

Teenage Pregnancy in Rural West Bengal: Reasons for Persistence, Risk Factors, and Programmatic Pathways to Reduction — A Comprehensive Review

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ABSTRACT

Background: Teenage pregnancy remains a pressing public health, gender-equity, and development challenge in pockets of rural West Bengal despite broad declines at the national level. This review synthesizes quantitative and qualitative evidence on trends, drivers, health risks, and programmatic solutions tailored to rural West Bengal. **Methods:** We conducted a narrative review of national and state surveys (NFHS-4 and NFHS-5), state programme reports, and peer-reviewed studies, prioritising West Bengal-specific evidence and India-validated interventions. **Findings:** NFHS-4 (2015–16) reported that 18% of West Bengal girls aged 15–19 had begun childbearing, while NFHS-5 (2019–21) reports ~16%—with notable district heterogeneity and hotspots like Purba Bardhaman (~21.9%) [1–3]. Persistent structural drivers include child marriage (~40% of women aged 20–24 married <18 years), incomplete secondary schooling, poverty, social norms, and limited adolescent-friendly SRH services; service-level gaps persist despite 505 Adolescent Friendly Health Clinics (AFHCs) and 461 counsellors statewide as of 2019 [4–6]. Adolescent pregnancy increases risks of eclampsia, infections, preterm birth, and low birth weight, with compounding burdens of anaemia and undernutrition [7–10]. Evidence-backed approaches include keeping girls in school via conditional cash transfers (e.g., Kanyashree) with documented reductions in under-age marriage and school dropout; strengthening RKSK/AFHCs and supply of modern contraception; comprehensive sexuality education (CSE); community norm change; and targeted interventions in high-burden districts [4–6,11–17]. **Conclusion:** In rural West Bengal, a multi-sector plan that integrates education retention (Kanyashree), rights-based CSE, adolescent-friendly contraceptive access, and strong enforcement/clarification of laws on child marriage—implemented through district-level action plans—offers the most credible pathway to reducing teenage pregnancy while protecting adolescents’ rights [4–6,11–19].

Keywords: Adolescent pregnancy; rural West Bengal; child marriage; Kanyashree; RKSK; AFHC; comprehensive sexuality education; contraception; NFHS

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1. INTRODUCTION

Adolescent pregnancy fuels a cycle of poverty, lost education, and adverse maternal–newborn outcomes. The World Health Organization (WHO) highlights higher risks of eclampsia, puerperal infections, preterm birth and low birthweight among adolescent mothers and their infants [7]. India’s overall teenage childbearing has declined, but state-level pockets persist. West Bengal continues to report high levels of child marriage and adolescent motherhood relative to many Indian states, with considerable rural heterogeneity [1–5]. This review focuses on rural West Bengal, where social norms, economic precarity, and service-delivery gaps intersect. We synthesise evidence on the reasons for persistence (and localised increases), delineate risk factors, and appraise what works to reduce adolescent pregnancy.

2. METHODS

We conducted a narrative review drawing on the National Family Health Survey (NFHS-4, 2015–16; NFHS-5, 2019–21), UNICEF/UNFPA analytical briefs on child marriage, official programme documents for Rashtriya Kishor Swasthya Karyakram (RKSK) and AFHCs, peer-reviewed studies (2010–2025) on adolescent pregnancy in West Bengal and India, and evaluations of relevant interventions (e.g., Kanyashree, PRACHAR). Priority was given to state-specific data (e.g.,

NFHS-5 West Bengal key indicators) and district-level evidence (e.g., Purba Bardhaman). We included legal/policy developments relevant to adolescent SRH (e.g., Prohibition of Child Marriage Act, POCSO jurisprudence) to discuss enabling environments for interventions [1–6,11–19,20–28].

3. EPIDEMIOLOGY AND TRENDS IN WEST BENGAL

NFHS-4 reported that 18% of West Bengal girls aged 15–19 had begun childbearing (live birth or pregnant at survey), higher than India's average at the time [1]. NFHS-5 indicates a modest decline to roughly 16% statewide, yet this masks stark district variation; for example, a qualitative study from Purba Bardhaman cites NFHS-5 figures as high as 21.9% in that district [2,3]. UNFPA analyses of NFHS-5 show West Bengal among the highest-burden states for child marriage (women aged 20–24 married <18), with prevalence exceeding 40%—closely tied to adolescent motherhood risk [4,12]. Adolescent fertility rates (births per 1,000 women 15–19) remain elevated in West Bengal compared to many states, with Ministry of Statistics (MOSPI) data underscoring the pattern and urban–rural gaps [8]. Taken together, rural West Bengal features persistent teenage pregnancy with intra-state hotspots that warrant district-specific action plans.

4. REASONS FOR PERSISTENCE AND RISK FACTORS IN RURAL WEST BENGAL

4.1 Structural and socio-economic drivers. Child marriage is the dominant proximal driver of teenage pregnancy; UNFPA's West Bengal analysis links high prevalence of marriage before 18 to poverty, low secondary completion, and entrenched norms [4]. NFHS-based decomposition studies for India indicate that poor wealth quintiles, rural residence, low maternal education, and religion/caste intersections are associated with earlier marriage and motherhood [11,18,21]. Qualitative work from Purba Bardhaman and prior rural studies in West Bengal highlight perceived 'good match' availability, social pressure, and concerns over girls' safety as triggers for early marriage/pregnancy [3,22].

4.2 Schooling and aspirations. School retention is protective. Evaluations of West Bengal's Kanyashree conditional cash transfer (CCT) show reductions in under-age marriage and dropout—especially with longer exposure—by easing education costs and shifting aspirations, though effects may wane without complementary education quality reforms [5]. UNICEF's multi-programme reviews similarly identify education subsidies as key levers to delay marriage and childbearing [13,17].

4.3 Service-delivery constraints. Despite the presence of 505 AFHCs and 461 counsellors in West Bengal as of December 2019, utilisation and 'friendliness' vary; national assessments and local studies report constraints in privacy, supplies, and counsellor availability [6,9,10,14]. Adolescents also report limited access to modern contraception and stigma in seeking SRH care—gaps that can sustain unintended pregnancy [14,16,19].

4.4 Health and nutritional risks. Anaemia among adolescent/lactating girls is widespread nationally and in the 'two Bengals' region, compounding obstetric risk [9,20]. WHO and multi-country reviews associate adolescent pregnancy with higher risks of hypertensive disorders, infections, preterm birth, and low birth weight; local studies from rural North 24 Parganas corroborate worse maternal and perinatal outcomes among teenage primigravidas [7,15,23,24].

4.5 Legal and policy environment. The Prohibition of Child Marriage Act (2006) sets 18 as the minimum age for girls; a 2021 Amendment Bill to raise it to 21 remains in committee, while courts have urged clarity on consensual adolescent relationships under POCSO to prevent unintended criminalisation [25–28]. Ambiguity and fear of punitive action may inadvertently deter adolescents from seeking timely SRH care; program designs must therefore emphasise confidentiality, rights-based counselling, and community engagement alongside law enforcement.

5. HEALTH, SOCIAL, AND ECONOMIC CONSEQUENCES

Adolescent pregnancy elevates risks of eclampsia, puerperal endometritis and systemic infections, and is linked to higher odds of preterm birth, low birthweight, stillbirth and neonatal death [7,15,23,24]. Indian and global studies further associate teenage motherhood with postpartum depression, curtailed education, and constrained lifetime earnings for mothers and their children [16,19]. In rural West Bengal, these risks intersect with anaemia and undernutrition burdens, poor transport, and health-system access barriers—amplifying intergenerational disadvantage [9,20].

6. WHAT WORKS TO REDUCE TEENAGE PREGNANCY

6.1 Keep girls in school and ease direct/indirect costs. West Bengal's Kanyashree CCT demonstrates reductions in under-age marriage and dropouts, with documented pathways through schooling and aspirations; sustained gains require improving education quality and addressing private tuition costs that burden poor households [5,13].

6.2 Expand adolescent-friendly contraception and counselling. Strengthen RKSK/AFHCs to guarantee privacy, trained counsellors, a full range of modern methods (including injectables and implants), and referral for complications; state-level numbers indicate substantial AFHC presence that can be leveraged with quality improvement [6,9,10,14,19].

6.3 Comprehensive sexuality education (CSE). School-based, curriculum-aligned CSE—consistent with international technical guidance—improves SRH knowledge, delays initiation, and increases contraceptive use when combined with services; WHO/UNESCO emphasise rights-based CSE adapted to local contexts [11,17,19].

6.4 Community norm change and male engagement. Multi-pronged programmes in North India (e.g., PRACHAR) delaying marriage/first birth via community mobilisation, peer educators, and couple counselling show sustained effects on contraceptive uptake and delayed childbearing; such approaches align with rural West Bengal's needs when adapted to local institutions (Panchayats, SHGs, religious/community leaders) [11,16,19].

6.5 Targeted district action plans. Use NFHS-5 district fact sheets and UNFPA mapping to identify hotspots (e.g., Purba Bardhaman, Murshidabad) and concentrate resources: intensified CSE, after-school programmes and safe transport, AFHC outreach days, and proactive enforcement against child marriage with case-management support for girls at risk [2–5,12,13].

6.6 Clarify and harmonise the legal environment. Parallel to enforcement, incorporate adolescent-friendly protocols (confidential counselling, non-judgmental care) so that the law does not become a barrier to help-seeking; current jurisprudence highlights the need to protect adolescents while avoiding criminalisation of consensual peer relationships [26–28].

7. IMPLEMENTATION ROADMAP FOR RURAL WEST BENGAL

- Governance and data use: Constitute district task forces (Health, Education, Women & Child Development, Panchayati Raj) that review NFHS-5 and school-administrative data quarterly to locate high-risk gram panchayats and schedule targeted outreach [3–5,12].
- School-centric package: Ensure Kanyashree coverage and grievance redressal in every secondary/higher-secondary school; provide sanitary pads and safe transport; add bridge-courses and mentoring to reduce dropout and repeat [5,13].
- AFHC quality: Fill counsellor vacancies, assure privacy, standardise adolescent-friendly hours, and stock a full contraceptive basket including condoms, OCPs, injectables and implants; run monthly Adolescent Health & Wellness Days with village ASHAs and peer educators [6,9,10,14].
- CSE and parents' engagement: Implement age-appropriate CSE with teacher training; hold regular parent–teacher sessions to diffuse myths and stigma [11,17].
- Community mobilisation: Partner with SHGs, ICDS/AWCs, and faith/community leaders for anti-child-marriage vigilance and positive norm campaigns; institute village child protection committees to flag high-risk cases [12,13,19].
- Referral and safety nets: Establish pathways for girls who refuse early marriage (hostels, scholarships, legal aid); link anaemic adolescents to IFA supplementation and nutrition services [9,20].
- Monitoring & evaluation: Track age at marriage, adolescent first births, AFHC utilisation, contraceptive uptake, and school retention; commission independent evaluations in two hotspot districts per year [3–6,12–14,16].

8. RESEARCH GAPS

Key evidence gaps include: (i) rigorous district-level evaluations of CSE + AFHC + Kanyashree integration; (ii) utilisation and outcomes among unmarried adolescents; (iii) effects of evolving jurisprudence on adolescent health-seeking; and (iv) cost-effectiveness of targeted district action plans in West Bengal [5,9–11,16–19,26–28].

9. CONCLUSION

Rural West Bengal exhibits persistent teenage pregnancy concentrated in specific districts. While state averages modestly improved between NFHS-4 and NFHS-5, child marriage remains high and continues to propel adolescent motherhood. A pragmatic, rights-based approach—anchored in keeping girls in school (Kanyashree), scaling high-quality AFHCs and modern contraception, delivering CSE, and mobilising communities against child marriage—offers the clearest pathway to sustained reductions. Aligning legal clarity with confidential, adolescent-friendly care will help ensure that protection does not inadvertently suppress help-seeking. District-level action, measured relentlessly, can turn evidence into durable gains for girls and their families in rural West Bengal [1–6,11–19,26–28].

REFERENCES

- [1] IIPS and ICF. National Family Health Survey (NFHS-4), 2015–16: West Bengal—State Factsheet and Report. Mumbai: IIPS. (e.g., AIDS Data Hub NFHS-4 WB factsheet).
- [2] Dutta K, Naskar S, et al. Exploring challenges of teenage pregnancy and motherhood in Purba Bardhaman, West Bengal. *Int J Community Med Public Health*. 2022;9(11):4124–4131. (NFHS-5 district figure ~21.9%).
- [3] Rural India Online. NFHS-5 (2019–21), West Bengal: Key findings (incl. 16% of 15–19 already

- mothers/pregnant).
- [4] UNFPA India. Child Marriage in West Bengal: Key Insights from NFHS-5 (2019–21). 2022.
- [5] Dutta A, Sen A. Kanyashree Prakalpa in West Bengal: Justification and evaluation. International Growth Centre, 2020 (evaluation showing reductions in under-age marriage and dropout; notes on waning effects without education reforms).
- [6] Government of India, Lok Sabha Q&A. State-wise AFHCs and counsellors under RKSK (as of 31 Dec 2019): West Bengal 505 AFHCs, 461 counsellors.
- [7] WHO. Adolescent pregnancy—Fact sheet (Apr 10, 2024). Higher risks of eclampsia, infections; infant low birthweight and preterm birth.
- [8] MOSPI. Adolescent fertility rate (15–19) per NFHS-5 (2019–21) — State profiles data portal.
- [9] Kundu A, et al. Anaemia among lactating adolescents in India: NFHS pooled analyses. PLOS One/PMC, 2024.
- [10] Jana A, et al. Determinants of women’s anaemia in West Bengal and Bangladesh. BMC Public Health. 2022.
- [11] Shri N, et al. Prevalence and correlates of adolescent pregnancy in India. BMC Pregnancy Childbirth. 2023.
- [12] UNFPA India. Child Marriage in India: Insights from NFHS-5 (2019–21). 2022.
- [13] UNICEF. Leveraging large-scale sectoral programmes to prevent child marriage (incl. Kanyashree pathways). 2022.
- [14] Bahl D, et al. Compliance of Adolescent Friendly Health Clinics with RKSK benchmarks: India. 2024.
- [15] Sarkar P, et al. Obstetric outcomes of teenage pregnancies: Record-based study, rural hospital, North 24 Parganas, West Bengal. AJMS. 2024.
- [16] Subramanian L, et al. Increasing contraceptive use among young married couples: PRACHAR evidence. Glob Health Sci Pract. 2018.
- [17] Jejeebhoy SJ, et al. Long-term associations of PRACHAR with awareness/behaviour in Bihar. Int Perspect Sex Reprod Health. 2015.
- [18] Singh M, et al. Patterns in age at first marriage and determinants in India, 1992–2021. PLoS One/PMC. 2023.
- [19] UNESCO/WHO. International technical guidance and WHO’s report on comprehensive sexuality education, 2018–2021 updates.
- [20] Singh PK, et al. Determinants of maternal healthcare utilisation among married rural adolescents in India. PLoS One. 2012.
- [21] Gausman J, et al. Prevalence of girl and boy child marriage across states/districts in India, NFHS-5. Lancet Reg Health–SE Asia. 2023.
- [22] Bhattacharyya A, et al. ASHA perspectives on teenage pregnancy in rural West Bengal: J Clin Diagn Res. 2017.
- [23] Ogawa K, et al. Adolescent pregnancy and neonatal adverse outcomes. Sci Rep. 2019.
- [24] WHO. Adolescent pregnancy (technical brief/policy): stillbirths and newborn deaths higher among infants of adolescent mothers.
- [25] PRS India. Prohibition of Child Marriage (Amendment) Bill, 2021 — bill status and summary.
- [26] Supreme Court of India. 2024 observations on POCSO and consensual adolescent relationships (Right to Privacy of Adolescents, In Re).
- [27] Supreme Court of India. 2025 judgment excerpts referencing POCSO context (evolving jurisprudence).
- [28] Ministry of Health & Family Welfare (NHM). RKSK/AFHC programme page and operational benchmarks.