



CORPORATE SOCIAL RESPONSIBILITY AND RURAL SCHOOL WELLNESS IN INDIA: A CRITICAL NARRATIVE REVIEW OF PREVENTIVE HEALTHCARE, ADOLESCENT MENTAL HEALTH, AND SUSTAINABILITY CHALLENGES

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Abstract: Rural school-going children and adolescents in India shoulder a disproportionate burden of preventable health conditions — iron-deficiency anaemia, undernutrition, deficient sanitation infrastructure, poor menstrual hygiene facilities, and severely restricted access to mental health services. Successive government programmes, notably the Ayushman Bharat School Health and Wellness Programme (ABHSWP) and the Rashtriya Kishor Swasthya Karyakram (RKSK), have not durably narrowed this gap. Corporate Social Responsibility (CSR), operating under Section 135 and Schedule VII of the Companies Act 2013, has stepped into this space — directing funds toward school infrastructure, preventive care, digital health, and psychosocial wellness. Whether these contributions generate enduring, institutionally embedded health improvements or remain episodic and inadequately evaluated is a question the existing literature has not satisfactorily addressed. This critical narrative review examined what CSR has contributed to rural school health and wellness in India, with particular attention to preventive healthcare integration, adolescent mental health, governance limitations, sustainability challenges, and the institutional conditions under which meaningful impact becomes possible. A structured narrative review drawing on 247 identified records yielded 65 peer-reviewed empirical sources and 30 policy documents (95 total) across six thematic domains. Findings reveal meaningful CSR contributions to sanitation infrastructure, preventive screening, nutrition awareness, menstrual hygiene education, digital health pilots, and psychosocial wellness activities — yet delivery remained spatially uneven, temporally fragmented, and inadequately evaluated. Adolescent mental health infrastructure proved particularly deficient: rural schools lacked counsellors, referral pathways, and effective anti-stigma strategies, while the post-COVID psychological burden continued to intensify. Short CSR funding cycles, visibility-oriented programme design, weak monitoring, and intersectoral fragmentation consistently undermined sustainability. CSR carries real but largely unrealised potential for rural school wellness — a potential realisable only when embedded within long-term institutional frameworks rather than periodic project cycles, and only when governance reform, multi-stakeholder partnerships, mandatory longitudinal evaluation, and a deliberate shift from infrastructure delivery toward integrated, community-anchored preventive wellness systems are achieved.

Index Terms — Corporate Social Responsibility; Rural School Health; Adolescent Mental Health; Preventive Healthcare; School Wellness; Rural India; Sustainability; Health-Promoting Schools; Yoga and Mindfulness; Public Health Policy.

I. INTRODUCTION

The health trajectories of school-going children in India are shaped by far more than what happens inside a classroom. Where structural deprivation intersects with adolescent vulnerability, schools occupy an irreplaceable position — simultaneously educational institutions, community health nodes, and the most accessible platform for preventive intervention. This dual function is especially consequential in rural areas, where healthcare infrastructure remains fragile and developmental windows for early intervention are routinely missed.

India's adolescent population is among the largest in the world, and the health data are sobering. The NFHS-5 (2019–21) recorded anaemia in 59.1% of adolescent girls and 31.1% of adolescent boys aged 15–19 — figures reflecting not only dietary deprivation but systemic barriers to healthcare access, gender inequity, and inadequate sanitation [1,2]. A substantial proportion of rural schools have historically lacked functional gender-segregated toilets, directly contributing to menstrual hygiene-related absenteeism and school dropout among older girls [3]. These are not marginal statistics — they represent structural determinants of educational participation and long-term human capital formation.

Running alongside persistent physical health challenges is a more recently visible crisis: adolescent mental health. COVID-19 and prolonged disruption of schooling, social routines, and family livelihoods left discernible psychological marks on young populations globally. A meta-analysis by Racine et al. estimated that approximately one in four children exhibited depressive symptoms during pandemic-related school closures, with roughly one in five experiencing clinically significant anxiety [14]. In India's rural settings — where adolescents simultaneously navigate poverty, academic pressure, gender stress, and social isolation with minimal institutional support — the cumulative burden is likely higher, though systematically under-quantified. School counselling infrastructure in these settings is virtually absent; a 2021 analysis documented pupil-to-counsellor ratios exceeding 1:1,000 across several states [13].

The governance response has been neither absent nor adequate. ABHSWP, launched in 2018, positioned schools as health promotion sites by training wellness ambassadors and embedding health education in curricula [6]. The National Education Policy 2020 acknowledged emotional well-being and holistic development as central priorities [7]. Yet the distance between policy intent and district-level implementation remains wide — a pattern recurring throughout India's health systems literature [5,6]. Workforce shortages, administrative fragmentation, inadequate training, and poorly designed monitoring frameworks have collectively prevented these initiatives from realising their stated ambitions.

CSR has found a significant, if imperfectly mobilised, role within this implementation gap. The Companies Act 2013 mandated that qualifying companies allocate at least 2% of average net profits to Schedule VII social domains including health, education, and rural development [4]. India's aggregate CSR expenditure grew from approximately INR 10,065 crore in 2014–15 to an estimated INR 26,210 crore in 2022–23, with education and healthcare consistently among the most funded categories [24]. The more critical question, however, is whether these resources translate into durable, institutionally embedded wellness improvements — or remain episodic, visibility-oriented, and inadequately evaluated.

This critical narrative review synthesises available evidence on CSR's role in rural school wellness in India — examining not only what has been achieved but where structural limitations persist. It identifies governance reforms most likely to unlock CSR's potential and proposes a conceptual framework for integrated, sustainable school wellness ecosystems that move beyond awareness campaigns toward embedded institutional systems.

I.I Unique Contribution of This Review

Existing literature on CSR and school health in India has tended to address discrete domains — sanitation, nutrition, or infrastructure — in isolation, or has examined CSR governance without applying it specifically to school wellness contexts. This review is, to the authors' knowledge, the first to integrate corporate governance analysis, preventive healthcare evaluation, post-COVID adolescent mental health evidence, digital health implementation, and sustainability frameworks within a single critical synthesis focused on rural school wellness in India. The proposed Integrated CSR-Supported Rural School Wellness Ecosystem Framework represents an original conceptual contribution synthesising WHO Health-Promoting Schools principles, the Social-Ecological Model, and preventive healthcare frameworks into a governance-ready implementation architecture for rural India.

II. OBJECTIVES OF THE REVIEW

This review pursues five inter-related objectives. First, to critically examine the role of CSR-supported interventions in strengthening rural school health and wellness systems across India. Second, to analyse implementation challenges — including governance fragmentation, regional inequity, and funding discontinuity — affecting rural school wellness programmes. Third, to evaluate the evidence base for preventive healthcare, adolescent mental health, nutrition, yoga-based wellness, and digital health within CSR-supported school settings. Fourth, to identify sustainability concerns and structural barriers affecting long-term programme continuity and institutional integration. Fifth, to propose an Integrated CSR-Supported Rural School Wellness Ecosystem Framework as a scalable, governance-ready model for underserved educational settings.

III. METHODOLOGY

III.I Rationale for Structured Narrative Review Design

A structured narrative review was selected over systematic review or meta-analysis for considered epistemological reasons. The relevant evidence base is inherently heterogeneous — spanning randomised controlled trials, observational studies, qualitative enquiries, cross-sectional surveys, governmental policy documents, international agency reports, and theoretical frameworks drawn from public health, adolescent medicine, education policy, rural sociology, and corporate governance. This diversity of study designs, outcome measures, intervention types, and settings renders statistical pooling methodologically inappropriate. Narrative synthesis enables the conceptual integration, critical interpretation, and policy analysis this heterogeneous corpus requires [8]. Methodological heterogeneity did not imply an absence of rigour; a deliberate and transparent process guided literature identification, screening, inclusion, and thematic organisation.

III.II Search Strategy

A structured literature search was conducted across seven databases and repositories: PubMed/MEDLINE, Scopus, ScienceDirect, Web of Science, Google Scholar, WHO and UNICEF institutional databases, and Government of India portals. The search was restricted to publications between January 2016 and February 2025. Search queries combined subject-specific terms using Boolean operators (AND, OR, NOT). Primary strings included 'CSR AND school health AND India'; 'rural school wellness AND India'; 'adolescent mental health AND rural India'; 'preventive healthcare AND school AND India'; 'yoga AND mindfulness AND adolescent AND school'; and 'health promoting schools AND low-income settings'. Reference lists of included articles were manually traced to identify sources not captured through database searches.

Table 1: Structured Literature Search Strategy: Databases, Search Terms, and Boolean Combinations

Database	Primary Search Strings	Secondary / Supplementary Strings
PubMed / MEDLINE	'school health' AND 'India' AND ('CSR' OR 'corporate social responsibility')	'adolescent mental health' AND 'rural India'; 'yoga' AND 'school' AND 'randomised'
Scopus	'rural school wellness' AND 'India'; 'preventive healthcare' AND 'school' AND 'India'	'CSR' AND 'education' AND 'sustainability' AND 'India'
ScienceDirect	'school wellness programme' AND 'India'; 'health promoting schools' AND 'low-income'	'corporate social responsibility' AND 'public health' AND 'India'
Google Scholar	'Ayushman Bharat school health'; 'NFHS-5 adolescent health'; 'RKSK India'	'CSR Schedule VII India'; 'rural healthcare India 2022'
Web of Science	'school-based intervention' AND 'India' AND 'mental health'	'community-based wellness' AND 'sustainability'
WHO / UNICEF	Health Promoting Schools; global adolescent health; UNICEF India school sanitation	WHO School Health Technical Note; UNICEF WASH reports

Govt. of India Portals	NFHS-5, NEP 2020, ABHSWP guidelines, MCA CSR expenditure reports	Ministry of Education; Ministry of HFW; MCA publications
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III.III PRISMA-Inspired Screening Process and Record Flow

A total of 247 records were identified across all searches. After removing 53 duplicates, 194 unique records underwent title and abstract screening, from which 112 were excluded: 67 on grounds of topical irrelevance, 18 lacking verified English translations, and 27 as inaccessible conference abstracts. The remaining 82 were retrieved in full text and assessed against inclusion and exclusion criteria. Seventeen were excluded at full-text stage — nine for urban/high-income focus, five as editorials, and three due to inaccessible full text. Sixty-five peer-reviewed or empirical sources were thus included, supplemented by 30 authoritative institutional documents, yielding 95 total sources across six thematic domains.

Table 2: PRISMA-Inspired Literature Selection Flow for the Structured Narrative Review

Review Stage	Process Description	Record Count
Identification	Records identified through database searches across 7 repositories	n = 247
Deduplication	Duplicate records removed following cross-database comparison	n = 53 removed; n = 194 remaining
Title/Abstract Screening	112 excluded (topical irrelevance n=67; non-English n=18; inaccessible abstracts n=27)	n = 194 screened; n = 82 retained
Full-Text Eligibility	17 excluded (urban/high-income focus n=9; editorials n=5; inaccessible n=3)	n = 82 assessed; n = 65 included
Supplementary Documents	WHO, UNICEF, Government of India, major international commission documents	n = 30 added
Final Inclusion	Total sources included in thematic narrative synthesis across six domains	n = 95 total

III.IV Inclusion and Exclusion Criteria

Included sources met the following criteria: published between January 2016 and February 2025; English language; peer-reviewed journal articles, government reports, or international agency publications; addressing school wellness, CSR, public health, or adolescent health in Indian or comparable low- and middle-income settings; directly relevant to rural educational contexts; and containing substantive health or education system content. Excluded sources comprised non-English publications without verified translations, duplicate records, studies unrelated to school health or adolescent wellness, opinion-based commentary lacking substantive evidence, and international studies with negligible contextual relevance to Indian rural settings.

III.V Thematic Synthesis and Quality Appraisal

Included sources were reviewed in full and key findings extracted using a structured template. Findings were organised into six thematic domains: (i) preventive healthcare and school wellness; (ii) adolescent mental health and emotional well-being; (iii) CSR-supported interventions and governance; (iv) community participation and sustainability; (v) digital health systems; and (vi) policy and implementation barriers. Formal quality scoring instruments were not systematically applied, consistent with established narrative review practice; however, each source was assessed for methodological clarity, evidence quality, relevance to Indian rural settings, and potential for publication or organisational bias.

IV. CONCEPTUAL AND THEORETICAL FRAMEWORKS

IV.I WHO Health-Promoting Schools Framework

The WHO Health-Promoting Schools (HPS) model provides the foundational conceptual lens for this review. Reaffirmed in WHO's 2021 global standards, the framework conceptualises schools not as passive sites for periodic health screening but as dynamic institutional environments capable of integrating health promotion into policy, infrastructure, social climate, curriculum, community relations, and health services [1,20]. The HPS model's insistence on whole-school approaches challenges the fragmented, domain-specific

logic characterising much current CSR investment. Sanitation, nutrition, mental health, and physical wellness are not independent targets; they are interconnected determinants of adolescent well-being most effectively addressed through coherent school-level systems [8].

IV.II Social-Ecological Model

The Social-Ecological Model (SEM) frames adolescent health outcomes as products of multiple interacting levels: individual characteristics, interpersonal relationships, institutional contexts, community structures, and macro-level socioeconomic and policy environments. This makes clear why CSR interventions targeting only a single level tend to produce limited or temporary effects. Rural school wellness deficits are simultaneously rooted in inadequate infrastructure, underfunded institutions, community health literacy gaps, household poverty, and governance fragmentation. The SEM also illuminates the mismatch between typical CSR programme designs and the multi-level determinants of adolescent health, helping explain why well-funded and sincerely intentioned programmes frequently generate measurable activity without corresponding health outcomes [9].

IV.III Preventive Healthcare Framework

Preventive healthcare models carry particular relevance in rural Indian contexts where delayed access routinely converts preventable conditions into chronic burdens. School-based approaches that identify anaemia, vision impairment, or emotional distress early, provide functioning referral pathways, and build durable health-sustaining behaviours offer both individual and population-level dividends. Realisation of this potential in rural India requires substantially more systemic investment — in screening infrastructure, referral systems, trained personnel, and longitudinal tracking — than currently exists [8,9].

V. RURAL SCHOOL HEALTH AND WELLNESS CHALLENGES IN INDIA

The health landscape confronting rural school-going adolescents in India resists straightforward technical characterisation. NFHS-5 data present a sobering picture: anaemia prevalence among adolescent girls aged 15–19 stands at 59.1% nationally, with states such as Jharkhand (65.3%), Madhya Pradesh (63.5%), and Uttar Pradesh (60.8%) exceeding this figure [12]. These numbers reflect not simply dietary inadequacy but compounding structural determinants: food insecurity, menstrual blood loss exacerbated by iron depletion, gendered food distribution norms, and inadequate supplementation programme reach. Sustained iron deficiency impairs cognitive performance, concentration, and physical capacity — with direct consequences for educational achievement.

Sanitation represents another structural vulnerability. Despite documented progress under the Swachh Bharat Mission, a meaningful proportion of rural schools in states with weaker administrative capacity continue to lack functional gender-segregated toilets and menstrual hygiene management infrastructure. UNICEF India data suggest inadequate WASH facilities drive absenteeism among adolescent girls by approximately two to three days per menstrual cycle — approximately 20 to 30 school days annually — with measurable consequences for learning continuity and retention [3,17].

The mental health burden has become increasingly visible through post-pandemic research. Prior to 2020, Indian school-based studies already documented elevated levels of academic stress, peer-related anxiety, low self-esteem, and loneliness among adolescents [13]. The pandemic's disruption of schooling for approximately 286 million students intensified these pre-existing vulnerabilities while generating new ones: prolonged social isolation, family financial distress, and exposure to household conflict [22,23]. The pupil-to-counsellor ratio in government schools frequently exceeds 1:1,000, and entire districts may lack a single trained school psychologist [13].

Table 3: Major Rural School Wellness Challenges in India: A Multi-Domain Overview

Health Domain	Predominant Concerns	Educational Impact	Ref.
Nutrition & Diet	Anaemia, undernutrition, poor dietary diversity	Fatigue, cognitive impairment, growth retardation	[1,12,25]
Sanitation & MHM	Inadequate gender-segregated toilets, absent pad-disposal units	Female absenteeism, infection risk, dropout	[3,17]
Adolescent Mental Health	Anxiety, emotional exhaustion, digital dependency, post-COVID burden	Academic disengagement, social withdrawal, dropout risk	[13,14,15,23]
Healthcare Access	Shortage of nurses, counsellors, referral pathways	Delayed intervention, worsening health outcomes	[5,6]
Preventive Awareness	Low hygiene literacy, limited health-promotion exposure	Increased communicable disease burden	[2,16]
Digital Infrastructure	Absent internet access, low e-health literacy	Exclusion from telehealth, poor data continuity	[18]
Human Resources	Scarcity of trained wellness educators and counsellors	Weak programme sustainability	[7,21]

VI. ROLE OF CSR IN STRENGTHENING RURAL SCHOOL WELLNESS SYSTEMS

VI.I CSR Governance in India: Scale, Mandate, and Structural Limitations

Section 135 of the Companies Act 2013 established one of the world's first statutory CSR frameworks, mandating contributions of 2% of average net profits to Schedule VII-defined social domains [4]. India's total CSR spending exceeded INR 26,200 crore in 2022–23 — nearly threefold the level at programme launch in 2014–15 [24]. The governance architecture, however, contains structural features that systematically limit its effectiveness. CSR operates on annual fiscal reporting cycles that rarely align with multi-year institutional development trajectories. Schedule VII specifies eligible categories without mandating geographic prioritisation — an omission that has predictably concentrated investment near urban centres and industrial corridors [19]. Reporting opacity further compounds these weaknesses: a company may fulfil its Schedule VII obligation by constructing a toilet block while generating no measurable improvement in health outcomes.

VI.II Infrastructure Development and Sanitation

Infrastructure development — sanitation and clean water provision in particular — has historically drawn the largest share of CSR attention in school settings, and the underlying rationale is defensible. Several CSR organisations have partnered with state governments under the Swachh Bharat Mission framework to construct gender-segregated toilets, install drinking water systems, and provide menstrual hygiene facilities. The limitation lies not in the infrastructure itself but in the tendency for CSR portfolios to treat completed construction as programme completion. A toilet block without reliable water supply, maintenance protocol, and community norms supporting consistent use delivers rapidly diminishing returns [17].

VI.III Preventive Healthcare and School Screening

Preventive health camps represent a major domain of CSR-supported school wellness, typically encompassing anaemia screening, haemoglobin estimation, vision testing, dental examination, nutritional assessment, and basic health counselling. Gupta and Kumar identified these camps as valuable entry points for detecting previously unrecognised conditions in rural adolescents [16]. A screening event without a functioning referral system, however, is of limited clinical utility. Students identified with moderate anaemia, significant refractive errors, or dental pathology frequently receive no follow-up care — because no referral protocol, transport arrangement, or communication mechanism exists to ensure they do. This gap between detection and intervention may be the most consequential implementation failure in CSR-supported preventive healthcare [5,16].

VI.IV Adolescent Mental Health and Emotional Wellness

Mental health has gradually begun to enter the vocabulary of CSR-supported school wellness programming. CSR programmes have increasingly incorporated emotional wellness workshops, life-skills sessions, adolescent counselling activities, peer-support training, and yoga-based interventions [13,14]. Most emotional wellness activities, however, are delivered as standalone sessions rather than components of a

sequenced, evidence-based counselling curriculum. A two-hour stress management workshop conducted once per academic year cannot substitute for regular access to a trained school counsellor. Stigma further complicates the picture: students and families accustomed to framing emotional distress through social or spiritual lenses may actively avoid activities labelled as mental health programming [13,25].

Table 4: Adolescent Mental Health Concerns in Rural School Settings: Determinants, Consequences, and Post-COVID Evidence

Mental Health Concern	Contributing Factors	Potential Consequences	Ref.
Academic stress & performance anxiety	Competitive examinations, parental expectations, post-COVID learning gaps	Burnout, test-avoidance, psychosomatic complaints	[13,14,15]
Emotional fatigue & dysregulation	Chaotic home environments, pandemic-related loss, lack of recreational space	Reduced academic motivation, classroom disruption	[13,23]
Digital dependency & screen overuse	Unregulated device access during lockdowns, social media comparison	Insomnia, social withdrawal, reduced attentional capacity	[15,26]
Social isolation & loneliness	Prolonged school closures, geographic remoteness, mental health stigma	Depressive symptoms, reluctance to seek help	[14,22]
Low self-esteem & body-image distress	Nutritional deficiency, bullying, gender-related pressures	Disordered eating risk, school avoidance	[3,25]
Sleep irregularity	Late-night screen use, study pressure, overcrowded living	Impaired memory consolidation, attention deficits	[15,26]

VI.V Post-COVID Adolescent Mental Health: A Deepening Crisis

The COVID-19 pandemic imposed acute disruption on pre-existing structural vulnerabilities in India's rural adolescent mental health landscape. Approximately 286 million students experienced school closures of varying duration, many without access to digital learning alternatives [22]. Racine et al.'s meta-analysis estimated pooled prevalence of 25.2% for depressive symptoms and 20.5% for anxiety symptoms during pandemic-related closures [14]. Ravens-Sieberer et al.'s longitudinal European data demonstrated that emotional deterioration was not transient — psychological distress persisted and in some domains worsened across twelve months of follow-up, with girls disproportionately affected [15]. In rural India, analogous longitudinal data are largely absent — itself a critical indicator of the inadequacy of current surveillance investment.

The post-pandemic period has also introduced emerging concerns around digital dependency and emotional dysregulation. Students relying heavily on screen-based entertainment during prolonged lockdowns have returned to classrooms with altered behavioural patterns: reduced attention span, disrupted sleep, and in some cases marked social anxiety [26]. Tele-mental health platforms offer one pragmatic response where connectivity permits; early evidence from Indian pilot implementations suggests technology-mediated counselling is acceptable to adolescent users [18], though significant implementation barriers constrain immediate scalability.

VI.VI Yoga, Mindfulness, and Physical Wellness

Yoga and mindfulness-based interventions have attracted growing interest within school wellness programming, driven partly by cultural resonance in the Indian educational context and partly by accumulating evidence of psychophysiological benefit. Regular yoga practice has been associated with enhanced parasympathetic nervous system activity, improved vagal tone, and mechanisms that may underpin stress reduction and emotional regulation [10]. Hagen and Nayar's systematic review found evidence supporting yoga's associations with anxiety reduction, mood improvement, and emotional resilience in young people, while noting heterogeneity in intervention protocols and the paucity of high-quality randomised controlled trials in school settings [10]. Bhatia and Kaur reported improvements in perceived stress and concentration among Indian adolescents, though single-group pre-post design limits causal inference [11].

The scientific case for school-based yoga and mindfulness is best characterised as promising — sufficient to justify sustained implementation and rigorous evaluation.

VI.VII Nutrition and Adolescent Health

Iron-deficiency anaemia — documented in 59.1% of adolescent girls aged 15–19 by NFHS-5 — is the most prevalent nutritional disorder in this population [12]. CSR-supported nutrition initiatives have encompassed haemoglobin monitoring, supplementation campaigns, dietary awareness sessions, and improvements to mid-day meal quality. Their limitations are largely structural: inadequate follow-up of identified cases, absent longitudinal monitoring, and a fundamental disconnect from family-level dietary practices. Nutrition behaviour is deeply embedded in household food culture, economic constraint, and gendered food distribution norms that a school-based awareness session cannot readily overcome. Sustainable nutritional improvement requires community-level family engagement alongside school-level education — a combined strategy that few CSR programmes operationalise.

VI.VIII Digital Health Systems and Technology Integration

Digital health innovation has emerged as a promising area within CSR-supported rural school wellness, with several corporate foundations piloting electronic student wellness records, telehealth consultation platforms, and longitudinal wellness dashboards [18]. Rural school connectivity remains inconsistent; power supply is unreliable in many districts; device maintenance capacity is limited; and teacher digital literacy is variable. There is also a conceptual risk in positioning digital health as a solution to structural deficits — technology supplements human judgement and care, but cannot substitute for absent systems. Schools without counsellors derive limited benefit from wellness dashboards, because no trained person exists to act on the insights those dashboards generate.

VII. IMPLEMENTATION BARRIERS AND GOVERNANCE CHALLENGES

VII.I Temporal Fragmentation: The Annual Funding Cycle Problem

The most fundamental structural limitation is the mismatch between CSR's annual fiscal reporting cycle and the multi-year timelines genuine institutional wellness development requires. Changing health-related behaviours, building mental health literacy, training teachers, establishing referral networks, and embedding a culture of wellness within institutional practice are processes that unfold across a minimum of three to five years. CSR funding uncertain beyond twelve months cannot reliably underwrite this trajectory. The practical result is a proliferation of programmes that reinvent rather than build — and collapse when the funding cycle ends [19].

VII.II Geographic Inequity in CSR Distribution

CSR investment in India does not follow the geography of social need — it follows the geography of corporate presence. Companies predictably direct resources toward communities proximate to their manufacturing facilities and operational zones. Remote tribal districts, drought-affected areas, and geographically isolated communities receive a disproportionately small fraction of CSR investment relative to their health and educational burden [24,25]. This is a predictable consequence of Schedule VII's failure to mandate geographic prioritisation, and addressing it requires policy-level reform.

VII.III Monitoring, Evaluation, and Impact Attribution

Evaluation practices within CSR-supported school wellness programmes are, with notable exceptions, inadequate. Standard output metrics — camps conducted, students reached, toilets constructed, sessions delivered — provide no information about health outcomes, behaviour change, or sustainability of gains. Without baseline health assessments and longitudinal outcome tracking, it is impossible to determine whether CSR interventions produce anything beyond temporary activity and documentation. The absence of standardised wellness indicators additionally prevents cross-programme comparison and national-level evidence synthesis [19].

VII.IV Human Resource Constraints

Rural schools face chronic shortages of counsellors, school nurses, wellness educators, yoga facilitators, and trained preventive healthcare workers. Programmes dependent on visiting external facilitators are inherently fragile: when the facilitator is unavailable, the programme stops. Teacher capacity-building is therefore not merely complementary to CSR-supported wellness — it is a sustainability prerequisite. Teachers who can identify emotional distress, deliver brief wellness sessions, facilitate referrals, and model healthy behaviours are the only realistic scalable human resource for rural school wellness. Yet teacher wellness training remains systematically underfunded in most CSR portfolios.

Table 5: CSR Implementation Barriers in Rural School Wellness Programmes: Implications and Recommended Responses

Barrier	Systemic Implication	Programmatic Response	Policy Lever
Short-term CSR funding cycles	Programme collapse; inability to sustain multi-year development	Multi-year institutional agreements with milestone review	MCA Schedule VII reform: minimum 3-year duration
Urban-rural investment imbalance	Remote communities receive least support despite highest burden	Policy-mandated rural prioritisation; geo-targeted allocation	CSR deprivation index; geo-tagged spending disclosure
Weak monitoring and evaluation	Inability to distinguish genuine impact from activity completion	Standardised wellness outcome indicators; longitudinal assessment	Government-CSR joint M&E frameworks
Shortage of trained wellness staff	Fragile continuity; dependency on external facilitators	Embedded teacher training; community wellness coordinator development	NEP 2020 wellness coordinator mandate
Mental health stigma	Under-reporting; low counselling uptake	Community sensitisation; school-led awareness	National Mental Health Policy integration
Fragmented intersectoral governance	Health and education silos prevent coordination	Joint district-level wellness coordination committees	ABHSWP institutional strengthening
Visibility-oriented programme design	Infrastructure preference over systems development	Outcome-based CSR recognition frameworks	SEBI ESG disclosure reforms

VIII. PROPOSED INTEGRATED CSR-SUPPORTED RURAL SCHOOL WELLNESS ECOSYSTEM FRAMEWORK

The evidence reviewed throughout this paper consistently points toward a single structural conclusion: rural school wellness cannot be meaningfully advanced through isolated, time-limited, externally facilitated interventions — however carefully designed or generously funded. What is required is an ecosystem-level conceptualisation in which preventive healthcare, mental health, nutrition, physical wellness, digital systems, and community participation are interconnected dimensions of a coherent institutional system.

The Integrated CSR-Supported Rural School Wellness Ecosystem Framework proposed here draws on the WHO HPS model, the Social-Ecological Model, and the preventive healthcare framework. At the framework's centre is the school itself — not as a passive recipient of externally delivered wellness activities, but as an active health-promoting institution with embedded wellness policies, trained staff, functional infrastructure, sustained community linkages, and a culture of health. CSR organisations function as enablers and catalysts: providing infrastructure, technology, capacity-building, and evaluation support designed to build institutional capacity rather than dependency. Government agencies supply the regulatory framework, workforce training pipeline, and monitoring architecture.

Table 6: Components of the Integrated CSR-Supported Rural School Wellness Ecosystem Framework

Ecosystem Component	Core Activities	Responsible Actors	Measurable Outcomes
Preventive Healthcare	Periodic multi-component screening; structured referral with completion tracking; vaccination liaison; health records	School medical officer; ANM; CSR health partner	Early intervention rates; referral completion %; anaemia and vision detection rates
Adolescent Mental Health	Structured counselling curriculum; life-skills education; peer-support network; tele-mental health pilot	School counsellor; trained teacher; psychologist	Counselling uptake %; PHQ-A/GAD-7 scores; referral completion rates
Nutrition & Anaemia	Haemoglobin monitoring; MHM education; dietary counselling; mid-day meal quality oversight	Dietician; ASHA; school nurse; CSR nutrition partner	Anaemia prevalence trends; BMI-for-age; MHM absenteeism rates
Yoga & Physical Wellness	Daily structured yoga; pranayama; sport; mindfulness sessions; posture awareness	Certified yoga educator; wellness coordinator; trained teacher	Session frequency; self-rated stress scale; cortisol proxy indicators
Digital Health Systems	Student electronic wellness records; telehealth integration; longitudinal wellness dashboard; data privacy protocols	CSR IT partner; block health officer; trained school coordinator	EHR coverage %; teleconsultation uptake; record accuracy
Community Participation	VHSNC engagement; parent wellness literacy sessions; ASHA-school liaison; community-led events	ASHA; village panchayat; school management committee	Meeting frequency; parent attendance rates; community initiative count
Monitoring & Evaluation	Quarterly indicator review; annual independent third-party audit; adaptive programme management	District health officer; academic partner; CSR M&E team	Indicator achievement rates; audit findings; adaptive management response rate

VIII.I Monitoring and Evaluation Architecture

A credible integrated wellness framework requires an evaluation architecture commensurate with its complexity. The indicators below span seven wellness domains, specifying measurable outcomes, assessment frequency, responsible actors, and target benchmarks. Indicators were selected to be assessable using tools and personnel available in rural school settings. Quarterly reviews enable adaptive programme management; annual third-party audits provide accountability; multi-year longitudinal tracking enables assessment of trajectory and sustainability rather than point-in-time performance.

Table 7: Monitoring and Evaluation Indicators for Integrated Rural School Wellness Programmes

Wellness Domain	Key Indicators	Frequency	Responsible Actor	Target Benchmark
Nutrition	Haemoglobin levels; BMI-for-age; mid-day meal coverage rate	Bi-annual	School health nurse / ANM	≥10% decline in anaemia prevalence at 12 months
Sanitation & MHM	Toilet availability; pad-disposal functionality; menstrual absenteeism rate	Quarterly	District education officer	100% functional gender-segregated toilets; zero MHM-related absenteeism
Mental Health	PHQ-A/GAD-7 scores; counselling utilisation; referrals completed	Quarterly	School counsellor / psychologist	Counselling utilisation >60%; referral completion >80%
Yoga & Physical Activity	Weekly session frequency; self-reported stress scores; attendance rates	Monthly	Wellness coordinator / teacher	≥3 sessions/week; ≥15% stress score reduction at 6 months
Preventive Healthcare	Screening completion; vision/dental/anaemia detection rates	Bi-annual	Medical officer / CSR health team	>90% of enrolled students screened annually
Digital Health	EHR registration; teleconsultation uptake; device functionality	Quarterly	IT coordinator / CSR tech partner	100% wellness records digitalised within 12 months
Attendance & Retention	Enrolment rate; dropout rate; absenteeism frequency	Monthly	Headteacher / block education officer	≥5% annual dropout reduction in programme schools

IX. RESULTS AND DISCUSSION

IX.I Overview of the Evidence Base

The 95 sources synthesised here collectively present a picture that resists simple characterisation. CSR-supported school wellness initiatives in India have grown in scale, diversity, and geographic reach over the post-2013 period. Sanitation infrastructure has been constructed in schools that previously lacked basic facilities. Preventive screening has reached adolescent populations who would otherwise have had no access to health assessment. The evidence does not, however, support characterising CSR as a transformative systemic force in rural school wellness — at least not in its current institutional form. The dominant mode of activity remains episodic, infrastructure-oriented, and inadequately evaluated. The contrast emerging most consistently across the literature is between infrastructure-oriented interventions — visible, quantifiable, and relatively straightforward to deliver — and system-oriented wellness development — slower, harder to demonstrate, and dependent on sustained institutional commitment [17,19].

IX.II Contradictions in the Literature

Several substantive contradictions emerge from the reviewed evidence. Some studies document meaningful improvements in anaemia awareness and hygiene behaviour following CSR-supported interventions [16], while others find that awareness gains do not translate into practice change when household food insecurity and sanitation deficits remain unaddressed [17]. School yoga intervention studies report improvements in self-reported stress and concentration [10,11], but predominantly pre-post designs without control groups make it difficult to distinguish genuine intervention effects from maturation or social desirability bias. The telehealth evidence presents its own contradictions: pilot studies report high acceptability [18], while implementation-level analyses highlight severe connectivity, device, and literacy constraints that limit scalability in the very settings where need is greatest.

IX.III The Adolescent Mental Health Gap

No dimension of the evidence picture is more concerning than adolescent mental health provision in rural schools. Racine et al.'s meta-analysis [14], Ravens-Sieberer et al.'s longitudinal European data [15], and Singh and Sharma's Indian-context review [13] converge on the conclusion that school-going adolescents experience clinically significant anxiety and depression at substantial prevalence, with rural populations disproportionately affected. The mechanisms generating this gap are multiple and mutually reinforcing: stigma prevents disclosure; workforce shortages prevent service provision; and policy frameworks in place — RSKS, ABHSWP — remain inadequately funded and inconsistently implemented at district level [6,21]. The honest conclusion from this evidence is that improving rural adolescent mental health requires sustained government investment in workforce development, clinical infrastructure, stigma reduction, and community sensitisation, with CSR playing a supplementary rather than primary role.

IX.IV Sustainability as a Governance Problem

The sustainability challenge recurrent throughout the literature is not fundamentally financial or a community engagement failure — it is a governance problem. CSR operates within a regulatory framework that rewards activity and sanctions non-disclosure but neither mandates impact evaluation nor incentivises long-term institutional investment [19,25]. Changing this dynamic requires regulatory amendments incentivising multi-year CSR commitments; mandatory third-party impact evaluation as a condition of full CSR credit; geo-targeted allocation guidelines directing proportional resources toward the most deprived districts; and inter-ministerial coordination mechanisms enabling CSR investments to align with government programmes rather than running parallel to them.

IX.V Community Participation and Local Ownership

The evidence on community participation as a sustainability mechanism is consistent in direction even where methodological robustness varies. Patel and Verma's analysis found higher programme survival rates where teachers, ASHA workers, and village health sanitation committees were substantively involved in governance and implementation [17]. Building local ownership requires relationship investment that develops over sustained time — precisely the investment that annual CSR cycles tend to preclude. There is a structural tension between the institutional logic of CSR (annual cycles, preference for quantifiable deliverables) and the community development logic of sustainable wellness programming (long-term relationships, diffuse outcomes, community agency).

Table 8: Evidence Synthesis: Selected Studies on Rural School Wellness and CSR Interventions

Study / Source	Setting	Focus / Intervention	Key Findings	Methodological Limitations
Jakasania et al., 2023 [2]	India (multi-state)	School health service mapping	Critical service gaps; shortage of nurses and counsellors; weak referral pathways	Cross-sectional; no longitudinal follow-up
Racine et al., 2021 [14]	Global (meta-analysis)	COVID-19 mental health in children	25.2% depressive and 20.5% anxiety symptom prevalence; rural burden higher	Heterogeneous designs; limited LMIC data
Ravens-Sieberer et al., 2022 [15]	Europe (longitudinal)	Adolescent mental health, COVID-19	Sustained emotional deterioration over 12 months; girls disproportionately affected	European context; limited generalisability to India
Singh & Sharma, 2021 [13]	India	School mental health interventions	Limited trained personnel; stigma a major barrier; absent sequenced counselling curricula	Narrative review; implementation data scarce
Patel & Verma, 2021 [17]	Rural India	Community participation in school health	Substantive community involvement associated	Observational; no control group

			with higher programme survival	
Pandey & Sharma, 2022 [19]	India	CSR and rural development	Urban-rural imbalance; short-cycle funding; visibility bias over impact	Review-based; reliant on self-reported CSR data
Kumar & Singh, 2023 [18]	Rural India	Digital health innovations	Telehealth feasible and acceptable; severely constrained by connectivity and literacy	Pilot study; small sample; not generalisable
Hagen & Nayar, 2014 [10]	International	Yoga and adolescent mental health	Positive associations with anxiety and mood; limited RCT evidence	Pre-2020 evidence; few high-quality trials
Gupta & Kumar, 2022 [16]	India	Preventive healthcare in schools	Screening camps valuable entry points; lack referral systems and longitudinal tracking	Cross-sectional; recall bias possible
Langford et al., 2014 [8]	International	WHO Health-Promoting Schools	Whole-school approaches associated with improved academic and health outcomes	Study heterogeneity; long-term outcomes limited

X. POLICY IMPLICATIONS AND FUTURE DIRECTIONS

X.I From Event-Based to System-Based CSR Programming

The most fundamental shift required is conceptual. CSR organisations and their regulatory counterparts must reconceptualise the purpose of school wellness investment. The relevant metric of success is not how many students attended an awareness session, but how many schools have developed the institutional capacity to sustain wellness activities independently of external facilitators. This reframing has cascading implications for programme design, funding duration, evaluation frameworks, and reporting requirements.

X.II Regulatory Reform of Schedule VII Governance

Schedule VII's current formulation does not incentivise multi-year institutional investment, geographic prioritisation of deprived communities, or impact-based evaluation. A coordinated package of regulatory amendments could significantly improve programme quality: minimum three-year programme durations for healthcare and education interventions; deprivation-indexed rural targeting requirements; mandatory credible third-party evaluation as a condition of full CSR credit; and geo-tagged spending disclosure enabling public verification of investment distribution.

X.III Integration with National Programmes: ABHSWP and RKSK

CSR-supported school wellness should not run parallel to government programmes but should be explicitly designed to strengthen and extend them. Joint district-level wellness coordination committees — bringing together CSR programme staff, district health officers, block education officers, and ASHA supervisors — could reduce duplication, leverage government institutional reach, and anchor CSR investments to infrastructure that persists beyond individual funding cycles.

X.IV Strengthening Rural Mental Health Infrastructure

CSR organisations investing in mental health programming should prioritise embedding trained counsellors within school institutions rather than organising periodic awareness events. This means funding multi-year counsellor positions, supporting supervision structures, and co-investing in community sensitisation alongside direct service provision. Government must simultaneously address the structural workforce deficit by expanding mental health training pathways in state medical and nursing curricula and creating rural mental health cadres within the ASHA and Auxiliary Nurse Midwife workforce.

X.V Longitudinal Research and Standardised Indicators

India's rural school wellness evidence base is weakened by the absence of standardised outcome indicators and longitudinal study designs. A nationally agreed minimum dataset for school wellness — covering the domains identified in Table 7 — would enable cross-programme comparison, trend analysis, and evidence-

based policy development. Academic institutions with public health and education research capacity should be engaged as independent evaluation partners. Longitudinal cohort studies following rural adolescents across the full school cycle are particularly needed to address the most critical evidence gaps.

Table 9: Stakeholder Responsibility Matrix for Integrated Rural School Wellness Programmes

Stakeholder	Primary Responsibilities	Strategic Actions Required
Government (Central & State)	Policy integration, regulatory oversight, budget allocation, M&E frameworks	Enforce CSR rural targeting mandates; integrate ABHSWP and RKSK with school systems; mandate longitudinal wellness data collection
CSR Organisations / Foundations	Infrastructure support, technology, capacity-building, multi-year programme funding, independent evaluation	Shift from event-based to system-based funding; adopt outcome metrics; prioritise geographically underserved districts
School Administration & Teachers	Daily wellness implementation, student engagement, referral identification, wellness education integration	Provide wellness literacy training; designate wellness coordinators per NEP 2020; embed wellness in school timetables
Healthcare Professionals & ASHA Workers	Community follow-up, clinical referral, family engagement, adolescent health awareness	Scale ASHA-school linkage; provide telehealth training; establish regular school-clinic communication protocols
Parents & Community Stakeholders	Behavioural reinforcement, programme ownership, cultural acceptance, sustainability advocacy	Engage VHSNCs; sensitise families on mental health; build community-led wellness councils
Academic & Research Institutions	Generate evidence, longitudinal studies, programme evaluation, capacity building	Conduct independent impact evaluations; partner with CSR bodies; publish implementation science relevant to Indian rural contexts

XI. CONCLUSION

The evidence traced through this review describes a trajectory that is simultaneously hopeful and structurally troubled. CSR has, unambiguously, expanded the resources, attention, and activity directed toward rural school wellness in India since the Companies Act 2013. Schools that previously lacked functional toilets now have them. Adolescents previously unscreened have received health assessments. Communities previously silent on menstrual health now discuss it in institutional settings. These are genuine improvements in the lives of adolescents who had little before, and they deserve acknowledgement.

The evidence is equally clear, however, that these gains are fragile, geographically inequitable, inadequately evaluated, and insufficient in scale for the magnitude of the challenge they address. India's 253 million rural school-going children face an interconnected constellation of health burdens — nutritional, sanitary, physical, psychological — that cannot be meaningfully addressed through annual health camps, isolated awareness workshops, or infrastructure constructed without maintenance systems and community ownership.

What the evidence points toward consistently is integrated, institutionally embedded wellness ecosystems: schools functioning as genuinely health-promoting environments, staffed by trained educators, connected to functioning referral networks, supported by engaged communities, and embedded within coherent government-CSR coordination frameworks. The path from current practice to this aspiration is neither technically obscure nor financially impossible — available CSR resources are substantial, and existing policy frameworks are reasonably well-conceived. What is missing is the governance architecture to align CSR incentives with long-term institutional impact rather than short-term visibility; the regulatory mechanisms to direct resources toward communities of greatest need; the workforce investment to develop teachers and

counsellors who are the irreplaceable human substrate of school wellness; and the research agenda to generate longitudinal evidence needed to hold programmes accountable.

Adolescent wellness in rural India is not peripheral to the national development agenda — it is constitutive of it. CSR, reformed and redirected from episodic visibility toward sustained systemic investment, can make a meaningful contribution to better outcomes for these adolescents. Whether that redirection occurs is a question of governance ambition, institutional honesty, and ultimately, political will.

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