) registering substantially higher stigma than Siddipet ($M = 47.94$, $SD = 4.51$). By contrast, no significant differences in stigma were observed across gender ($t(385) = 0.18$, $p = .861$), age ($F(2, 384) = 2.26$, $p = .106$), caste ($F(2, 384) = 1.07$, $p = .343$), religion ($F(2, 384) = 0.54$, $p = .586$), or educational level ($F(2, 384) = 2.13$, $p = .120$), confirming that stigma by association functions as a socially universal experience within this population, irrespective of demographic identity.

5.2 Impact on Self-Esteem and Emotional Well-Being

The second analytical focus examines how stigma by association shapes two core psychosocial constructs: self-esteem and emotional and psychological well-being. Table 3 presents the comparative mean scores for both constructs between HIV-affected children ($n = 387$) and a non-affected comparison group ($n = 90$), alongside inferential statistics.

Table 3: Comparison of Self-Esteem and Emotional Well-Being between HIV-Affected and Non-Affected Children

Construct	Group	N	M	SD	t	df	p
Self-Esteem	HIV-Affected Children	387	25.15	3.24	4.920	475	< .001
Self-Esteem	Non-Affected Children	90	26.98	2.89	—	—	—
Emotional & Psychological Well-Being	HIV-Affected Children	387	37.79	4.57	25.503	475	< .001
Emotional & Psychological Well-Being	Non-Affected Children	90	24.66	3.59	—	—	—

Note. Self-Esteem measured using Rosenberg Self-Esteem Scale (10 items; range 10–40; test value = 25). Emotional Well-Being measured using Social Support and Quality of Life scale (12 items; range 12–60; test value = 36). Independent samples t-test.

Self-esteem among HIV-affected children ($M = 25.15$, $SD = 3.24$) reveals a statistically significant deficit relative to non-affected children ($M = 26.98$, $SD = 2.89$), $t(475) = 4.92$, $p < .001$, indicating that the psychosocial context of parental HIV illness suppresses self-esteem below the level observed in children without this exposure. Age significantly moderates self-esteem, $F(2, 384) = 3.97$, $p = .020$, with older adolescents aged 16–18 years ($M = 25.60$) demonstrating higher self-esteem than the 13–15 age group ($M = 24.78$) and the 10–12 group ($M = 24.51$). This developmental trajectory suggests that maturation confers some protective capacity through expanded cognitive tools for meaning-making and identity consolidation.

The emotional and psychological well-being composite yielded a mean of $M = 37.79$ ($SD = 4.56$) for HIV-affected children. Notably, the between-group comparison with non-affected children produces a striking result: affected children ($M = 37.79$) score significantly higher than non-affected children ($M = 24.66$), $t(475) = 25.50$, $p < .001$. This seemingly counter-intuitive finding most plausibly reflects the fact that HIV-affected children exist within a context that necessitates heightened engagement with formal and informal support systems — including ART-linked social services, NGO support networks, and community health programmes.

5.3 Social Exclusion Experiences

Social exclusion in this study manifests across three interdependent contextual domains: peer relationships, community spaces, and institutional engagement. Within peer relationships, the data document a systematic erosion of social bonds. Over two-thirds of respondents (68.47%) experienced the loss of friendship at high frequency, with 66.41% reporting the termination of personal relationships.

In community settings, reduction in social visits (65.37%) and social avoidance by others (60.99%) signal the withdrawal of community members from family spaces, translating household-level stigma into a form of social quarantine. Physical contact avoidance (56.85%), discriminatory serving practices (54.78%), and forced social isolation during meals (58.40%) further entrench exclusion within the ritualised contexts of communal life.

Voluntary social withdrawal (57.36%) occupies a theoretically important position in this analysis. When a child withdraws from social contexts to pre-empt anticipated rejection, stigma ceases to operate only through external agents and instead becomes self-imposed. This internalised stigma represents the deepest penetration of the social stigma mechanism into the child's self-regulatory behaviour.

5.4 Psychosocial Coping and Resilience Indicators

Despite the substantial stigma burden documented in Sections 5.1 through 5.3, the dataset also surfaces important indicators of resilience. The inter-variable correlation structure, presented in Table 4, illuminates the relational architecture within which stigma, self-esteem, and well-being interact.

Table 4: Pearson Correlation Matrix — Stigma by Association, Self-Esteem, and Emotional & Psychological Well-Being (N = 387)

Variable	1. Stigma by Association	2. Self-Esteem	3. Emotional & Psychological Well-Being
1. Stigma by Association	—		
2. Self-Esteem	−0.032 (ns)	—	
3. Emotional & Psychological Well-Being	−0.215**	0.462**	—

*Note. ** p < .01 (two-tailed); ns = not significant. Stigma × Self-Esteem: r = −0.032, p = .534. Stigma × Emotional Well-Being: r = −0.215, p < .01. Self-Esteem × Emotional Well-Being: r = 0.462, p < .01.*

The correlation between stigma by association and self-esteem ($r = -0.032$, $p = .534$) is negligible and non-significant, indicating that the two constructs are not linearly related when analysed at the aggregate level. Critically, stigma by association is significantly and negatively correlated with emotional and psychological well-being ($r = -0.215$, $p < .01$), confirming that sustained stigma exposure predicts poorer psychosocial functioning. The moderate positive correlation between self-esteem and emotional well-being ($r = 0.462$, $p < .01$) is the strongest association in the matrix, establishing that self-esteem functions as a meaningful internal resource in the well-being architecture of these children.

Table 5 presents pre- and post-intervention scores for both self-esteem and emotional well-being among the comparison sub-sample (n = 90).

Table 5: Pre- and Post-Intervention Differences in Self-Esteem and Emotional Well-Being (n = 90)

Construct	Pre M	Pre SD	Post M	Post SD	t	p
Self-Esteem	24.98	3.59	33.74	1.65	−22.050	< .001
Emotional & Psychological Well-Being	37.57	4.97	50.27	2.09	−23.111	< .001

Note. Paired samples t-test (two-tailed). Pre-intervention data collected at baseline; post-intervention data collected following psychosocial intervention programme. p < .001 for both constructs.

Self-esteem scores increased from a pre-intervention mean of 24.98 (SD = 3.59) to a post-intervention mean of 33.74 (SD = 1.65), $t(89) = -22.05$, $p < .001$ — a gain of 8.76 scale points representing a 35% improvement from baseline. Emotional and psychological well-being scores showed an even more pronounced improvement, rising from M = 37.57 (SD = 4.97) to M = 50.27 (SD = 2.09), $t(89) = -23.11$, $p < .001$ — an increase of approximately

34% above baseline. Both effect sizes are large by conventional standards, indicating that the psychosocial deficits attributable to stigma by association are not irreversible and that structured, evidence-based intervention can mobilise significant latent resilience capacity.

6. Discussion

The findings of the present study — drawn from a sample of 387 CPLHA across three districts of Telangana — constitute a multi-dimensional empirical portrait of stigma by association and its psychosocial consequences. This discussion situates those findings within the integrated theoretical framework of Resilience Theory and the SDH Framework, connects them with the existing literature reviewed in Section 2, and identifies points of both convergence and divergence with prior research.

6.1 Stigma by Association as a Structural and Psychosocial Risk Process

The study's most striking empirical finding is the near-universality of stigma by association across all twenty indicators assessed. With 68.47% of children reporting the loss of friendship at high frequency, the data confirm that stigma by association is not a peripheral or episodic experience for CPLHA but a pervasive social condition that systematically infiltrates every relational domain of their lives. This finding resonates directly with the integrated theoretical model proposed in Section 3, which conceptualises stigma by association as both a structural determinant and a psychosocial risk process that progressively depletes the protective resources sustaining children's resilience.

The theoretical architecture of Ungar's social-ecological model of resilience [11] is confirmed empirically here: the children in this study are not simply confronting individual hardship, but are navigating environments systematically stripped of the relational and social resources that resilience theory identifies as indispensable. The progressive dismantling of peer networks, community belonging, and institutional inclusion maps precisely onto Bronfenbrenner's nested systems model [35] — stigma operating simultaneously in the microsystem (peer rejection, family isolation), the mesosystem (school and community interaction), and the macrosystem (cultural HIV stigma norms). That stigma shows no significant variation across gender, age, caste, religion, or educational level confirms the theoretical proposition that it functions as a structurally imposed condition rather than a consequence of individual vulnerability traits.

The district-level variation in stigma scores — Sangareddy ($M = 58.97$) and Medak ($M = 57.50$) substantially higher than Siddipet ($M = 47.94$) — introduces an important ecological dimension. This variation points to the role of local socio-cultural environments as structural mediators of stigma intensity, consistent with SDH framework principles that identify neighbourhood and community context as a key domain of social determinants [27]. It also aligns with Ungar's principle of equifinality.

6.2 Self-Esteem and Emotional Well-Being: Convergences and Divergences

The self-esteem findings require nuanced interpretation. The between-group comparison with non-affected children reveals a statistically significant deficit ($t(475) = 4.92$, $p < .001$), and the negligible correlation between stigma and self-esteem ($r = -0.032$, $p = .534$) indicates that the pathway from stigma to self-concept disruption is not linear but mediated by other processes. This finding both converges with and diverges from prior literature. It converges with Nabunya and colleagues' [9] documentation of a self-esteem deficit among children and caregivers affected by HIV-related stigma in Uganda, and with Ade and colleagues' [21] Indian study linking family environment disruption to lower self-esteem. The divergence lies in the absence of a direct statistical association at the aggregate level — a pattern that resonates with the resilience framework's recognition that internal assets can partially buffer the direct pathway from stigma to self-concept erosion.

The age-moderated pattern is particularly significant: older adolescents demonstrate higher self-esteem than younger cohorts, consistent with developmental theories of identity consolidation and suggesting that maturation confers protective cognitive resources — a finding aligned with Qiao and colleagues' conceptual framework [23]. The emotional well-being findings align with the SDH framework's recognition that intermediary determinants, including access to psychosocial support, can partially attenuate the health consequences of structural stigma [12], even when that access is structurally necessitated by the very vulnerabilities those children face. This is consistent, moreover, with the Indian intervention literature [22], which documents that engagement with comprehensive psychosocial programmes can measurably improve emotional functioning.

6.3 Social Exclusion and the Internalisation of Stigma

The social exclusion findings are among the most theoretically significant in the dataset, particularly the high prevalence of voluntary social withdrawal (57.36%). The SDH framework's model of structural discrimination [39] — in which systemic disadvantage becomes self-reinforcing when internalised by those it targets — is given concrete empirical expression here. When children pre-emptively remove themselves from social contexts to avoid anticipated rejection, the external mechanism of enacted stigma has been transformed into an internal self-regulatory process.

This finding resonates with Robinson and colleagues' [18] systematic review identifying social exclusion, feelings of abnormality, and mental health difficulties as core stigma-related challenges for children in HIV-affected households, and with Cluver and colleagues' [7] South African evidence linking cumulative stigma exposure and bullying to mental health impairment. A notable divergence from the South African literature is the absence of significant gender or caste variation in stigma exposure within this study's sample — suggesting that in the Telangana context, HIV-related stigma overrides these conventional axes of social differentiation.

6.4 Resilience Potential and Healthcare System Implications

The intervention data provide the study's most affirmative empirical finding: self-esteem improved by 35% and emotional well-being by 34% following structured psychosocial intervention, with a narrowing of standard deviations indicating convergence toward a more uniformly positive psychosocial state. The correlation structure further establishes self-esteem as a significant internal mediator of emotional well-being ($r = 0.462$, $p < .01$), suggesting that interventions targeting self-concept can produce secondary gains in broader psychosocial functioning. These findings confirm the central theoretical proposition of Ungar's ecological resilience model: that resilience is not a fixed individual property but a latent capacity that structured, responsive environments can mobilise.

The UNAIDS Global AIDS Strategy 2021–2026 [28] calls for the integration of mental health and psychosocial services with HIV care, explicitly identifying stigma as a systemic barrier to achieving comprehensive care outcomes. The present study provides empirical grounding for that mandate: stigma by association produces measurable, cascading psychosocial harm that current HIV care architectures in India — as documented through NACP-V [29] and institutional programme evidence [30] — are not systematically equipped to address.

7. Implications for Resilient Healthcare Systems

The empirical findings of this study carry substantive implications that extend well beyond the immediate population of CPLHA in Telangana. This section draws out four interrelated streams of implication: policy, practice, healthcare system design, and professional education.

7.1 Policy Implications

At the policy level, the most urgent implication is the need to revise existing HIV care frameworks to formally recognise CPLHA as a distinct and systematically underserved population. The National AIDS and STD Control Programme Phase V (NACP-V, 2021–2026) remains overwhelmingly biomedical in its orientation, with no institutionalised screening, referral, or service delivery protocols for addressing the psychosocial needs of non-infected children in HIV-affected households [29]. The evidence from this study makes a compelling case for the inclusion of child-centred psychosocial provisions as a formal and funded component of future NACP revisions.

Alignment with the UNAIDS Global AIDS Strategy 2021–2026 target — linking 90% of HIV-affected individuals and their families to integrated, people-centred services — provides the international mandate for these domestic policy reforms [28]. The HIV and AIDS (Prevention and Control) Act of 2017 provides a legislative platform that has yet to be fully operationalised for children. Extending its anti-discrimination protections into enforceable school and community safeguarding protocols would represent a critical structural intervention.

7.2 Practice Implications

At the level of service delivery, the intervention data from this study are unambiguous: structured, strengths-based psychosocial programmes produce large and statistically significant gains in self-esteem and emotional well-being among CPLHA. ART centres and Integrated Counselling and Testing Centres (ICTCs) — currently the primary contact points between HIV-affected families and the healthcare system — represent the most strategically

positioned platforms for embedding such programmes within routine service delivery.

Community health workers (CHWs), including ASHA workers and peer educators, occupy an irreplaceable role in this practice architecture. The peer-led, community-based participatory model developed by Sannigrahi and colleagues [26] offers one evidence-informed blueprint for how this architecture might be operationalised in the Indian context, co-designing support structures with affected communities rather than imposing externally developed clinical models.

7.3 Healthcare System Design: Integrating Stigma-Reduction into Resilient Care Architectures

The structural lesson of this study for healthcare system design is that stigma is not a peripheral cultural nuance to be managed alongside clinical care — it is a primary determinant of health outcomes in HIV-affected populations, and its reduction must be architecturally embedded in how healthcare systems are organised, resourced, and evaluated. The district-level variation in stigma exposure documented in this study confirms that local socio-cultural environments act as powerful structural mediators, suggesting that healthcare systems must be designed with sufficient sensitivity to local context.

The WHO's updated SDH framework [39] explicitly positions healthcare systems as structural actors with the capacity to redistribute protective resources; designing those systems with this redistributive function as an intentional architectural goal is the practical expression of that theoretical commitment. Public health crises — whether epidemics, pandemics, or climate-related health emergencies — consistently generate secondary stigmatisation of affected communities, with children among the most silently harmed.

7.4 Social Work Education and Interprofessional Training

The evidence from this study carries direct implications for how health and social care professionals are prepared to engage with HIV-affected populations. Social work education, in particular, is positioned at the intersection of individual wellbeing and structural advocacy — making it the most natural disciplinary home for competency-building in this domain. Curricula should integrate the SDH framework as a core analytical lens for understanding HIV-related stigma, grounding professional practice in structural analysis of how social arrangements produce and perpetuate psychosocial harm. Interprofessional training models — bringing together social work, nursing, public health, and education trainees — offer a further mechanism for building the cross-disciplinary communication and referral competencies that integrated, resilience-oriented care requires.

8. Conclusion

This chapter has examined stigma by association as a structural barrier to psychosocial resilience among children of parents living with HIV/AIDS in Telangana, India — contributing empirical evidence to a discourse that lies at the intersection of HIV care, child development, and the design of resilient healthcare systems. Drawing on data from 387 CPLHA across three districts, interpreted through an integrated theoretical framework of Resilience Theory and the Social Determinants of Health Framework, the study has demonstrated three core arguments.

First, stigma by association is a pervasive, structurally determined, and demographically universal experience for CPLHA in this context. Its manifestation across relational, verbal, communal, and institutional domains — and its statistical indifference to gender, caste, religion, and educational level — confirms that it operates not as a function of individual identity but as a systemic feature of social arrangements. The district-level variation in stigma intensity further establishes local socio-cultural environments as structural mediators, underscoring the need for geographically sensitive, community-level responses.

Second, the psychosocial consequences of this structural exposure are measurable, significant, and compound across developmental domains. Self-esteem deficits, compromised emotional well-being, and the internalisation of stigma — evidenced most acutely in the prevalence of voluntary social withdrawal — collectively describe a process in which externally imposed exclusion gradually becomes self-reinforcing. Critically, however, the intervention data establish that these deficits are not irreversible: structured, strengths-based psychosocial programming produced improvements of 34–35% in both self-esteem and emotional well-being, affirming the robust latent resilience of this population when appropriately supported.

Third, and most centrally, healthcare systems bear both a structural responsibility and a demonstrable capacity to disrupt this cycle of harm. Systems that embed child-sensitive psychosocial services, stigma-reduction

protocols, and community-level support within their standard HIV care architecture do not merely extend welfare — they function as active structural determinants, redistributing the protective resources that stigma by association has depleted. The children of Telangana's HIV-affected households do not lack resilience. What they lack are systems designed to recognise, protect, and cultivate it. Addressing that systemic deficit is not a supplementary aspiration for healthcare reform — it is a foundational condition for healthcare justice.

Several directions for future research emerge from this work. Longitudinal studies are needed to track the developmental trajectories of CPLHA over time. Comparative studies across Indian states with varying HIV prevalence rates and socio-cultural contexts would test the generalisability of the district-level variation observed here. Implementation research evaluating the scalability of integrated psychosocial programmes within ART centre and school-based delivery platforms is urgently needed to translate the evidence base into sustainable system change.

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