



ORIGINAL RESEARCH PAPER

Geography

GROWTH AND DEVELOPMENT OF PUBLIC HEALTH INFRASTRUCTURE IN HARYANA, 1966–2024

KEY WORDS: health infrastructure; Haryana; three-tier health system; public health expenditure

Amit Bairagi*

Research Scholar, Department of Geography, Maharshi Dayanand University, Rohtak – 124001, Haryana, India*Corresponding Author

Binu Sangwan

Senior Professor, Department of Geography, Maharshi Dayanand University, Rohtak – 124001, Haryana, India

ABSTRACT

Public health infrastructure is the foundation on which the delivery of health care services rests, and its historical evolution shapes present-day patterns of access and utilisation. This paper presents a descriptive account of six decades of public health infrastructure development in Haryana, from the state's formation in 1966 to 2024, drawing on the Bulletin on Rural Health Statistics, the Statistical Abstract of Haryana, departmental records, National Health Accounts estimates and the Sample Registration System. At its formation, Haryana inherited only 183 Sub-Centres and 64 Primary Health Centres. By 2023-24 the three-tier network had grown to 2,734 Sub-Centres, 408 Primary Health Centres and 122 Community Health Centres, with the National Rural Health Mission (2005) marking a watershed in expansion. Per capita government health expenditure rose from 1.92 in 1966-67 to 3,237 in 2021-22, consistently 48–70 per cent above the national average, yet remains below one per cent of the state's income against the National Health Policy target of 2.5 per cent. Persistent human-resource gaps — an 18 per cent vacancy among medical officers and much higher vacancies among specialists — qualify the physical achievement. Vital statistics record the accompanying health transition: the infant mortality rate fell from 101 in 1971 to 27 in 2023.

INTRODUCTION

The health infrastructure of a region — its institutions, personnel, equipment and financing systems — determines whether populations can obtain timely and affordable care. From a geographical standpoint, the growth of a health care network is a spatial process: facilities accumulate over decades in response to policy regimes, fiscal capacity and demographic pressure, and the inherited pattern conditions present-day utilisation. An understanding of this historical development is therefore essential background for any inquiry into health care access.

Haryana offers a useful case. Carved out of the erstwhile Punjab on 1 November 1966, the state began with a sparse medical network serving a predominantly rural population, yet went on to become one of India's most prosperous states. This paper traces the development of Haryana's public health infrastructure, health workforce, public health spending and associated demographic outcomes from 1966 to 2024. The treatment is deliberately descriptive and state-level; district-level spatial disparities are examined separately in the wider doctoral research of which this paper forms a part.

Figure 1: Map of the study area — administrative divisions of Haryana, 2025.

Source: District boundaries, Survey of India / Government of Haryana.

2. Data Sources

The paper draws entirely on official secondary sources: the Bulletin on Rural Health Statistics of the Ministry of Health and Family Welfare (various years); the Statistical Abstract of Haryana (various years); Haryana Health Services at a Glance, 2023-24; National Health Accounts estimates; and the Sample Registration System (SRS) of the Registrar General of India. The method is simple tabular and trend description.

3. Growth of the Three-Tier Network

India's rural public health system is organised in three tiers: Sub-Centres (SCs) at the village level, normatively serving 5,000 persons and staffed by an auxiliary nurse midwife; Primary Health Centres (PHCs) serving about 30,000 persons with a medical officer; and Community Health Centres (CHCs) providing specialist referral care at the sub-district level. District civil hospitals and medical college hospitals complete the pyramid.

At formation in 1966-67, Haryana possessed 183 Sub-Centres, 64 PHCs and a handful of district and sub-divisional hospitals (Table 1). The subsequent expansion proceeded in phases. The 1970s and 1980s saw rapid growth under the Minimum Needs Programme, with Sub-Centres crossing 1,800 and CHCs introduced as a new tier in the 1980s. Growth slowed in the 1990s and early 2000s before the National Rural Health Mission (NRHM), launched in 2005, marked a second watershed: enhanced central funding supported the construction and upgrading of facilities, large-scale recruitment of contractual staff, and the deployment of Accredited Social Health Activists (ASHAs) in every village

Table 1: Historical growth of public health facilities in Haryana, 1966–2024

Year	Sub-Centres	PHCs	CHCs
1966-67	183	64	—
1980-81	960	221	—
1990-91	1,857	312	47
2000-01	2,241	408	68
2010-11	2,535	453	115
2020-21	2,655	537	131
2023-24*	2,734	408	122



Source: District boundaries, Survey of India / Government of Haryana.

Source: Bulletin on Rural Health Statistics (various years), MoHFW; Statistical Abstract of Haryana (various years); Haryana Health Services at a Glance, 2023-24. *Provisional. The fall in the PHC series after 2020-21 reflects a change in counting convention, whereby only standalone PHCs are enumerated from 2022-23.

By 2023-24 the network comprised 2,734 Sub-Centres — a nearly fifteen-fold increase over 1966 — 408 PHCs (more than a six-fold increase) and 122 CHCs. The apparent decline in PHCs after 2020-21 is definitional rather than real: from 2022-23 only standalone PHCs are counted, excluding those co-located with other institutions.

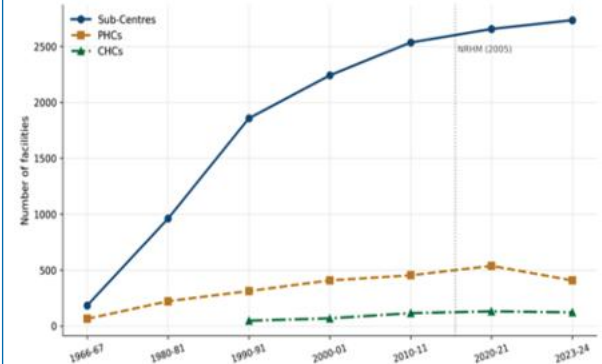


Figure 2: Growth of the three-tier public health network in Haryana, 1966–2024.
Source: Bulletin on Rural Health Statistics (various years), MoHFW; Statistical Abstract of Haryana.

4. Human Resources

Physical expansion has outpaced staffing. Against a sanctioned strength of 4,739 medical officers and dental surgeons, only 3,877 were in position according to the Statistical Abstract of Haryana (2023-24), a vacancy rate of about 18 per cent. The position is far more severe for specialists at CHCs and district hospitals, where vacancy rates approach 63 per cent for certain specialties. The shortage of obstetricians, surgeons, physicians and paediatricians undermines the referral function that the CHC tier is designed to perform, and constitutes the single most important qualitative gap in the system.

5. Public Expenditure on Health

Haryana has consistently outspent the national average on health in per capita terms (Table 2). Per capita government health expenditure grew from a negligible 1.92 in 1966-67 to 166.83 in 2000-01 and 3,237 in 2021-22 under the National Health Accounts framework, maintaining a premium of roughly 48 to 70 per cent over the all-India figure throughout. Yet a structural concern persists: government health spending remains below one per cent of the state's income, far short of the National Health Policy 2017 target of 2.5 per cent (MoHFW, 2017). High per capita spending in a rich state thus coexists with low fiscal priority for health.

Table 2: Per capita government health expenditure, Haryana and India

Year	Haryana per capita (₹)	India per capita (₹)	Haryana premium (%)
1966-67	1.92	—	—
1991-92	69.50	41.00	+69.5
2000-01	166.83	99.00	+68.5
2010-11	442.08	276.00	+60.2
2019-20	1,530.74	984.00	+55.6
2021-22	3,237	2,185	+48.2

Source: Economic Survey of Haryana (various years); National Health Accounts, MoHFW; RBI State Finance Reports.

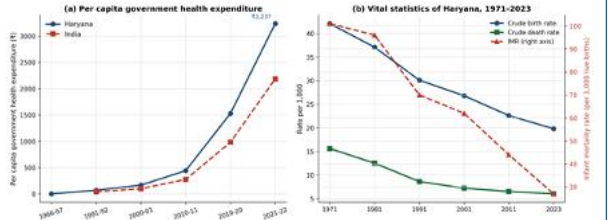


Figure 3: Per capita government health expenditure, Haryana and India.
Source: Economic Survey of Haryana; National Health Accounts, MoHFW; RBI State Finance Reports.

6. Accompanying Health Outcomes

The expansion of infrastructure has been accompanied by a marked demographic and health transition (Table 3). The crude birth rate declined from 42.1 per 1,000 in 1971 to 19.8 in 2023, and the crude death rate from 15.6 to 6.0. The infant mortality rate fell from 101 per 1,000 live births in 1971 to 27 in 2023 — a nearly four-fold improvement in child survival. These trends place Haryana in the advanced stages of the demographic transition and the middle stages of the epidemiological transition described by Omran (1971), in which non-communicable conditions progressively replace infectious diseases as the dominant burden. While these improvements cannot be attributed to public infrastructure alone — rising incomes, education and sanitation have all contributed — the spread of primary care institutions, immunisation and institutional delivery has been an important enabling condition.

Table 3: Vital statistics of Haryana, 1971–2023 (per 1,000; IMR per 1,000 live births)

Year	Crude birth rate	Crude death rate	Infant mortality rate	Natural growth rate
1971	42.1	15.6	101	26.5
1981	37.1	12.5	96	24.6
1991	30.1	8.6	70	21.5
2001	26.8	7.2	62	19.6
2011	22.6	6.5	44	16.1
2023	19.8	6.0	27	13.8

Source: Sample Registration System, Registrar General of India; Statistical Abstract of Haryana.

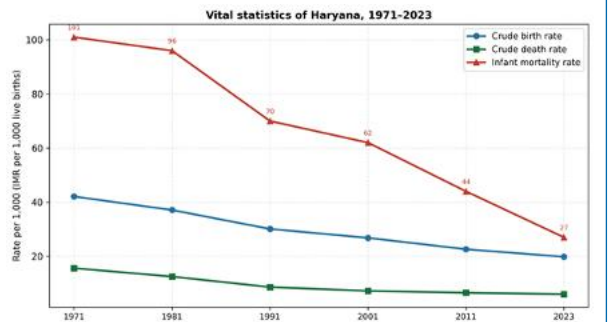


Figure 4: Vital statistics of Haryana, 1971–2023.
Source: Sample Registration System, Registrar General of India; Statistical Abstract of Haryana.

7. CONCLUSION

Over six decades Haryana built a public health network from 247 rural facilities to more than 3,200, supported by per capita health spending well above the national average, and witnessed dramatic improvements in survival. The record is nevertheless qualified in three respects. First, quantity has outrun staffing: nearly one in five medical officer posts and a majority of specialist posts lie vacant. Second, the fiscal priority of health remains low relative to the state's capacity, with spending below one per cent of state income. Third, aggregate growth conceals spatial inequalities in the

distribution of facilities across districts, a dimension addressed in the author's wider research. Consolidation — filling posts, raising the health budget share, and equalising provision across space — rather than further expansion alone, emerges as the central task for the coming decade.

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