

An Overview of Private Medical Education in Pakistan

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Abstract

The study's primary purpose was to investigate the challenges and prospects of Private Medical Education (PME) in Pakistan. Private Medical Education in Pakistan has grown significantly in recent decades, and the Punjab province has been at the vanguard of this trend.

The desk research was used to gather information and data from books, journals, reports, databases, and online resources, including relevant websites related to private medical education in Pakistan. The author selected several papers, a few from PubMed and many from Google Scholars, to gain insights into the challenges and prospects of the sector to develop thought for the paper.

Private Medical Education in Pakistan is an integral part of the Asian Medical Education (ME) landscape, proliferating in response to the increasing demand for medical education. As a result, PME in Pakistan has bright prospects to contribute significantly to the continent's development in terms of ME and economy.

The Pakistan Medical Commission (PMC) is Pakistan's medical education and training regulatory authority. It is responsible for ensuring that medical colleges and universities in the country meet the required standards for the quality education and training of medical professionals.

However, ME in Pakistan faces several challenges: high tuition fees, limited funding, shortage of MBBS doctors, lack of government support and insufficient medical infrastructure in rural areas, and concerns about quality and standards. Of course, these challenges are not unique to Pakistan but also to many developing countries in Asia, but they are significant. They require the immediate attention of the Pakistan Government to address the issues.

Keywords: Growth, Challenges, Prospects, Private Medical Education, Pakistan

Introduction

Generally, the demand for Higher Education (HE) has grown phenomenally (Qureshi and Khawaja, 2021) and Medical Education, particularly worldwide in recent years. The world's population is inevitably rising, and currently, it is over 8 billion (Worldometers, 2023), consequently, there is an increased demand for healthcare services. This has led to a need for more healthcare professionals, including doctors, nurses, and other healthcare providers. Health systems in developed and developing countries are in the process of adapting to population ageing due to significant increases in life expectancy (Cristea et al., 2020). The ageing population is driving demand for medical education as older individuals often require more frequent and specialised medical care. Public health challenges such as pandemics, natural disasters, and chronic disease epidemics have highlighted the importance of a well-trained healthcare workforce. As a result of these factors, medical education, including private, is experiencing significant growth worldwide.

Medical education is categorised into three sectors: undergraduate, postgraduate and the Continuing Professional Development (CPD) of established clinicians (Swanwick, 2014). This article only focuses on undergraduate medical education-MBBS stands for Bachelor of Medicine, Bachelor of Surgery in Pakistan. It is an undergraduate degree in the field of medicine and surgery that prepares students to become medical doctors. The MBBS programme generally takes five years for taught components, followed by a one-year house job to complete the programme.

Over the five years, students study anatomy, physiology, biochemistry, pharmacology, pathology, microbiology, community medicine, public health, behavioural sciences, ethics and two mandatory courses of Pakistan Studies and Islamiat (aku. com,2023).

Upon completion of the MBBS five-year taught component, students are generally required to complete a period of internship or residency training, commonly known as a House Job in a teaching hospital or healthcare facility in Pakistan, before they can practice as medical doctors. The purpose of the house job is to provide medical graduates with hands-on clinical practice experience and prepare them for further specialisation. The training period provides them with further practical experience through clinical rotations in various specialisms such as internal medicine, surgery, paediatrics, obstetrics and gynaecology, and psychiatry and ultimately prepares them for specialisation in specific fields of medicine.

At the end of the house job, medical graduates are required to pass a final assessment to demonstrate their competency in various clinical skills and procedures. After successfully completing the house job and passing the final assessment, graduates are awarded a provisional license to practice medicine in Pakistan. The house job is a mandatory requirement for medical graduates in Pakistan and is an essential step towards becoming a licensed medical practitioner.

The medical profession has seen a substantial transformation due to improvements in global education, which have increased the relevance of teaching and learning to societal needs (Dent and Harden, 2017). It is envisaged that modern medical education would satisfy the needs of both local and global communities (McKimm, 2010). More than 62% of the Pakistani population live in rural areas (Macrotrends, 2023), but unfortunately, modern health facilities and medical education are unavailable locally.

Growth of Private Medical Education in Asia

As the population in Asia grows, and currently, it is more than 4.7 billion (Worldometer, 2023), there is a rising demand for healthcare services, creating a need for more healthcare professionals, including doctors, nurses, and other healthcare providers.

ME in Asia has experienced significant growth in recent decades, with a growing number of medical colleges and universities across the continent (Shehnaz, 2011). A few decades ago, most medical colleges in Asia, particularly in India and Pakistan, were public colleges attached to large teaching public hospitals. However, the privatisation trend in India and Pakistan has changed the equation, with private medical colleges accounting for a significant stake in medical education. Moreover, the economic scenario started to change rapidly worldwide in the early 1990s from a command economy to a market economy after the disintegration of the former Union of Soviet Socialist Republics (USSR) in 1989 and officially ceased to exist on December 31, 1991 (history.com, 2023).

As a result, economic policies of many countries started encouraging private ownership (liberalisation, privatisation and marketisation), allowing Private Higher Education Institutions to proliferate in most parts of the world, particularly since the 1990s (Qureshi and Khawaja, 2021).

Growth of Private Medical Education in Pakistan

Privatisation of medical education can be defined as 'Medical Education imparted by an organisation not a part of the government bureaucracy'(Shehnaz, 2010).

Privatisation of medical education refers to the increasing trend of private entities, such as individuals, organisations, or corporations, establishing and managing medical colleges and universities. It is a growing phenomenon in many countries, including Pakistan, where there has been a significant increase in private medical colleges over the past few decades.

Private higher education institutions are funded by various means and have varying levels of control by the Government, meaning fully or partially or partially autonomous institutions. They can be profit-generating or non-profit society-centred institutions (Shenaz, 2011). The most straightforward understanding of a private higher education institution is that of an organisation with private ownership and funding, while a public higher education Institution is an organisation with state ownership and funding (Qureshi and Khawaja,2021).

In Pakistan, private medical colleges can be owned by individuals, trusts, or societies. The ownership of a private medical college is usually established through a legal registration process with the relevant authorities, such as the Pakistan Medical and Dental Council (PMDC) in the recent past or now Pakistan Medical Commission (PMC). The registration process typically involves submitting documentation related to the institution's ownership structure, governance, financials, and infrastructure. Once registered, the private medical college is required to comply with the regulations and guidelines set forth by the regulatory body, including requirements related to curriculum, faculty qualifications, student admissions, and clinical training (PMC,2022).

ME has proliferated in Pakistan over the past few decades. The public sector dominated till 1990, with around 20 medical and dental colleges, while only two were in the private sector. The balance, however, began tilting towards the private sector in the early 1990s when the privatisation trend started. Today, 74 colleges are private, and only 48 are in the public sector. The exponential growth in the number of medical and dental colleges, especially in the private sector, was the outcome of the privatisation trend in the early 1990s in Pakistan, the increasing demand of ME and the government's financial incapacity to fund new public colleges and meet the increasing demand.

Table 01: List of Public and Private Medical Institutions by Province

Province	Public	Private	Total
Punjab & Islamabad	19	44	63
Sindh	12	17	29
Khyber Pakhtunkhwa	10	11	21
Balochistan	1	4	5
Azad Kashmir	3	1	4
Total	48	74	122

Source: Urooj (2023) author modified it

The supply of medical colleges in Pakistan has also increased in recent years to meet the growing demand. Most of these colleges are located in Punjab (63) and, Sindh (29), Khyber Pakhtunkhwa (21) provinces, with a smaller number in Azad Kashmir (4) and Balochistan (5) provinces. For more information on public and private medical colleges, see table 01.

Pakistan Medical Commission (PMC)

The Pakistan Medical Commission (PMC) is Pakistan's medical education and practice regulatory body. It was established in September 2020 to develop the foundations for a qualitative modern medical education system and to ensure that medical professionals meet the required qualifications and ethical standards. In addition, the Commission is entrusted with developing and executing accreditation standards to ensure improved medical and dental education quality in Pakistan with the ultimate goal of producing quality and safe doctors.

Some of the key functions of the PMC include:

1. Accreditation and recognition of medical and dental colleges
2. Registration and licensing of medical and dental practitioners
3. Development and implementation of standards for medical education and practice
4. Assessment and certification of foreign medical and dental graduates
5. Regulation of medical and dental practice to ensure compliance with ethical and professional standards.

(PMC,2022)

The Pakistan Medical and Dental Council (PMDC) was the predecessor of the Pakistan Medical Commission (PMC). The PMDC was established in 1962 and was responsible for regulating medical education and practice in Pakistan until it was dissolved in 2019 and replaced by the PMC. The dissolution of the PMDC was due to its alleged corruption and mismanagement, and the PMC was established to bring more transparency, accountability, and efficiency to the regulatory system for medical education and practice in Pakistan. The PMC has since taken over the functions of the PMDC and is responsible for regulating medical education and practice in Pakistan.

Admission Criteria

The PMC recognises that the admission criteria for private medical colleges in Pakistan shall be conducted and completed by each of the private colleges or through the university of which the college is a constituent college, affiliated to or administered, subject to the terms of affiliation mandated by each university in respect of the conduct of admissions. Each of the private colleges shall publicly issue the criteria and merit formulation as prescribed in the regulations for admissions as under:

Table 02: Admission Criteria for Private Medical Institutions

Criteria	% Weightage
MDCAT	50%
F.Sc (Pre-Medical)/HSSC/Equivalent	40%
SSC/Matriculation/Equivalent	10%

The admission criteria may slightly vary from college to college but generally, the following criteria are considered:

1. **Academic Qualifications:** Students must have completed their F.Sc. (pre-medical) or an equivalent qualification with at least 60% or above marks.
2. **Entry Test:** Students must pass the entry test conducted by the respective college or university, such as the MDCAT (Medical and Dental College Admission Test) conducted by the Pakistan Medical Commission (PMC).
3. **Interview:** Students who qualify for the entry test are called for an interview. The interview is conducted to assess the communication and interpersonal skills of the candidates.

4. **Merit List:** After the interview, the college prepares a merit list based on the academic qualifications, entry test marks, and interview performance of the candidates.
5. **Medical Fitness:** Finally, candidates have to undergo a medical examination to ensure they are medically fit to pursue a career in medicine.

Quality and Grading

The PMC maintains a list of medical and dental colleges in Pakistan, generally divided into different categories based on grading:

- **A+ Category:** Institutions that meet all standards of PMC in an exemplary manner
- **A Category:** Institutions that meet all standards of PMC
- **B Category:** Institutions that meet most standards of PMC
- **C Category:** Institutions that meet some standards of PMC
- **D Category:** Institutions that do not meet the minimum standards of PMC and are under warning or under a show cause notice
- **E Category:** Institutions that do not meet the minimum standards of PMC and are not allowed to admit new students
- **X Category:** Institutions that have voluntarily closed their programmes

Categories A + and A medical colleges meet the highest standards of education and training and are recognised by the PMC as having the capacity to provide quality medical education. These colleges are typically affiliated with universities and have vital academic programmes and faculty.

The PMC has identified Category E medical colleges as having significant deficiencies in their programmes, facilities, or faculty and are not recognised by the commission. As a result, these colleges are not authorised to grant medical degrees or offer medical education in Pakistan.

Table 03: List of A+, A, B and C Grading Private Medical Institutions

Sr. No	Name	Grading	City
1	Aga Khan University Medical College	A+	Karachi
2	CMH Lahore Medical College	A+	Lahore
3	FMH College of Medicine & Dentistry	A+	Lahore
4	Avicenna Medical College	A	Lahore
5	Islamic International Medical College	A	Rawalpindi
6	Shifa College of Medicine	A	Islamabad
7	HITEC Institute of Medical Sciences	A	Taxila
8	Frontier Medical College	B	Abbottabad
9	Independent Medical College	B	Faisalabad
10	Rawal Institute of Health Sciences	B	Rawalpindi
11	Sahara Medical College	B	Narowal
12	Islamabad Medical & Dental College	C	Islamabad
13	Kabir Medical College	C	Peshawar
14	Sialkot Medical College	C	Sialkot
15	Women Medical College	C	Abbottabad

Source: (Avicenna, 2021) (Author's unbiased selection)

Critical Issues and Challenges

Variations in quality standards: Variations in quality and standards in medical education exist globally and in Pakistan. These variations can be attributed to various factors, including educational systems, regulatory frameworks, resource availability, and cultural contexts. Here are some key points regarding the variations in quality and standards in medical education:

1. Countries have different educational systems, leading to variations in medical education's structure, curriculum, and assessment methods.
2. The presence and effectiveness of accreditation and regulatory bodies vary across countries, resulting in variations in medical education standards and quality assurance mechanisms.
3. Disparities in resource allocation, such as funding, faculty expertise, clinical training facilities, and educational technologies, contribute to variations in the quality of medical education globally.
4. Cultural and societal factors can influence the emphasis on specific medical disciplines, teaching methodologies, and patient care approaches, leading to variations in medical education practices.

5. Global standards and accreditation systems for medical education are being developed to address variation issues as more medical practitioners and educationists realise the importance of doing so to guarantee the calibre of medical education.

The World Federation for Medical Education (WFME) issued its worldwide standards to assist nations in contextualising and creating their own standards (WFME,2020). The Higher Education Commission (HEC) and the Pakistan Medical Commission (PMC) regulate medical education in Pakistan. However, variations exist in enforcing and implementing standards across different institutions.

The PMC, as the sole regulatory body, holds the responsibility of public and private accreditation for medical and dental colleges in the country. The PMC has already made categories of private medical colleges based on variations in quality and standards.

Insufficient medical education infrastructure: The capacity of medical colleges in Pakistan is limited, and most of the medical colleges exist in urban areas hardly any medical colleges in rural areas of Pakistan, which is 62% of the population (Macrotrends,2023). This lack of medical institutions leads to a shortage of MBBS doctors, with insufficient opportunities for medical education and training in semi-urban areas.

Inadequate healthcare infrastructure: The shortage of MBBS doctors is compounded by the insufficient healthcare infrastructure in Pakistan, particularly in remote and underserved areas. Lack of medical facilities, equipment, and resources limit the capacity to absorb and utilize an adequate number of doctors.

Rural-urban divide: There is a significant disparity in the distribution of MBBS doctors between urban and rural areas. Many doctors prefer to work in urban centres, leaving rural areas with limited access to medical services. This further highlights the shortage of doctors in rural regions.

Brain drain and migration: Many qualified MBBS doctors in Pakistan migrate abroad for better career opportunities, higher salaries, and improved working conditions. Their most preferred destinations are the UK, the US and the Middle East. The brain drain of medical professionals exacerbates the shortage within the country.

Quality and Standards: Despite the increase in medical colleges in Pakistan, there are still concerns about the quality of medical education and the availability of resources for practical training. Many private medical colleges have been criticised for charging high fees and offering inadequate facilities and training. There have also been concerns about the standardisation of medical education across the country, with different colleges following different curriculums and assessment methods. The Pakistan Medical Commission (PMC) is the regulatory authority for medical education and training in Pakistan. It is responsible for ensuring that medical colleges and universities in the country meet the required standards for the education and training of medical professionals.

The PMC maintains a list of medical and dental colleges in Pakistan, divided into three categories: A, B, and C.

Category A medical colleges meet the highest standards of education and training and are recognised by the PMC as having the capacity to provide quality medical education. These colleges are typically affiliated with universities and have vital academic programs and faculty.

Category B medical colleges have been granted provisional recognition by the PMC and are in the process of meeting the required standards for full recognition. These colleges may have some deficiencies in their programs or facilities but are actively working to improve their quality and meet the PMC's requirements.

Category C medical colleges have been identified by the PMC as having significant deficiencies in their programs, facilities, or faculty and are not recognised by the commission. As a result, these colleges are not authorised to grant medical degrees or offer medical education in Pakistan.

Cost of education: The high tuition fees of private medical colleges can be a barrier to students from low-income backgrounds. Most of the population in Pakistan belongs to low-income who may be unable to afford the much higher cost of private medical education than public medical colleges.

Table 04: MBBA Fee in Public and Private Medical College (2023)

Sr. No	Fee	Public	Private
1	Annual Tuition Fee	Rs. 40,000 to 60,000	Rs. 1,500,000 to 1,700,000
2	One time Admission Fee	Rs. 10,000 to 15,000	Rs. 100,000 to 200,000

Source: (Ilmkidunia.com,2023)

Table 05: MBBA Fee in Public Medical College

King Edward Medical University, Lahore
Fee Schedule For MBBS Programme for the Session 2021-2022

Description	1st Year	2nd Year	3rd Year	4th Year	5th Year
University Fee					
1 Admission Fee	200	-	-	-	-
2 University Registration fee	2,000	-	-	-	-
3 Tuition Fee	26,000	26,000	26,000	26,000	26,000
4 Misc. Charges	2,830	630	830	630	730
Total	31,030	26,630	26,830	26,630	26,730

The higher tuition fees in private medical colleges affect the accessibility of medical education for students from different socioeconomic backgrounds, especially from low and middle classes.

Table 06: MBBA Fee in Private Medical College (AKU)

Fee Type	Frequency	2023(Yr1)	2024(Yr2)	2025(Yr3)	2026(Yr4)	2027(Yr5)
Admission	One time	Rs.171,500	Rs.188,500	Rs.205,500	Rs.226,000	Rs.248,500
Health Fees	Annual	Rs.20,900	Rs.22,800	Rs.24,900	Rs.27,200	Rs.29,700
Graduation	One time	Rs.22,500	Rs.25,000	Rs.27,500	Rs.30,500	Rs.33,600
Student Activity	Annual	Rs.3,700	Rs.4,100	Rs.4,500	Rs.5,000	Rs.5,500
Physical Examination	One time	Rs.15,500	Rs.17,100	Rs.18,800	Rs.20,700	Rs.22,800
Tuition	Annual	Rs.1,257,600	Rs.1,383,400	Rs.1,509,200	Rs.1,709,300	Rs.1,880,800
University	Annual	Rs.1,382,400	Rs.1,520,600	Rs.1,658,800	Rs.1,878,700	Rs.2,067,200

Source: AKU,2023, modified by author excluding hostel fee and charges

With the promulgation of the ‘Pakistan Medical Commission Ordinance, 2019’, unlimited autonomy has been given to private medical and dental colleges as they can now charge fees of their choice (Junaidi, 2019).

Private medical colleges generally operate as profit-oriented entities, and market forces, including demand and supply, primarily determine their tuition fees. Although the medical education market is growing, the country has experienced many private medical colleges in recent years. However, it is unsaturated in Pakistan, and a gap between demand and supply must still be filled. Factors such as increasing operational costs, infrastructure and facilities investments, faculty and staff salaries, and accreditation requirements contribute to the rise in tuition fees.

Table 07: MBBA Fee in Private Medical College (Shifa College of Medicine)

S.#	Description	For Local Students- MBBS				
		Ist Year	2 nd year	3 rd Year	4 th Year	5 th Year
01	Annual Tuition Fee (per year)	Rs. 1,400,000	Rs. 1,470,000	Rs.1,543,500	Rs. 1,620,000	Rs. 1,701,000
02	Admission Fee (one time)	Rs. 28,000				
03	Security (Refundable)	Rs. 60,000				
04	University Fee (per year)	Rs. 28,000	Rs. 30,000	Rs. 31,000	Rs. 32,000	Rs. 34,000
Total		Rs. 1,516,000	Rs. 1,500,000	Rs. 1,574,500	Rs. 1,652,000	Rs. 1,735,000

Source: MBBS Admission Information-Booklet Session-2022-2023, Shifa College of Medicine

Private medical colleges are often associated with a perceived higher quality of education, better infrastructure, and enhanced opportunities for practical training and career advancement. The perceived advantages may drive up the demand for admissions, allowing private colleges to charge higher fees.

Impact on accessibility and diversity: The increasing cost of private medical colleges may create barriers to entry for students from lower socioeconomic backgrounds, potentially limiting diversity within the medical profession. Affordability concerns could restrict access to medical education and lead to a concentration of students from more privileged backgrounds.

The stigma associated with private medical colleges: Despite their growing popularity, they are often stigmatised as inferior to public medical colleges and desperately seeking profits in Pakistan. This can affect the reputation and credibility of private medical colleges in the market. Private medical colleges in Pakistan may face a negative perception from some people who believe that the quality of education in private colleges is not as good as in government colleges. A few private medical colleges have been demanding upfront tuition fees from students and some students sought relief from the courts of Pakistan.

Prospects

The prospects of private medical education in Pakistan are significant and hold several opportunities for growth and development. Here are some key prospects for private medical education in Pakistan:

Increasing demand for medical education: With a growing population and increasing healthcare needs, there is a high demand for medical education in Pakistan. As a result, the private sector has been heavily investing in establishing new medical colleges to meet the increasing demand. Thus, the sector has endeavoured to fill the gap, but the ME market is still lucrative due to an imbalance between demand and supply.

Shortage of MBBS Doctors: The shortage of MBBS doctors in Pakistan is a significant concern that affects the healthcare system and access to medical services. Pakistan's population has been proliferating, which has increased the demand for healthcare services. The shortage of MBBS doctors arises due to inadequate healthcare professionals to cater to the population's needs.

Among 57 countries, Pakistan has a severe shortage of healthcare workers, including MBBS doctors, nurses, Auxillary staff, paramedic staff and managerial staff (Rana et al., 2016). In Pakistan Doctor to patient ratio is not sufficient and is reported as 1: 1300, and nurse to population ratio is 1: 3568, which is quite alarming (Parveen, 2016).

Quality of education: Private medical colleges in Pakistan are often associated with higher quality education and better facilities than public medical colleges. This has attracted students looking for a better education experience and higher chances of employment. For example, the Aga Khan University's Medical College receive international recognition for excellence in medical education. The AKU's Medical College received two ASPIRE awards – for international excellence in education in a medical school – from the Association for Medical Education in Europe in Prague, Czech Republic, standing out as an eminent leader in medical education among global universities

(More information visit <https://www.aku.edu/mcpc/about/Pages/recognition.aspx>)

Flexibility and innovation: Private medical colleges in Pakistan are often more flexible and innovative in their approach to medical education and are able to adapt to changing market demands and trends. For example, the Aga Khan University's Centre for Innovation in Medical Education (CIME) is one in Pakistan and Kenya and will soon be joined by Uganda and Tanzania.

(More information visit <https://www.aku.edu/cime/about/Pages/home.aspx>)

Conclusion

Medical Education is experiencing significant growth around the world. The expansion of medical colleges, new training programmes, ageing, and the public health challenges such as the recent COVID-19 Pandemic drives this growth.

Overall, the demand and growth of medical education will likely continue in the coming years as the need for healthcare professionals increases.

As the population in Asia grows, there is a rising demand for healthcare services, which has created a need for more healthcare professionals, including doctors, nurses, and other healthcare providers.

The growth of ME in Pakistan has grown significantly in the last few decades. One of the main reasons is the rapidly increasing population; according to a recent consensus (unofficially), more than 230 million have created a high demand and shortage of supply. Consequently, there has been significant growth in Pakistan's private medical colleges market. Private medical colleges now account for a significant proportion of medical education in the country. They are seen as an alternative to public medical colleges, often overcrowded and underfunded.

Private medical colleges in Pakistan are known for their modern facilities, experienced faculty members, and innovative teaching methods. However, the cost of education in these colleges is higher than in government medical colleges, and this can make it challenging for some students to afford the tuition fees.

Overall, private medical colleges in Pakistan are essential in meeting the demand for medical education in the country. These colleges provide students with access to quality medical education and help to address the shortage of healthcare professionals in the country.

Recommendations

A demand-supply balance mechanism for ME should be established to reasonably determine the scale, structure and distribution of medical education across the country.

Encouraging rural practice: Implementing policies and incentives to attract and retain doctors in rural and underserved areas can help bridge the rural-urban divide and improve access to healthcare services.

Incentives for private medical colleges in small cities and rural areas:

Providing incentives for private medical colleges in small cities and rural areas of Pakistan can help address the shortage of healthcare services, particularly in rural areas, mitigate urban migration, and improve access to quality medical education. Here are some potential incentives that can be considered:

Financial support and grants: The government can provide financial support and grants to private medical colleges in small cities and rural areas to help them establish and expand their infrastructure. This can include funding for construction, equipment, and medical education and training resources.

Tax incentives and waivers: Offering tax incentives or tax waivers for private medical colleges operating in small cities and rural areas can help alleviate their financial burden and encourage their establishment and continued operation.

Student scholarships and loan forgiveness programs: Introducing scholarship programs or loan forgiveness initiatives explicitly targeted at students studying in private medical colleges in small cities and rural areas can make medical education more affordable. This can incentivise students to pursue their education in these locations and contribute to healthcare services in underserved areas.

Enhanced government funding and reimbursements: Ensuring adequate government funding for healthcare services and improving reimbursement rates for services provided by doctors and hospitals in small cities and rural areas can create a more favourable environment for private medical colleges. This can help sustain their operations and attract quality faculty and staff.

Collaboration with public health institutions: Encouraging partnerships and collaborations between private medical colleges and public health institutions in small cities and rural areas can facilitate knowledge sharing, resource pooling, and joint initiatives to address healthcare challenges. This can enhance the overall healthcare ecosystem in underserved regions.

Recognition and accreditation: Providing recognition and accreditation to private medical colleges in small cities and rural areas based on their commitment to serving underserved populations can create positive incentives. Accreditation bodies and government agencies can offer specific recognition for institutions prioritising training doctors for rural practice and contributing to remote healthcare services.

Telemedicine and technology support: Promoting telemedicine and providing technology support to private medical colleges in small cities and rural areas can help overcome geographical barriers. This enables students and healthcare professionals to access specialised knowledge and services remotely, improving the quality of education and healthcare delivery.

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