Integrating schemes could be beneficial but requires supportive evidence

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We were delighted to read the Health Policy by Shastri and colleagues[1] in *The Lancet Regional Health — Southeast Asia*. The Health Policy discussed the positive findings from the descriptive analysis of tuberculosis care costs in the state of Karnataka, India (under the scheme Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana-Arogya Karnataka [AB-PMJAY-ArK]). However, the article also raised some concerns for us.

First, the omission of certain methodological details presented challenges to the article's interpretability. The authors have lauded the public health infrastructure based on relative care-seeking patterns across public and private centres. However, this could be simply driven by the availability of free tuberculosis (TB) care in the public sector under the National Tuberculosis Elimination Programme (NTEP).[2] The authors have not provided much evidence on how greater utilization can be tied to the integration. The authors have also noted that AB-PMJAY-ArK improves access to TB diagnostics at the primary care level. However, we find this contestable given that primary health centres are not empanelled under PMJAY.[3] The diagnostic and treatment packages are typically only for tertiary and super specialty levels of care. We couldn't find any details specific to AB-PMJAY-ArK that included primary care. More broadly, the implementation of the integration of schemes was unclear. Details on this would have proved to be an important resource for state-level officials of other states beyond Karnataka.

Second, the included patient population might have the following selection bias issues that hamper the generalizability of the findings:

1. As per India Tuberculosis Report 2023, Karnataka notified 80,416 confirmed TB in a year.[4] The present study used two years of data but included 7450 cases. Hence, the included confirmed TB cases formed only a small fraction of the state's annual TB burden. Beyond the current study, this also raises questions about whether the scheme with such a limited population coverage can truly benefit the larger population.
2. The study sample notes extrapulmonary TB to be more common (58.8%) than pulmonary TB. However, the India TB Report 2023 notes only 26.9% of all TB cases as extrapulmonary in Karnataka.[4] While it is understandable that the patient profile might be different among scheme beneficiaries and the broader population (since scheme eligibility criteria are selected for specific deprived classes), such stark differences cannot be ignored as they impact the generalisability of the findings. Costs of diagnosing and treating pulmonary and extrapulmonary could be presented separately to address this disparity.

Third and most importantly, the authors have consistently mentioned a reduction in catastrophic health expenditure as an outcome of the integration of schemes. From a health economics perspective, catastrophic expenditure is defined as the out-of-pocket expenditure on health exceeding a certain threshold (usually 10%) relative to the overall consumption expenditure.[5] This has neither been calculated nor used as an outcome for assessing schemes' impact in the article. Further, for gross calculations, the authors have only considered direct medical expenditures, leaving out direct non-medical and indirect expenditures. This is important to consider given that indirect costs account for about 55.5% of the total costs among TB patients.[6]

While integrating schemes could help in enhancing efficiency, there needs to be stronger evidence that considers appropriate study design, analysis techniques, and outcomes.

Contributors

PS–Conceptualisation, writing-original draft; SZ–Conceptualisation, writing-review & editing; NM–Writing-review & editing.

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Declaration of interests

PS and SZ received honoraria for writing for Think Global Health, Harvard Public Health Magazine, *The Wire* Science, and *The Hindu*. PS is the founder of Nivarana (www.nivarana.org), a public health information and advocacy platform. SZ is the Cofounding Director, Association for Socially Applicable Research (ASAR); Permanent Council Member, The G4 Alliance; Chair, SOTA Care in South Asia Working Group, The G4 Alliance; Drafting Committee Member for Maharashtra State Mental Health Policy. NM has leadership roles in Navi Technologies Limited, Navi General Insurance Limited, Navi AMC Limited; Swasth Digital Health Foundation Limited; Narayana Hrudayalaya Foundation, Sukoon Healthcare services Private Limited, Meridian Medical research & Hospital Ltd. Authors have declared no other conflicts of interest.

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