COMMENTARY

National Medical Commission's new rule on capping the number of undergraduate medical seats in high performing States: pragmatic or quixotic?

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Abstract

The article analyses the recent amendment by the National Medical Commission (NMC) in India, capping the number of undergraduate medical seats in high-performing states, which has sparked a debate. With a healthcare system catering to the diverse needs of 1.4 billion people, regional disparities in healthcare personnel distribution have emerged, especially among doctors.

The advantages of the amendment include a focused approach on lagging states and the potential distribution of doctors to improve overall health indices. However, concerns arise over infringement of the autonomy of state governments, potential hindrance to high-performing states, and the impact on doctors' postgraduate choices.

This commentary explores the complex factors influencing doctor distribution, including state policies, infrastructure and migration patterns. While emphasising the need for equitable healthcare access, and it also stresses the need for a balanced approach to address the challenges in doctor distribution to ensure both state and national healthcare needs are met effectively.

Keywords: *NMC, India, medical graduates, MBBS, doctor distribution*

The healthcare system in India encompasses an extensive network, across complex, geography-specific requirements, serving the needs of a diverse population of 1.4 billion people. However, due to various factors like regional variations in health expenditures, healthcare practices, healthcare seeking behaviour, availability of healthcare facilities and socio-economic status and health outcomes have not been uniform. One of the striking disparities among different regions of the country is the wide variation in the availability of healthcare personnel, especially doctors.

The National Medical Commission (NMC), the erstwhile Medical Council of India (MCI), has played a crucial role in laying down and upholding high and uniform standards for medical education throughout the country. The governing body of NMC has various functions including the establishment and maintenance of standards in undergraduate medical education and laying down of guidelines for regulating medical institutions. NMC has recently amended its guidelines regarding permission for starting a new medical college or increasing MBBS undergraduate medical seats in existing medical colleges. As per the new amendment, permission shall be given only for 50/100/150 MBBS seats, provided that the medical college follows the ratio of 100 MBBS seats per 10 lakh population in that particular state or union territory [1]. This means that the states which already have more than the above number will not be allowed to increase the number of MBBS seats in existing colleges, or start new medical colleges. This recent change in the guideline has led to a huge uproar from the medical community, a few states and the health activists and health advisors in the country.

Figure 1 (available online only) [2, 3] illustrates the number of MBBS seats available in high-performing and low-performing states, along with their estimated populations in 2023. States such as Karnataka, Kerala, Tamil Nadu, and Telangana have more than 100 seats for every 10 lakh people and exhibit a high health performance index (HPI). In contrast, Uttar Pradesh, Bihar, Jharkhand, and Madhya Pradesh have far fewer MBBS seats and demonstrate low HPI [4].

The are several advantages to the recent NMC amendment. The states that are lagging behind in terms of providing healthcare can be focused on preferentially and more funds can be spent on them, while also promoting the distribution of doctors in low-performing states, potentially leading to an improvement in the overall number of physicians and health indices in those regions.

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To cite: Venkatachari M, Thirunavukkarasu AB. National Medical Commission's new rule on capping the number of undergraduate medical seats in high performing States: pragmatic or quixotic?. *Indian J Med Ethics.* Published online first on August 23, 2024. DOI: 10.20529/IJME.2024.053

Manuscript Editor: Vijayaprasad Gopichandran

Peer Reviewer: An anonymous reviewer

Upon closely examining the health indices of different states of the year 2019-2020, it is evident that states like Kerala, Tamil Nadu, Telangana, and Andhra Pradesh rank among the top states, compared to Uttar Pradesh, Bihar, and West Bengal. Since a state's health index is indirectly linked to its number of doctors, as stated above, it is clear that an increase in the number of doctors would lead to an improvement in health outcomes by enhancing the standard of healthcare.

The current NMC amendment would undoubtedly benefit underperforming states but could also hinder the progress of high-performing states. However, these amendments also have a few drawbacks. Firstly, it is argued that individual states should have the autonomy to determine the number of doctors they should have, as it closely relates to their public health and health index. This move by the NMC may be construed as a clear infringement of the autonomy of state governments and also penalises those who have made substantial investments in their public health infrastructure over time instead of rewarding them. Capping the number of seats based on population could indirectly hinder high-performing states from excelling in healthcare. Secondly, students who complete their undergraduate studies in a particular state may not choose to pursue their postgraduate and super-specialty training or practice in the same state, potentially impacting the state's ability to retain them and improve its doctor-population ratio if new seats aren't granted to high-performing states. Third, the high-performing states are excelling in various sectors, including healthcare, information technology, trade, and commerce. From a close examination of the Gross Enrollment Ratio (GER) for higher education among individuals aged 18-23 years in various states, as shown in Table 1 [2, 3, 5, 6], it is evident that Kerala, Tamil Nadu, Karnataka, and Telangana have GERs of 43.2, 46.9, 36, and 39.1, respectively. These figures are significantly higher than the national average GER of 27.4%. In contrast, states such as Uttar Pradesh, Bihar, Jharkhand, and West Bengal have GERs of 23.2, 15.9, 17.0, and 21.3, as reported in the latest All India Survey on Higher Education (AISHE). It would also be prudent to increase undergraduate seats, including MBBS, in states with higher GER to offer more opportunities to young individuals and incentivise those in states with low GER to pursue higher education.

The assumption that producing doctors locally will lead to increased net availability of doctors within a state is an oversimplified one. When states have a substantial number of available medical seats but still face a shortage of doctors, it indicates that various factors like strategies to retain them avoiding migration, structural limitations, employment opportunities also play an equally crucial role in shaping the fair distribution of doctors within the state. Other factors influencing migration of doctors include the economic condition of the state, its level of public health spending, and its investment in medical education.

The rate of expansion of healthcare services has been uneven across the states since Independence. In the last decade, some states such as Andhra Pradesh, Delhi, Uttarakhand and Arunachal Pradesh have experienced a growth rate of more than 8%, while states like Punjab, Maharashtra, West Bengal, Assam, and Bihar have lagged behind with less than 2%.

A survey conducted among MBBS graduates across India in 2022-23 states that at least 40-50% of undergraduates have prospective plans of pursuing postgraduate education and careers in developed countries like the United States of America and the United Kingdom [7]. According to the latest global statistics, at least 7% of the current fleet of doctors trained in India are working in different countries, which accounts for nearly 74,455 doctors, a substantial number [8].

While there has been consistent emigration of highly skilled doctors from India, recent data indicates that, when viewed collectively, brain drain is not the most significant challenge facing the country and it is on a declining trend [9].

The presence of doctors differs significantly from one state to another, and several factors contribute to this variation. The main issue lies in the generation of specialty and superspeciality doctors and even distribution of doctors among all states and more importantly, in suburban and rural areas. There is also a skew in the availability of doctors in rural versus urban areas in both low and high performing states. According to rural health statistics from 2021-2022, most of the sanctioned doctor positions have been filled in the rural areas of high performing states like Karnataka, Kerala, Tamil Nadu, and Andhra Pradesh, whereas there are nearly 40-50% vacant positions in low performing states like Bihar and Uttar Pradesh [10]. The number of available seats in medical colleges and the movement of doctors between states play an important role in deciding doctor-to-population ratio.

States can also be classified based on availability of doctors, with some having more doctors [where the doctor-to-population ratio exceeds the World Health Organization (WHO) standard of 1:1,000] and others less (where the ratio falls below this standard). The WHO has proposed that the optimal doctor-to-patient ratio should be 1:1000. Many European and American countries have a ratio of more than 1, whereas many African and Asian countries are yet to achieve that mark [11].

The reported doctor-to-population ratio in India was 0.7 per 1,000 in 2020. Some states in India like Kerala, Tamil Nadu, Karnataka and Andhra Pradesh with robust healthcare systems have already surpassed the WHO's recommended doctor-patient ratio. The ratio however varies widely from state to state, with Goa having the highest ratio of 2.02 and Nagaland having the lowest ratio of 0.05 (Table 1) [2, 3, 5, 6]. Various factors determine into which category states fall. These factors include state policies and incentives designed to retain doctors, the presence of general and medical infrastructure, and the ratio of public and private medical colleges. Creating more MBBS seats locally in government-run medical colleges has led to producing a larger number

Table 1: Comparison of the number of MBBS seats, projected population, gross enrolment ratio and doctor to population ratio [2,3,5,6]

Sl no	State	No of MBBS Seats 2023	Projected Population 2023	Seats per 10 lakh population	Gross Enrolment Ratio to higher education 2021	Doctors per 1000 population, 2019
1	Andaman and Nicobar Islands	114	3,99,001	292.0	NA	NA
2	Andhra Pradesh	6435	9,17,02,478	70.1	37.2	1.42
3	Arunachal Pradesh	50	17,11,947	29.4	33.7	0.62
4	Assam	1550	3,59,98,752	43.4	17.5	0.56
5	Bihar	2665	12,85,00,364	20.7	15.9	0.31
6	Chandigarh	150	11,58,040	13.0	66.1	NA
7	Chhattisgarh	2005	3,21,99,722	62.4	19.6	0.27
8	Dadra and Nagar Haveli	177	4,53,008	393.3	10.4	NA
9	Delhi	1497	1,93,01,096	77.5	47.6	1.01
10	Goa	180	15,21,992	120.0	33.8	2.02
11	Gujarat	6900	7,04,00,153	98.0	33.8	0.82
12	Haryana	2185	2,89,00,667	75.6	31.1	0.4
13	Himachal Pradesh	920	75,03,010	122.6	38.7	0.35
14	Jammu and Kashmir	1347	1,49,99,397	90.4	25.0	0.92
15	Jharkhand	980	4,01,00,376	24.4	17.0	0.14
16	Karnataka	11,695	6,95,99,762	168.2	36.0	1.54
17	Kerala	4655	3,46,98,876	134.5	43.4	1.5
18	Madhya Pradesh	4650	8,50,02,417	54.7	27.1	0.39
19	Maharashtra	10745	12,49,04,071	86.0	34.9	1.2
20	Manipur	525	34,36,948	154.4	37.8	NA
21	Meghalaya	50	37,72,103	13.5	25.8	NA
22	Mizoram	100	13,08,967	76.9	26.8	0.07
23	Nagaland	100	27,03,074	37.0	17.3	0.05
24	Orissa	2525	4,70,99,270	53.7	20.7	0.44
25	Puducherry	1830	16,46,050	111.6	60.8	NA
26	Punjab	1800	3,05,01,026	59.0	26.3	1.36
27	Rajasthan	5575	7,95,02,477	70.1	26.1	0.48
28	Sikkim	150	6,58,019	250.0	39.9	1.7
29	Tamil Nadu	11,600	8,36,97,770	138.7	46.9	1.53
30	Telangana	8540	3,81,57,311	224.1	39.1	0.17
31	Tripura	225	41,84,959	54.8	19.2	0.39
32	Uttar Pradesh	9705	23,15,02,579	41.9	23.2	0.29
33	Uttarakhand	1150	1,17,00,099	98.3	45.7	0.64
34	West Bengal	5175	10,08,96,618	51.3	21.3	0.61

of doctors. This connection is influenced by various other factors, such as the seat allocation system where 85% of seats are reserved for residents of the respective state, the imposition of bonds (which vary from one state to another) mandating doctors to serve in government hospitals, and incentives for priority access to postgraduate seats. The movement of doctors between states is influenced by factors like the allocation of seats in public and private institutions, government policies that either encourage or discourage such migration, and infrastructure.

At present, there are 706 medical colleges in India, out of which 45% are in the private sector [12]. Private sector medical college seats are not subject to the same bond conditions, and states with more private sector seats consistently see a net outflow of doctors. In the past decade, the growth of the private healthcare sector has primarily centred around the more economically developed southern states, with the exception of Uttar Pradesh [13].

Overall, the current amendment by the NMC might have a positive impact on underperforming states in terms of increasing the number of doctors at various levels of healthcare, indirectly improving their health indices, and creating increased opportunities for MBBS aspirants. However, their state authorities should implement schemes to retain locally produced doctors, as the resources invested in their training would be unproductive if they are unable to retain them. The amendment might have a negative impact on high-performing states by limiting their chance to achieve higher standards of healthcare.

While the current policy emphasis on enhancing equity by augmenting public medical seats in underserved regions is essential, that alone may not be adequate to enhance the local supply of doctors. An exclusive focus on regulating the production of doctors might overlook the other factors like private institutions, and lack of strategies by State Government to retain doctors.

The states and the governing body for medical education should have a balanced policy which would benefit the individual states and the nation as a whole.

Conflicts of Interest and funding: *None declared.*

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