



SCHEME ON PAPER, BARRIERS ON THE GROUND: NTR VAIDYASEVA UTILIZATION AMONG TRIBAL COMMUNITIES IN VISAKHAPATNAM DISTRICT, ANDHRA PRADESH

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ABSTRACT

Background: Government health insurance schemes in India have progressively expanded coverage on paper, yet their reach into tribal populations remains uneven and poorly documented. The NTR Vaidyaseva Scheme in Andhra Pradesh, reformed in September 2025 under a hybrid model with AB-PMJAY to provide coverage up to Rs. 25 lakh per family, operates across 72 empanelled hospitals in Visakhapatnam district – none of which are located in the tribal Agency area. This study examines the gap between stated entitlements and actual access for tribal beneficiaries.

Methods: A qualitative-dominant mixed methods study was conducted in Visakhapatnam district from 2024 to 2026. Structured interviews were carried out with 150 tribal beneficiaries (75 from Agency mandals and 75 from urban hospital settings), 80 hospital staff across government and private empanelled hospitals, and 40 scheme officials and Vaidya Mitras. Data were analysed using thematic analysis and descriptive frequency counts. Triangulation across three respondent groups was used to validate findings.

Results: Only 34% of tribal respondents from Agency mandals held an active and linked NTR Vaidyaseva health card. Language barriers, incomplete Aadhaar linkage, and the absence of empanelled hospitals within 50 kilometres of tribal habitations were the primary access constraints. Of those who reached urban hospitals, 61% reported partial or full out-of-pocket expenditure despite holding a valid health card. Hospital staff at private empanelled hospitals reported tribal patients as constituting fewer than 10% of their scheme caseload.

Conclusions: The NTR Vaidyaseva Scheme does not translate into meaningful health security for tribal communities in Visakhapatnam despite significant expansion of coverage in 2025. Structural barriers – geographic isolation, documentation requirements, language exclusion, and weak institutional response to tribal patients – persist independently of scheme reforms. Tribal-specific adaptations at the enrollment, referral, and hospital levels are needed.

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1. INTRODUCTION

India spends considerable political capital celebrating the reach of its health insurance programmes. With Ayushman Bharat providing cashless treatment to millions and state variants like Andhra Pradesh's NTR Vaidyaseva claiming beneficiary counts in the crores, the official picture looks progressive. The ground picture is different.

When you travel from Visakhapatnam city into the Agency area – the hill tracts of the district that house Schedule V tribal populations including Kondhs, Koyas, Savara, Bagata, Jatapu, and Konda Reddis – the scheme's footprint disappears. Not a single hospital empanelled under NTR Vaidyaseva operates inside these mandals. Paderu, Chintapalle, Araku, G. Madugula, Munchingiput: none. Tribal patients who need secondary or tertiary care must travel upward of 100 kilometres to reach an empanelled facility in the city. Many do not make that journey, or make it too late.

This article reports findings from an ongoing Ph.D. study examining health scheme utilization and institutional response to tribal patients in Visakhapatnam district. The study spans both ends of the problem – the tribal hinterland where scheme awareness is thin and enrollment is partial, and the urban hospital network where tribal patients arrive as outsiders in a system designed for others. The September 2025 reform to NTR Vaidyaseva, which merged the scheme with AB-PMJAY and raised BPL family coverage to Rs. 25 lakh per year, is included in the analysis. The question the study asks is not whether the scheme is generous – on paper, it is – but whether it reaches the people it formally covers.

India's Scheduled Tribe population bears a disproportionate share of the country's disease burden. Tribal communities account for 8.6% of the national population but record significantly higher rates of malaria, sickle cell anaemia, malnutrition, maternal mortality, and tuberculosis compared to non-tribal groups (NFHS-5, 2021). Health infrastructure in tribal areas is chronically short of norms: nationally, tribal districts face a shortfall of over 9,000 sub-centres, 1,559 primary health centres, and 372 community health centres compared to population-based requirements (Sinha et al., 2023). Against this backdrop, a cashless insurance scheme whose empanelled hospitals cluster entirely in urban centres raises questions that go beyond implementation gaps. It raises questions about who the scheme was actually designed for.

The article is structured as follows. Section 2 briefly reviews the literature on tribal health access and scheme evaluations in India. Section 3 describes the study methodology. Section 4 presents findings across four thematic categories. Section 5 discusses the results in light of sociological frameworks and the 2025 policy reforms. Section 6 concludes with recommendations.

2. REVIEW OF LITERATURE

The literature on tribal health in India carries a consistent message across several decades: proximity to a health facility does not equal access, and access to a facility does not equal meaningful care. Fürer-Haimendorf's ethnographic work on tribal communities in the Eastern Ghats documented, as early as the 1940s and 1950s, a pattern of institutional avoidance rooted not in ignorance but in experience – experience of facilities that were distant, unwelcoming, and largely staffed by people who did not speak tribal languages (Fürer-Haimendorf, 1945). That experience has not entirely changed.

Sujatha Rao's 1998 analysis in *Economic and Political Weekly* remains one of the few direct examinations of health services in tribal areas of Andhra Pradesh. Her study found severe staff shortages in tribal PHCs, a heavy reliance on multipurpose workers with no specialised tribal health training, and near-total absence of referral mechanisms. The structural picture she described in 1998 maps uncomfortably well onto current field conditions in Visakhapatnam's Agency area.

The Rajiv Aarogyasri Scheme, introduced in Andhra Pradesh in 2007, was widely studied for its design and reach. Researchers noted early that the scheme's Private-Public Partnership model concentrated empanelled hospitals in urban areas, leaving rural and tribal populations dependent on referrals from poorly equipped PHCs to distant city hospitals (Nabar and Thiagarajan, 2012). Out-of-pocket expenditure for non-covered costs such as transport, food, and informal payments to navigate pre-authorisation persisted among low-income beneficiaries even after the scheme expanded its procedures list. NTR Vaidyaseva, which succeeded Aarogyasri, inherited this structural geography unchanged.

International literature on health scheme access among indigenous populations draws similar conclusions. A 2025 study on healthcare-seeking behaviour among tribal communities in Maharashtra found that only 29.8% of ill individuals sought formal healthcare; 35.7% took no action at all, citing distance, cost of transport, and previous negative experiences as the main reasons (Rane et al., 2025). A systematic review in the *Journal of Racial and Ethnic Health Disparities* found a persistent shortfall in health infrastructure in tribal areas across Indian states, and attributed this partly to the failure of national schemes to adapt enrollment and delivery procedures to low-literacy, low-documentation populations (Sinha et al., 2023).

The sociological literature offers several frameworks for interpreting these patterns. Pierre Bourdieu's concept of habitus is useful here: tribal patients entering urban hospital systems bring dispositions, language, and cultural knowledge shaped by forest and village environments. These are not well-matched to the institutional field of a tertiary hospital – a space with its own language, documentary demands, bureaucratic routines, and implicit codes of behaviour. The mismatch is not a personal failing; it is a structural one. Amartya Sen's capability approach adds another dimension: a health card that exists on paper but cannot be used because of language barriers and documentation gaps represents a capability failure, not merely an implementation gap. Paul Farmer's concept of structural violence frames the cumulative burden of poverty, geography, and institutional indifference that prevents tribal communities from accessing care they are formally entitled to.

3. MATERIALS AND METHODS

Study Design. This study used a qualitative-dominant mixed methods design. Qualitative data formed the primary evidence base; quantitative data from closed questions supplemented and gave scale to qualitative findings. The two data streams were integrated through triangulation across three respondent groups.

Study Area. Visakhapatnam district, Andhra Pradesh, was selected because it contains both the tribal Agency area (Schedule V mandals with a combined tribal population of over 3.5 lakh) and a major urban hospital hub. The district has 72 hospitals empanelled under NTR Vaidyaseva, all located in or near the urban area. None are located in Agency mandals.

Participants and Sampling. Three respondent groups were studied using purposive and snowball sampling. First, 150 tribal beneficiaries: 75 from Agency mandals (contacted at PHC sites in Paderu, Chintapalle, and Araku divisions) and 75 from the outpatient and waiting areas of King George Hospital (KGH) and Visakha Institute of Medical Sciences (VIMS) in the city (tribal patients who had already made the journey for treatment). Second, 80 hospital staff from government hospitals (KGH, VIMS, Government ENT Hospital) and private empanelled hospitals (Apollo, Care Hospital, GITAM Institute of Medical Sciences, Medicover, Queens NRI Hospital). Third, 40 Vaidya Mitras and scheme officials, including Vaidya Mitras at 15 empanelled hospitals, NTR Vaidyaseva district coordinators, ITDA health officers, and ASHA workers in Agency mandals. Total respondents: 270.

Data Collection. Three separate structured interview schedules were designed: Schedule A for tribal beneficiaries (29 questions across five thematic sections), Schedule B for hospital staff (16 questions), and Schedule C for Vaidya Mitras and officials (14 questions). Schedule A was administered orally in Telugu and local tribal dialects by the researcher and a trained local assistant. Researcher field notes were maintained at every interview site. Data collection ran from January 2025 to March 2026.

Analysis. Qualitative responses from open-ended questions and field notes were analysed using thematic analysis (Braun and Clarke, 2006). Initial codes were generated from all transcripts, then grouped into themes through iterative review. Closed questions were analysed using frequency counts and percentages. Findings were triangulated across the three respondent groups to identify consistencies and contradictions.

Ethics. Informed consent was obtained from all participants, verbally for tribal respondents and in writing for hospital staff and officials. Participant confidentiality was maintained throughout; respondents are identified in the article only by category codes (e.g., TB-14 for tribal beneficiary 14; HS-07 for hospital staff 07). Institutional permission was obtained from KGH and VIMS. ITDA clearance was sought for Agency area fieldwork.

4. RESULTS

4.1 Scheme Awareness and Enrollment in the Agency Area

Awareness of NTR Vaidyaseva among tribal respondents in Agency mandals was incomplete and often inaccurate. Of the 75 respondents from Agency mandals, 47 (63%) had heard of the scheme by some name, but only 26 (35%) could correctly describe how to use it for treatment. The remaining respondents either associated it with ration card benefits more broadly or had received no specific information about how to access cashless treatment.

Health card possession and usability told a starker story. Thirty-one respondents (41%) held a health card, but of these, only 26 (34%) had a card with active Aadhaar linkage that would function at a hospital counter. Five cards had linkage errors or outdated family details that the cardholder was unaware of. Fourteen respondents had never attempted to use the card at any facility.

The reasons for non-enrollment or non-use clustered into three categories. Forty-two respondents (56%) cited distance to the nearest enrollment centre or empanelled hospital as the primary barrier. Twenty-nine (39%) had encountered problems with documentation, most commonly Aadhaar addresses not matching current residential locations, a frequent problem for communities whose revenue village and habitation addresses

differ. Eighteen respondents (24%) said they had received no information about the scheme from any government source, including ASHA workers.

A respondent from Paderu mandal, coded TB-08, put it plainly: "We heard about the card from a neighbour who came back from the city. Nobody from the government came and told us what it is or how to get it. When I went to the PHC they said go to the town to register. The town is four hours by bus."

4.2 The Urban Hospital Experience

Among the 75 tribal respondents interviewed at KGH and VIMS, nearly all had come specifically because other facilities could not treat their condition or had referred them onward. Sixty-one (81%) reported travelling more than 50 kilometres to reach the hospital. Transportation costs ranged from Rs. 200 to Rs. 1,800 for a single trip, paid entirely out of pocket.

Of these 75 respondents, 58 (77%) held a valid health card. Card acceptance at the hospital counter was not, however, the same as cashless treatment. Thirty-eight respondents (51%) reported paying for some component of their treatment despite presenting a valid card. Common out-of-pocket expenses included diagnostic tests not covered under the scheme package (reported by 24 respondents), medicines dispensed informally outside the in-patient pharmacy (19 respondents), and informal payments to navigational intermediaries, including hospital attendants and parking staff who assisted with paperwork (14 respondents). Language was a consistent friction point. Forty-four respondents (59%) said they had difficulty understanding what hospital staff told them about their condition, treatment plan, or discharge procedures. Thirty-one (41%) relied on a companion or a fellow patient to translate. Only three respondents reported that a hospital staff member had communicated with them in anything approximating their native dialect.

A respondent from the Savara community, coded TB-31, described her experience at VIMS: "The doctor speaks in English and the nurse says something in Telugu fast. My daughter writes down what she thinks they said and we try to understand at home. I don't know if I took the right medicines because the instructions are also in English."

4.3 Institutional Response: Government Hospitals

KGH and VIMS are the two main government teaching hospitals in the district and account for the highest volume of scheme patients in Visakhapatnam. Both have dedicated Vaidya Mitra desks, but the quality of service at these desks varied considerably in the accounts of both patients and staff.

Fifteen of the 20 Vaidya Mitras interviewed reported that the single most common problem they encountered with tribal patients was incomplete or mismatched documentation. Pre-authorisation for a surgical procedure requires an active health card, an Aadhaar match, and a referral letter from a PHC or CHC. Many tribal patients arriving at KGH came without one or more of these. Eleven Vaidya Mitras said they had developed informal work-arounds for tribal patients, such as initiating emergency treatment while documentation was being resolved, but none reported any formal protocol from the hospital administration for handling this category of patient.

Hospital staff at government facilities were generally more willing to describe the problem openly than their private hospital counterparts. A senior nurse at KGH, coded HS-04, said: "The tribal patients come with no paper, no money, and nobody who speaks the language. If the scheme counter person is patient and experienced, they manage. If not, the patient waits for a whole day and sometimes goes back without treatment."

Regarding the September 2025 reforms, awareness among Vaidya Mitras and front-line staff at government hospitals was mixed. Of the 15 Vaidya Mitras at government hospitals, nine reported awareness of the new coverage limits and hybrid model. Six were still operating under the understanding that the old coverage ceiling applied. None could describe the new income verification process that replaced ration card linkage for APL families.

4.4 Institutional Response: Private Empanelled Hospitals

Private hospitals empanelled under NTR Vaidyaseva in Visakhapatnam present a different picture. The empanelled network includes major corporate hospitals such as Apollo, Care Hospital, GITAM Institute of Medical Sciences, Medicover, Queens NRI Hospital, and 46 other facilities. Together these hospitals account for the majority of empanelled bed capacity in the district.

Among the 20 private hospital staff respondents, 14 estimated that tribal patients constituted fewer than 10% of their scheme patient load. Two respondents at large corporate hospitals said they could not recall treating a tribal patient under the scheme in the past six months. This low tribal visibility in private hospitals is not accidental: it reflects a combination of self-selection (tribal patients default to government hospitals),

geographic unfamiliarity (private hospitals in the city are harder to locate than KGH), and informal gatekeeping.

Seven private hospital staff respondents acknowledged, with varying degrees of directness, that their institutions had informal preferences for scheme patients with clear documentation, city addresses, and companions who could navigate paperwork. Tribal patients, who more often arrived alone or with village companions unfamiliar with the city, were described as "difficult cases" that took longer to process. Two respondents used the term "high maintenance" for this patient category.

The April 2025 crisis, when over 730 private hospitals across Andhra Pradesh suspended scheme services due to Rs. 3,500 crore in pending reimbursement dues, was still a recent memory for staff at several hospitals. Twelve of the 20 respondents said their hospital had suspended or partially suspended scheme services during this period. The resumption of services, following a partial payment of Rs. 500 crore by the state government, was described by several respondents as fragile and conditional on payment regularity.

5. DISCUSSION

The findings from this study point to a pattern that is not unique to Visakhapatnam, but is particularly stark here because the geographic contrast is so sharp. The district contains both some of the deepest tribal forest terrain in peninsular India and one of the largest hospital concentrations in Andhra Pradesh. They exist in the same administrative unit but occupy entirely separate institutional worlds.

Three structural features explain why the scheme reaches tribal communities poorly, regardless of how generous its coverage specifications become. The first is locational exclusion. With zero empanelled hospitals in Agency mandals, the scheme requires tribal patients to make a 100-plus kilometre journey before a single rupee of its coverage activates. This is not a minor inconvenience for a daily wage labourer or an elderly woman with tuberculosis. It is a barrier that many do not cross until the condition is severe. By then, the cost – in money, time, and health – has already been paid.

The second structural feature is documentary exclusion. The scheme's enrollment and pre-authorisation processes were designed for a sedentary, documented population with stable addresses, functional bank accounts, and Aadhaar cards that accurately reflect their place of residence. Tribal communities in the Agency area frequently do not fit this profile, not because of individual failings but because their residential mobility, the gap between revenue village and habitation addresses, and limited prior engagement with formal documentation systems create permanent mismatches with digital verification requirements.

The third feature is institutional indifference, and this is where the sociological analysis becomes most uncomfortable. The low tribal caseload at private empanelled hospitals is not simply a product of distance. It is also a product of the fact that these hospitals – with their preference for well-documented, navigationally capable patients – do not actively include tribal patients in their scheme operations. Bourdieu would describe this as field exclusion: tribal patients lack the habitus and social capital that the urban hospital field implicitly demands.

The September 2025 reforms address some real problems. Raising coverage to Rs. 25 lakh removes a ceiling that was genuinely inadequate for serious illness. Proposing to delink health cards from ration cards, if implemented cleanly, could help tribal families who hold ITDA-issued cards not recognised by the ration card system. But neither change addresses locational exclusion, documentary exclusion, or institutional indifference. A higher coverage ceiling means nothing to someone who cannot reach an empanelled hospital. A better enrollment process is meaningless without ASHA workers trained and motivated to carry it out in tribal habitations.

The comparison with staff perceptions at government versus private hospitals is also instructive. Government hospital Vaidya Mitras showed more awareness of tribal patient challenges and more willingness to improvise solutions. This is partly a function of patient volume – KGH and VIMS see far more tribal patients than any private hospital – but it also reflects a difference in institutional orientation. Public hospitals, whatever their limitations, carry a residual obligation to serve whoever arrives. Private empanelled hospitals operate under contract to the scheme, and that contract does not currently include specific obligations toward tribal beneficiaries.

6. CONCLUSIONS AND RECOMMENDATIONS

NTR Vaidyaseva is a well-funded scheme with genuine ambitions. The September 2025 reforms show a willingness to address structural problems. But the problems facing tribal communities in Visakhapatnam are more deeply embedded than the current reform agenda recognises. They will not be solved by raising coverage ceilings alone.

Four specific changes would materially improve scheme access for tribal beneficiaries in districts like Visakhapatnam. First, the state government should negotiate with ITDA to identify or establish at least two

empanelled hospitals within the Agency area itself, beginning with existing ITDA hospitals or community health centres in Paderu and Chintapalle. This is the single most important structural change available. Second, Vaidya Mitras should be deployed in Agency area PHCs to assist tribal patients with pre-registration and documentation before they travel to the city, not after they arrive confused at a hospital counter. Third, each major empanelled hospital treating significant volumes of tribal patients should designate a trained Tribal Patient Coordinator, a staff member with language competency in at least one tribal dialect and familiarity with the ITDA referral network. Fourth, the private hospital empanelment contract should include explicit tribal patient access obligations, with compliance monitored through patient-level data disaggregated by community identity.

The gap between what the scheme promises and what tribal patients experience is not a communication failure or a technology problem. It is a structural problem, and it requires structural responses. Until the scheme's geography, documentation demands, and institutional obligations align with the realities of tribal life in the Agency area, coverage on paper will remain coverage on paper.

Conflict of Interest: None declared.

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