



**Student Mobility for Higher Education: The Case of
Indian Students Studying Medicine in China**

Madhurima Nundy

Rama V. Baru

ICS OCCASIONAL PAPER NO. 52

Student Mobility for Higher Education: The Case of Indian Students Studying Medicine in China
Authors: Madhurima Nundy and Rama V. Baru

First published in 2020

© Institute of Chinese Studies, Delhi

Institute of Chinese Studies
8/17 Sri Ram Road, Civil Lines
Delhi 110 054, INDIA
Ph.: +91-11-23938202; Fax: +91-11-23830728
Email: info@icsin.org
Website: www.icsin.org

ABOUT THE AUTHORS

Rama V. Baru is Professor at the Centre of Social Medicine and Community Health, Jawaharlal Nehru University, and an Honorary Fellow, Institute of Chinese Studies, Delhi, India. She is also an Honorary Professor at the India Studies Centre, Central China Normal University, Wuhan, China. Her major areas of research interest include commercialisation of health services, infectious diseases, comparative health systems and health inequalities. She is the author of several books, her most recent publications are a co-edited volume (with Anuj Kapilashrami) titled *Global Health Governance and Commercialisation in India: Actors, Institutions and the Dialectics of Global and Local* (2018) and a book authored with Madhurima Nundy on *Commercialisation of Medical Care in China: Changing Landscapes* (2020), both by Routledge. She has contributed to many edited volumes and peer-reviewed journals. She is currently a member of the Ethics Committee at the All India Institute of Medical Sciences (AIIMS), the Technical Appraisal Committee for Health Technology Assessment, the Department of Health Research, the Ministry of Health, the Government of India and the Scientific Advisory Group, Indian Council of Medical Research, New Delhi.

Contact: rama.v.baru@gmail.com

Madhurima Nundy is Fellow at the Institute of Chinese Studies (ICS), Delhi, India. She completed her PhD in Public Health from the Centre of Social Medicine and Community Health, Jawaharlal Nehru University, New Delhi. Her areas of interest include health service systems, health policies, comparative health systems and inequalities in health. Her most recent publication published by Routledge (with Rama V. Baru) is titled *Commercialisation of Medical Care in China: Changing Landscapes* (2020). She has published in several journals, edited volumes and has been a regular contributor to policy analysis in the area of public health on China and India.

Contact: madhurima.nundy@gmail.com

Content

List of Tables/Figures

Abbreviations

- 1. Background and Rationale of the Study**
 - 1.1 Higher Education in China: Inbound Students
 - 1.2 State of Medical Education in India

- 2. Research Questions and Objectives**

- 3. Methodology**

- 4. Discussion and Analysis**
 - 4.1 ***Structure of Medical Education in India and China***
 - i. Role of Public and Private Sectors
 - ii. Entry into Medical Colleges in India and China
 - iii. Curriculum for Indian students in India and Indian students in China
 - iv. Regulatory Mechanisms and Quality Control for Medical Education (India and China)
 - 4.2 ***Indian Students Studying Medicine in China: Perceptions and Experiences***
 - i. Rationale of Indian Students for Studying Medicine in China
 - ii. Informal and Formal Networks used by Indian students for gaining entry into China
 - a. *Informal Networks*
 - b. *Formal Networks for Medical Admission*
 - iii. Perceptions and Experiences of Indian Medical Students Studying in China
 - a. *Curriculum, Pedagogy and Evaluation*
 - b. *Internship Year*
 - c. *The Foreign Medical Graduates Examination (FMGE) in India*
 - d. *Experience of the Students with the Indian Embassy in China*
 - e. *Psycho-social Stresses faced by Indian Students*
 - iv. Challenges and Dilemmas for the Indian and Chinese governments

- 5. Policy Recommendations and Conclusion**

List of Tables and Figures

Tables	Title
1	Indian Students Enrolled in Higher Education in Top Seven Countries, 2018
2	International Students in China, 2014
3	Total Number of International Students by Field of Study in China, 2014
4	Pass percentage of students who appeared for FMGE (2015-18)
5	Number of medical colleges for MBBS by ownership in India, 2019
6	Number of medical colleges for MBBS by state in India
7	Topics and Outcomes of undergraduate curriculum measuring competencies in India
8	List of Institutions for international students studying medicine in China, recognized by the Ministry of Education, PRC, 2019-20
9	The fee structure for international students studying medicine in Beijing, 2019
10	Six-year medical curriculum programme for International Students in a Medical University in Beijing

Figure No.

- 1 Multipath to acquire multilevel medical degrees in China

List of Abbreviations

AIPMT	All India Pre-Medical Test
FMGE	Foreign Medical Graduates Examination
HSK	<i>Hanyu Shuiping Kaoshi</i> (Chinese Proficiency Test)
MBBS	Bachelor of Medicine and Bachelor of Surgery
MCI	Medical Council of India
MoE	Ministry of Education
MoH	Ministry of Health
MHRD	Ministry of Human Resource Development
NBE	National Board of Examinations
NEET	National Eligibility cum Entrance Test
NMC	National Medical Commission (of India)
NRI	Non-resident Indian
PRC	People's Republic of China
USMLE	United States Medical Licensing Examination

Student Mobility for Higher Education: The Case of Indian Students Studying Medicine in China¹

Abstract

The mobility of Indian students travelling abroad for higher education, has been on the rise since the early 2000s. The favoured destinations have been the US, Canada, Europe and Australia. However, in the last few years it has been observed that China is one of the top non-English speaking countries where Indians are going for higher education, mostly for undergraduate medical courses.

The study analyses the pull and push factors of Indian students travelling to China for an undergraduate course in medicine through in-depth interviews with students studying in these universities, faculty and government representatives. It attempts to understand – the students' experiences and expectations; the structure of medical education, curriculum, pedagogy and teaching methods in China in comparison to India; specific challenges and barriers that they confront in China and on their return. The results show that the larger phenomenon is of commercialisation of medical education in both India and China that is fraught with challenges. There are several actors, governmental and non-governmental, involved in this process, which is largely market-driven and has implications for the future of the students who are pursuing medicine presently and those who will be pursuing medicine in the future. The study also gives policy recommendations to deal with the burgeoning numbers of Indian students pursuing medical education in China that has implications for medical education policies within higher education as well as for the quality of doctors produced.

¹ The research for this paper was conducted in 2018-19 before the outbreak of COVID-19 and hence, does not include in its analysis, the impact of the pandemic and recent developments in India-China relations, on the mobility of Indian students travelling to China for higher education, especially medicine. This will require a follow-up study that the researchers would like to address in the near future.

1. Background and Rationale of the Study

The mobility of students, travelling for higher education² has increased globally over the last decade. Increasing opportunities in a globalised world, market forces, revolution in information technology and communication, a growing middle class in developing countries with the financial power along with aspirations that has led to a greater mobility of students across the world. In 2018, about 752,725 Indian students travelled across to 90 countries for higher education, according to the Ministry of External Affairs (Deepalakshmi 2018).

There are several push and pull factors that determine the outbound flow of students globally. Snehi (2013) observes that push factors are mostly due to inadequate number of seats and facilities in the desired programme, poor quality of teaching, lack of diversity in the programmes available and so on. The pull factors could be several – wider pool of options to select from, scholarship opportunities, better facilities for research and so on. The wider factors are manifold that could include gaining better social status, employment prospects and gaining entry into a globalised middle class. In the present context, governments are also increasingly encouraging students to seek opportunities abroad by announcing joint scholarships for international programmes as well as attracting foreign students to come to study. India has more outbound students than inbound. The reasons need to be studied both in terms of rising aspirations and a crisis of higher education at the undergraduate and graduate levels that requires serious inquiry that could potentially contribute to policy dialogue and reforms.

In 2014, India had the highest growth rate in terms of number of students travelling for higher education abroad that surpassed China. This is despite the fact that in terms of actual numbers there are twice as many students going from China to study abroad as compared to India (M. M. Advisory Services 2015). In the higher education market, China and India have the maximum number of outbound students going to foreign universities, followed by South Korea. It is estimated that almost 50 per cent of the international students are from these three countries

² Higher education covers all undergraduate, postgraduate and doctoral programmes across disciplines. It also includes diploma and certificate courses received from vocational or professional institutes.

(ibid. 2015). Business and administration, science, engineering and construction and humanities and arts are some of the top subjects for which students seek admissions.

In 2018, the top seven countries to enrol Indians in higher education were – United States (US), Canada, Australia, United Arab Emirates (UAE), China, United Kingdom (UK), Ukraine and France, in descending order of enrolments (See Table 1) (Deepalakshmi 2018). This trend is now changing with the US retaining the first position and witnessing a massive growth of Indian students. It is estimated that almost 30 per cent of all Indian students going abroad are seeking admission for higher education. Canada, Australia, UAE have overtaken UK during the last few years. This is due to the tightening of immigration policies in the UK, weakening of the Indian Rupee to the British Pound that has made UK expensive for higher education. In addition, the *Brexit* impasse also affected the mobility of students to the UK. Interestingly, for many Indian students, China is one of the preferred countries and this is reflected in their steady growth. India ranked among the top ten nations with students at Chinese varsities. This number has now increased to over 20,000 in 2019.

Table 1: Indian Students Enrolled in Higher Education in Top Seven Countries, 2018

Rank	Countries students travelling to	Number of students
1.	United States	211,703
2.	Canada	127,000
3.	Australia	87,115
4.	United Arab Emirates	50,000
5.	Bahrain	27,200
6.	China	18,171
7.	United Kingdom	16,550
8.	Ukraine	11,000
9.	Kyrgyzstan	8,500
10.	France	2000

Source: Deepalakshmi 2018.

After North America and Western Europe - Central Asia, East Asia and Pacific region are favoured destinations for Indian students. While English-speaking nations are the most favoured

destinations for Indians, China is one among the non-English speaking country where Indians are going for higher education (Clark 2013).

1.1. Higher Education in China: Inbound Students

China has made a fruitful commitment to scale the global value chain by making internationalization of higher education an important aspect of their education and foreign policy. They have been steadily investing in higher education in order to attract foreign students to China (See Table 2). It is estimated that the number of inbound students will increase to 500 thousand by 2020. Presently, almost 70 per cent of the international students are from Asia (UNESCO 2013: 20). China is an attractive place to study due to several reasons. Firstly, in recent years the Chinese government has introduced several scholarship programmes to attract foreign students from various fields. They also have several ‘split campus programmes’ where they have partnered with a foreign university (mostly North American). An enrolled student finishes part of the programme in a university in China and the remaining in the partnering university in the West. There are joint venture universities, for example, the Duke Kunshan University (jointly funded by Duke University in the US and Wuhan University), where a student can get an international degree by studying in China. Secondly, the cost of living and tuition fees in China is relatively lower than other developed countries (Onsman 2013; UNESCO 2013).

Table 2: International Students in China, 2014

Rank	Place of Origin	Number of Students	Percentage of total
1	South Korea	62,923	16.7
2	United States	24,203	6.4
3	Thailand	21,296	5.6
4	Russia	17,202	4.6
5	Japan	15,057	4.0
6	Indonesia	13,689	3.6
7	India	13,578	3.6
8	Pakistan	13,360	3.5
9	Kazakhstan	11,764	3.1

10	France	10,729	2.8
----	--------	--------	-----

Source: Institute for International Education. n. d.b

A break up of international students by field of study in China shows that Humanities has the largest share followed by Business and Management and Medicine occupies a third position (See Table 3).

Table 3: Total Number of International Students by Field of Study in China, 2014

Rank	Field of Study	Number of Students	Percentage of total
1	Humanities	208,472	55.3
2	Business and Management	54,750	14.5
3	Health Professions	52,090	13.8
4	Engineering	34,134	9.1
5	Social Sciences	9,118	2.4
6	Education	6,664	1.8
7	Fine and Applied Arts	5,531	1.5
8	Physical and Life Sciences	3,927	1.0
9	Agriculture	2,368	0.6

Source: Institute for International Education. n. d.b

China is gradually becoming an important destination for Indian students – for language, literature and medical education. In 2018, the total number of Indian students in China was reported as 18,171 as compared to 765 a decade ago. Interestingly, 90 per cent of them are pursuing undergraduate medical courses followed by Chinese language and literature. Comparatively, the number of Chinese students in India has remained low to about 2000 (*Press Trust of India* 2015). The reason for Indian students travelling to China for studying medicine has to do with the state of medical education in India, achieving improvement of socio-economic status and rising aspirations of the middle and lower-middle classes.

1.2. State of Medical Education in India

According to the latest data by the Medical Council of India (MCI), there are 536 colleges teaching Bachelor of Medicine and Bachelor of Surgery (MBBS) with total seats of 79,627 (MCI 2019a). The real growth in medical colleges has been due to an expansion of the private sector with a regional bias towards the southern and western parts of India (Diwate 2016). Medicine is seen as a status enhancing profession and therefore there is a demand for it. It is observed that the demand for medical seats exceeds the supply. Given the fact that the entrance exams for medicine is highly competitive and the number of seats in public medical colleges are few, the expanding private sector offers seats at a high price. Those who are unable to pay for medical education in India look for other alternatives. These alternatives are weighed in terms of cost and medical education in China works out cheaper than the private medical colleges in India. Compared to other countries, China works out the cheapest when taking in to account fees, accommodation, living cost and miscellaneous expenses. The fee structure across provinces vary with a range that could be anything between 2.5 to 4.5 million. In 2014, an undergraduate student in China spent on an average 2.5 million for the complete course (Banerjee 2015). Among the most preferred destination to study medicine abroad, China tops the list followed by Russia, Ukraine, Nepal, Kazakhstan, Kyrgyzstan, and others. More recently, Philippines is also attracting students from India (Banerjee 2015).

China opened its doors for foreign students seeking admission in medicine courses in 2004. Streamlining of regulations took number of years. In 2016-17, the MCI listed around 45 Chinese medical institutions, which are public institutions, providing 3,470 seats to international students. There were also 214 universities listed as bilingual universities (MCI 2016b). The course is for six years that includes a year of internship and learning Mandarin is compulsory and a prerequisite for doing the internship in the 6th year. MCI approves only students from these 45 universities to appear for the Foreign Medical Graduates Examination (FMGE) that provides an eligibility certificate to the students who enter the university. The Indian Embassy in Beijing provides guidelines to students wishing to study medicine in China (Embassy of India, Beijing 2016). Recruitment of Indian students takes place through ‘agents’ in India who facilitate the process. According to some anecdotal evidence, there are ‘spurious agents’ and the guidelines

given by the Indian Embassy clearly warn students seeking admission about them (MCI 2016b). There are instances of students being recruited by agents and sent to sub-standard privately run universities that do not meet the standards of the Ministry of Education (MoE) in China or the MCI in India.

The real crisis is when the students complete their education and return to India. On returning, most of the graduate students from abroad (barring US, UK, Australia, New Zealand, and Canada) have to sit for the FMGE organised by the National Board of Examinations (NBE) which is a prerequisite to start medical practice in India. Analysis of data from 2015-18 shows that out of 61,708 students who appeared for the FMGE, only 8,764 passed, that is 14.2 per cent (Ghosh 2019). Maximum number of students who appeared were from China and pass percentage was 11.67 per cent (See Table 4).

Table 4: Pass percentage of students who appeared for FMGE (2015-18)

Country	Total number of students who appeared for FMGE	Number who passed FMGE	Percentage passed
China	20,314	2,370	11.67
Russia	11,724	1,512	12.89
Bangladesh	1,265	343	27.11
Nepal	5,894	1,042	17.68
Ukraine	8,130	1,224	15.00
Kazakhstan	1,393	143	10.2
Kyrgyzstan	5,335	589	11.00
Total	61,708	8,764	14.20

Source: Ghosh 2019.

Since the pass percentage is so low, many students who have completed their medical education abroad have to invest money and time in coaching centres in India in order to prepare for passing the FMGE. Despite these constraints, there has been no decrease in the number of students going to China. The Standing Committee Report of the Parliament on the functioning of the MCI in 2016, observed that rigid standards cannot be applied to foreign medical graduate colleges that will probably be very different and these similar standards have also been an impediment to

establishing more medical colleges in India. They observed that there is undue focus on infrastructure and none on the quality of education. It further recommended that along with a Common Medical Entrance Test there should be a Common Exit Test in order to ascertain the quality of students and indirectly the quality of medical education being imparted by the private medical colleges in India (Rajya Sabha Secretariat 2016).

There is anecdotal information of the experiences of Indian students travelling to China for medical education but there is very little information on the curriculum and pedagogy for training them (Mishra 2012; Bhattacharyya 2012; Desikan 2013; Kumar 2013; Zhao 2015). A lot is based on assumptions and therefore, there is an important question that arises of poor recognition of Chinese medical degrees by the MCI. The issue is far more complex. Is it only a problem with the skills of the curriculum or is it the many inadequacies of the state of Indian medical education in itself (Nundy 2016)?

2. Research Questions and Objectives

Given the large proportion of Indian students travelling for undergraduate courses for medicine (MBBS), it is important to understand the push and pull factors that lead Indian students to seek medical education in other countries especially China. It also raises questions of the motivations of students to study medicine in China and concerns of the quality of medical education and the future of the students when they return to India.

To be able to do an in-depth analysis, one needs information on the students who travel to China for medical education. Who are these students and which part of India do they mostly come from? What is their experience in China, not only in terms of skills and quality of education but also of the general ethos and life in a country that was never part of their imagination? This is clearly an under-researched area, which requires greater attention.

The project will seek to give policy recommendations to deal with the burgeoning numbers of Indian students pursuing medical education in China that has implications for medical education policies within higher education.

- i. What are the push and pull factors that determine the flow of students to China?
- ii. Who are these students and which part of India do they mostly come from?
- iii. What are the formal and informal networks that support the mobility of students?
- iv. What is their experience in China, not only in terms of skills and quality of education but also of the general ethos and life in a country that was never part of their imagination? What are the challenges they face?
- v. What are the contents and methods of transaction of the curriculum for undergraduate medical education in China and India?
- vi. What are the challenges and barriers they confront on their return?
- vii. How do the various government stakeholders on both sides view this phenomenon, what are their perceptions and what are the challenges to be addressed?

The objectives of the study will be to -

- i. Provide a comprehensive analysis of the internal and external factors that determine the flow of students.
- ii. Examine the motivations, experiences and expectations of students in China as well as the challenges faced by students once they return to India.
- iii. Examine the curriculum and its transaction for undergraduate medical education in China and India
- iv. Provide policy recommendations.

3. Methodology

The study extensively relies on primary data and is supported by macro data available from secondary sources. The study is primarily based on in-depth interviews with various stakeholders – Indian students, Indian Embassy in China, Ministry of Education in China, and Faculty from the Chinese Medical Universities.

The researchers first got in touch with the Indian Embassy in Beijing, PRC to get an overview of the students in China. The Indian Embassy facilitated the meetings with medical universities, students and the Chinese Ministry of Education (MoE). They put the researchers in touch with

students from three medical universities (out of the 45 universities that are recognised by MoE, PRC) – Capital Medical University, Beijing; China Medical University, Shenyang, Liaoning; Wuhan Medical University, Wuhan, Hubei and faculty from all these medical colleges. The researchers also interviewed faculty of medicine in Fudan University, Shanghai through other networks. All these universities have a large number of Indian students and therefore, were purposively selected. They also represent two universities under central government and one under the provincial government. Capital Medical University, Beijing is under the central government and has 600 students from India, studying across all six years. China Medical University, Liaoning is a provincial university that has 600 Indian students across all the years of the undergraduate course. Wuhan University in Hubei province, which is under the central university has over 400 students. The three universities were representative of the 21,000 Indian students who study medical education in China. The sample did not take into account the 214 bilingual universities that were earlier recognised by the MCI and have very recently been withdrawn from the list of recognised medical colleges.

The researchers had focused group discussions and in-depth interviews with students across these universities. Discussions were held with the faculty of the medical universities. In-depth interviews were conducted with officials of the Indian Embassy dealing with the issue of higher education in China. Senior officials of the Ministry of Education, PRC were also interviewed.

The meeting in China was facilitated by the Indian Embassy, which helped the researchers gain access to the select medical colleges and students. One of the constraints of going through the Embassy was that the faculty and the MoE officials were cautious and not completely forthcoming. However, the researchers were able to ease this situation by stating their independent status, and also stating that the research would help in evolving more suitable policy and course corrections, where required. They later met the students outside their campuses to get a more comprehensive picture of their experiences and the overall phenomenon.

4. Discussion and Analysis

4.1. Structure of Medical Education in India and China

i. Role of Public and Private Sectors

As discussed before, in India there are 536 medical colleges providing undergraduate degree in medicine with 79,627 seats (MCI 2019). Out of the total number of medical colleges, 49.1 per cent are government institutions; 46.5 per cent of the total are owned by trusts and societies and rest are private for-profit or in partnership with the government (See Table 5).

Table 5: Number of medical colleges for MBBS by ownership in India, 2019

Sl.No.	Ownership	Number of medical colleges
1.	Government	263
2.	Trust/Society	249
3.	Private	14
4.	Government-Society Partnership	10
	Total	536

Source: Compiled from Medical Council of India (MCI 2019a).

Table 6 shows that there is a concentration of these colleges in some states – Karnataka, Maharashtra, Uttar Pradesh, Tamil Nadu, Kerala, Telangana, Andhra Pradesh and Gujarat. Karnataka has the highest number of private (trust/society) colleges. About 69 colleges were not granted recognition by the MCI in 2017 and hence debarred from admissions.

Table 6: Number of medical colleges for MBBS by state in India

State / UT	Government	Trust/Society	Private	Government-Society Partnership	Total
Andaman & Nicobar	1	-	-	-	1
Andhra Pradesh	13	17	1	-	31

Arunachal Pradesh	1	-	-	-	1
Assam	5	-	-	1	6
Bihar	10	5	-	-	15
Chandigarh	1	-	-	-	1
Chhattisgarh	7	2	1	-	10
Dadra & Nagar Haveli	1				1
Delhi	7	2			9
Goa	1				1
Gujarat	9	10	2	8	29
Haryana	5	6	1		12
Himachal Pradesh	6	1			7
Jammu & Kashmir	7	1			8
Jharkhand	3				3
Karnataka	19	40			59
Kerala	10	24			34
Madhya Pradesh	14	9			23
Maharashtra	25	27	1		53
Manipur	2				2
Meghalaya	1				1
Mizoram	1				1
Orissa	8	4			12
Pondicherry	2	7			9
Punjab	3	5			8
Rajasthan	15	6	2		23
Sikkim			1		1
Tamil Nadu	26	22	1		49
Telangana	10	21	1		32
Tripura	1	1			2
Uttarakhand	4	2			6
Uttar Pradesh	23	28	2	1	55
West Bengal	18	6			24
Total	260	246	13	10	529

Source: Compiled from Medical Council of India (MCI 2019a)

Medical education in India is plagued by serious issues of maldistribution of resources, the unregulated growth of the private sector, dearth of faculty, the lack of uniform admission

procedures and dated curricula that needs to undergo a review. There are serious concerns over issues of quality, regulation and increasing corruption in selection and recruitment procedures as has been exposed by the *Vyapam* scandal leading to the ‘criminalisation of medical education’ (Baru and Diwate 2015).

Since providing education is considered to be a non-profitable activity, over 50 per cent of the recognised colleges are in the private sector and are registered as trusts or societies. The rest are government-owned and funded, with very few that are in partnership with a Trust or Society. The non-profit status does not prevent the private colleges from demanding high capitation fees that could vary from 5 million to 15 million Rupees, which is separate from the annual college fees. These are shown as donations by the respective medical colleges. Despite the Supreme Court declaring the practice of capitation as illegal, the demand for it from private colleges continues unabatedly.

Many of the failures regarding medical education have been attributed to the functioning of the MCI in the Standing Committee Report that was released in 2016. This report acknowledges that the MCI must undergo extensive reforms and a complete overhauling (Rajya Sabha Secretariat 2016). The Committee clearly states that the MCI had created many roadblocks and had failed to create a transparent system for accrediting medical colleges. The well-entrenched and powerful interests that drive the MCI was difficult to undo but the fact that it was documented to have failed in its duty was a good beginning. The MCI was superseded vide Indian Medical Council (Amendment) Ordinance, 2018 (Ordinance 8 of 2018) by the Board of Governors. The Board of Governors has taken over functions of the MCI in September 2018. In August 2019, both houses of parliament passed the National Medical Council Bill, which will now determine the quality and standards of medical education.

The recent draft policy on National Education Policy, 2019 suggests further commercialisation of medical education in India. The official stance till date was that education is not a for-profit venture and hence all private medical colleges on paper were registered as non-profits, either as trusts or societies. Many were of course, seeking donations and capitation fees that was illegal. The UPA government in 2010, allowed private medical colleges to open under the Companies

Act (Nagarajan 2019a). In 2016, the present government did away with the non-profit stipulation and for-profit medical colleges were allowed to set up under Companies Act. This decision has also created dissatisfactions among the existing non-profit medical colleges, who would like to set their own fees and have the for-profit status. Further, earlier this year, *“the MCI Board of Governors amended the Establishment of Medical College Regulations Act, 1999 to allow a consortium to set up medical colleges. A consortium, could be a group of two or four eligible organisations including a society, trust, company, university or deemed university who have entered into a Memorandum of Understanding”* (ibid. 2019). There are few medical colleges that are already in partnership in a PPP mode in Gujarat and few other states. Will this move improve the quality of medical education or is the State only looking at increasing quantity of doctors?

As a contrast to India, in China, all medical colleges are public. A few colleges are under the jurisdiction of the MoE at the Centre. The others are under the respective provincial government. All medical colleges have the status of a deemed university and are autonomous entities. Hence, even though all the medical universities in China are public (centre or provincial institutions), they are autonomous and are allowed to generate their own resources. This has led to commercialisation of medical education. There are over 250 medical universities across provinces recognised by the MoE in the PRC and there is much variation in the infrastructure, human resources and quality of education across provinces in China as is in India. Unlike Indian colleges, many of these medical colleges take international students, a phenomenon that started in Xi’an Jiatong University, Shaanxi in 1995 and then Tianjin University in 1997 (*Interview with MoE officials, Beijing, May 2019*).

ii. Entry into Medical Colleges in India and China

In India, there is a common entrance test called the National Eligibility cum Entrance Test (NEET), which was earlier the All India Pre-Medical Test (AIPMT) for students who are keen on pursuing MBBS or dental in government or private medical colleges after finishing high school. Undergraduate courses at the All India Institute of Medical Sciences (AIIMS) in New Delhi and Jawaharlal Institute of Postgraduate Medical Education & Research (JIPMER) are outside the NEET’s purview, as these institutes were set up under separate Acts.

While the NEET exam in India was introduced to regulate quality of medical education, it has not served that purpose as analysis shows. It is money and not merit that has compromised the quality of students entering the medical colleges in India (Nagarajan 2019b). In government colleges, seats are distributed among general category students and those for reserved categories. These seats are known as ‘government-controlled seats’. Private medical college seats include ‘government-controlled seats’ and those under private control such as management and non-resident Indian (NRI) quota that are available at a high price. It is observed that the average NEET score for students in the two colleges (public and private) vary drastically with a much higher average of 448 out of 720 in the public colleges and 306 in the private (*The Wire Analysis* 2018).

Nagarajan (2019c) in a recent report states that since there is no cut-off for individual subjects in NEET,

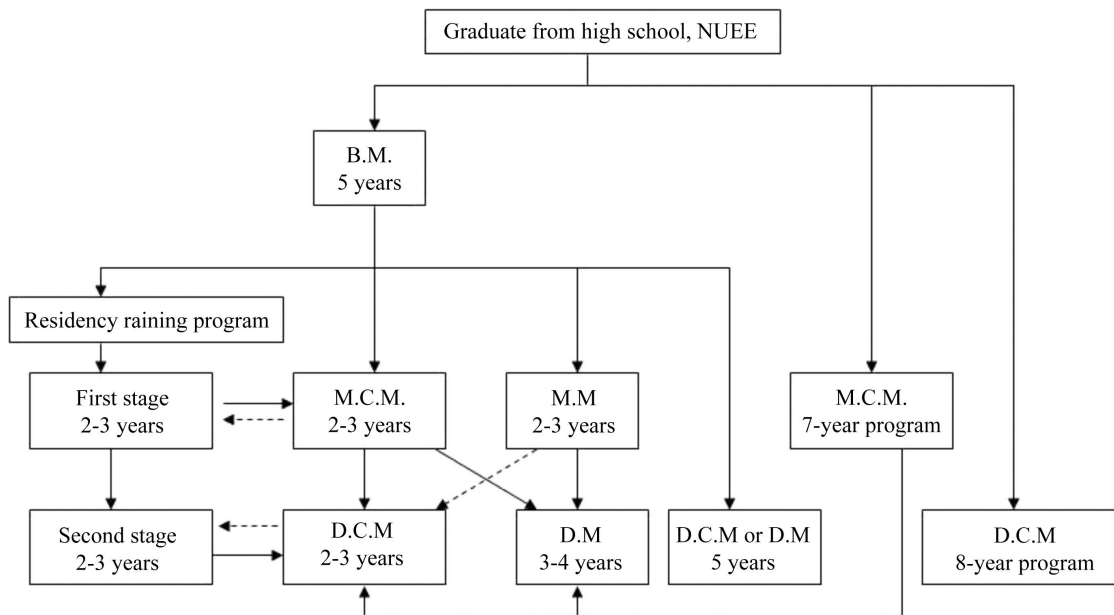
“At least 400 students with single-digit marks in physics and chemistry and 110 students with zero or negative marks in them have been admitted for MBBS in 2017, mostly in private colleges....If getting zero in these subjects doesn’t make a person ineligible for admission, why bother to test in that subject at all?”

The percentile system of NEET, dropped the stipulation on marks in individual subjects. The report analysed subject marks of 1,990 students who got admitted to MBBS with NEET scores of less than 150 out of 720 and found 530 students with single digit, zero or negative marks in physics or chemistry or even both (Nagarajan 2019c).

The Chinese system has a centralised exam, National College Entrance Examination, known as the *Gao Kao* for getting in to higher education and professional colleges, after completing high school. It is a highly competitive exam, since there is only one uniform exam for everyone to enter in to higher education and professional courses, including medicine. According to merit scores, the students are given choice of medical colleges. In terms of status, unlike India, the status of medicine is not high among professional courses in China. Engineering and other sciences top the list of preferences. The Chinese medical education system has undergone

reforms. The medical education is organised around a three-level degree system – bachelor, masters and doctorate. It has several streams of learning and students are selected on the basis of that – 3 years course (diploma), 5 years (bachelors), 7 years (masters) and 8 years (doctorate) (Figure 1).

Figure 1– Multipath to acquire multilevel medical degrees in China



Source: Wu et al 2014.

For international students in China, entry is quite different. It is a completely different stream from the regular Chinese stream. Students can gain entry by buying their seats in the college. This is discussed at length later in the report.

iii. Curriculum for Indian students in India and Indian students in China

In India, MBBS course extends over a period of 4 ½ years with one-year compulsory internship. Total duration of MBBS course in India is 5 ½ years. In the first one-and-a-half year a student is taught pre-clinical subjects and the rest three-years, students are given in-depth knowledge in clinical subjects. In the Indian medical education system, the syllabus is based on pure medical

subjects. The 4 ½ years are divided into three phases. First phase is with two semesters fully based on pre-clinical subjects like human anatomy, physiology and biochemistry. In second phase, three semesters are included with para-clinical and clinical subjects like pharmacology, pathology, microbiology and forensic medicine. In phase three, the 7th semester will have clinical subjects like paediatrics, ENT, community medicine, ophthalmology and other allied specialties of medicine and surgery. Passing in each phase is compulsory before proceeding to next phase. Health ministry from 2017-18 has proposed an exit exam at MBBS level onwards and also in the draft education policy 2019, with an aim to further improve the quality standards in Indian medical system.

A new competency based curriculum was introduced by the MCI in 2018 which was the first substantial revision since 1997. The curriculum competencies are organised in three volumes with detailed explanations on the competencies that are required (MCI 2019b). For 412 topics below, there are 2949 competencies listed (See Table 7).

Table 7: Topics and Outcomes of undergraduate curriculum measuring competencies in India

Sl. No.	Subjects	Number of topics	Outcomes
Vol. 1	Pre-clinical & Para-clinical		
1	Human Anatomy	82	409
2	Physiology	11	137
3	Biochemistry	11	89
4	Pharmacology	05	85
5	Pathology	36	182
6	Microbiology	08	54
7	Forensic Medicine and Toxicology	14	162
Vol. 2	Medicine & Allied Subjects		
1.	Community Medicine	20	107
2.	General Medicine	26	506
3.	Respiratory Medicine	02	47
4.	Paediatrics	35	406
5.	Psychiatry	19	117
6.	Dermatology, Venereology & Leprosy	18	73

7.	Physical Medicine & Rehabilitation	09	43
Vol. 3	Surgery & Allied Subjects		
1	General Surgery	30	133
2	Ophthalmology	09	60
3	Otorhinolaryngology	04	76
4	Obstetrics & Gynaecology	38	126
5	Orthopaedics	14	39
6	Anaesthesiology	10	46
7	Radiodiagnosis	01	13
8	Radiotherapy	05	16
9	Dentistry	05	23
		412	2949

Source: Medical Council of India, Competency based Undergraduate curriculum for the Indian Medical Graduate, 2018 (MCI 2019b).

Critiques of this curriculum say it is inadequate and instrumental, with emphasis on capsules of information than epistemological approaches that inform the interplay of medicine and humanities (Prabhu 2019).

The medical education programme for international students in China consists of a five-year programme with one-year internship. The curriculum includes compulsory course and elective course according to the requirements of the University. Students' internship is in the same university's affiliated hospital or the student can do his internship in his own country. In China the entire course is divided in to ten semesters and the total ten semesters divided into two parts – basic and clinical. First semester is devoted to study the subjects that are studied in high school - Cell Biology, Physics and Chemistry and Chinese language. The goal is to have all students from different parts of world reach a uniform level of understanding of subjects at the level of high school (12th grade according to Indian standards). Basic medical subjects are taught within the first four semesters. Clinical subjects are taught in the next six semesters. During the second semester the subjects include Anatomy, Physiology, Chinese language and Bio-Chemistry. Third semester revolves around subjects like pharmacology and pathology. In the fourth semester the subjects include Pharmacology, Pathology, Community Medicine and Microbiology (*Interview*

with students, faculty in Beijing, Shenyang and Wuhan and Shanghai, May-June 2019; August 2019).

iv. Regulatory Mechanisms and Quality Control for Medical Education in India and China

Medical education in India falls under the purview of higher education which is overseen by the Ministry of Human Resource Development (MHRD) also known as Ministry of Education, but many times there are tensions between MoE and Ministry of Health (MoH). The MCI, which is affiliated to the MoH was a statutory body for establishing uniform and high standards of medical education in India. Following corruption charges on the MCI, the Supreme Court allowed the Central Government to replace the medical council and with the help of five specialized doctors monitor the medical education system in India, from July 2017. The *Niti Ayog* recommended the replacement of the MCI with National Medical Commission (NMC). The Bill was presented in the Parliament on 22 July 2019 and was passed by both houses of parliament. Till the Bill gets implemented, the MCI has a board of governors, monitoring and regulating quality of medical education in India.

In the PRC, medical education comes under the purview of the MoE. They regulate and monitor the quality of education. They have a panel, representing faculty from different universities who carry out inspection of medical universities every year. The only medical college under the Ministry of Health is the Peking Union Medical College (PUMC), which is the oldest medical college of China providing training in allopathic medicine founded by the Rockefeller Foundation. This is considered as an elite institution and does not allow entry of international students to the MBBS programme.

4.2. Indian Students Studying Medicine in China: Perceptions and Experiences

There is a separate stream of medical education for international students in China, which is very different from that of the Chinese students who study medicine. The other international students are from Pakistan, Bangladesh, Nepal and Sri Lanka.

The Southeast Asian countries had lobbied with China to open up medical education to students from their country in the 1990s. Thailand was one of the first ones, since there were not enough medical colleges in Thailand to train students who desired to be doctors. In order to address the demand and unmet need, Thailand had approached the Chinese government to provide medical training to their students. The first medical college to open up for international students was Xi'an Jiatong University in 1995 and the second was Tianjin University in 1997. It is only in the first decade of the 2000s that Indian students started going to China to study medicine. In 2003 China opened up all its sectors and also education to other countries. At that time Prime Minister Vajpayee visited China and signed several agreements pertaining to education. In the first batch in 2004, 150 Indian students went to study medicine in China. These students went through agents who were selected by the Chinese Embassy and consulates in India. The main agents were individuals spread across Kolkata, Nagpur, Hyderabad, Kerala and Delhi. According to an official in the Indian Embassy in China,

“Now these main agents have many sub-agents all over India. From 2004-2006, these agents were bringing around 200 Indian students to China every year. During this time, they studied the Chinese market carefully and saw that there was a huge market in medical education and the demand of students back in India to become doctors especially in rural India was quite high”

(Official in Indian Embassy, Beijing, May 2019).

An official at the Chinese Embassy in India created a list of 45 universities in the early years. However, this exercise resulted in disgruntlement among the Chinese medical universities who were excluded. This meant revenue loss for the Chinese universities hence this list was scrapped and was replaced with a list of 214 universities. Any student from India could come and study medicine (Interview with Official from Indian Embassy in China, Beijing, May 2019).

Over the years, as more and more Indian students started joining the medical universities and graduating, there was concern from both sides – the Indian government as well as the MoE, PRC – regarding the quality of students as well as medical education. The Chinese were also

concerned about their image abroad. Since 2016, the Ministry of Education, PRC has recognized 45 universities in China that provide medical education in English, that is to say, English is the medium of instruction for the international students. These universities were ranked on the basis of the medical education provided to the Chinese students. The MCI used to list 214 bilingual medical universities approved by MoE, PRC. In 2018, an expert panel of the MoE, PRC visited 52 colleges and evaluated them. The report was submitted to the MoE based on which 45 medical colleges were recognized for admitting international students. There is a Chinese review board that inspects medical universities and suggests the suitability of these for international students. They undertake site visits and review curriculum, evaluation and quality of education. The review board consists of a panel of experts of doctors and representatives of international education (Interview with officials of the MoE, PRC, Beijing, May 2019).

From 2019, the MCI has removed 214 bilingual universities from its list of recognised universities and now includes only 45 universities. Most of these universities are spread across provinces from north-east to south-east of China (Table 8).

Each recognised medical university can only take a fixed number of international students every year. The Capital Medical University in Beijing, for example can take 100 international students every year and they said that they get students from about 50 countries, the maximum being from India. More recently the trend is changing, as there are more students from Bangladesh, Thailand, Sri Lanka, Indonesia and southern African countries. The Chinese are also consciously trying to evenly distribute the number of international students coming from other countries. In the last two years the flow of Indian students in some of these universities have come down. According to the faculty, the standard of other international students is similar to that of the Indian students studying in these universities.

Table 8: List of Institutions for international students studying medicine in China, recognized by the Ministry of Education, PRC, 2019-20

S. No.	Name of the Medical University, Province	Number of intake of international students permitted	Total number of Indian students presently studying
--------	--	--	--

		by the MoE for academic year 2019- 20	MBBS (cumulative for all years) (till 2018-19 batch)
1.	Jilin University, Jilin	62 (earlier intake was 100)	374
2.	China Medical University, Shenyang, Liaoning	100	600
3.	Dalian Medical University, Liaoning	100	108
4.	Capital Medical University, Beijing	100	600
5.	Tianjin Medical University, Tianjin	100	350
6.	Shandong University, Shandong	78 (earlier intake was 100)	50
7.	Fudan University, Shanghai	100	12
8.	Xinjiang Medical University, Xinjiang	100	437
9.	Nanjing Medical University, Nanjing	100	270
10.	Jiangsu University, Jiangsu	100	249
11.a	Wenzhou Medical University, Zhejiang	100	230
11.b	Wenzhou Medical University (Overseas), Zhejiang	50	-
12.	Zhejiang University, Zhejiang	100	103
13.	Wuhan University, Hubei	100	429
14.	Huazhong University of Science and Technology, Hubei	100	Nil
15.	Xi'an Jiatong University, Shaanxi	100	191
16.	Southern Medical University, Guangdong	100	357
17.	Jinan University, Guangdong	-	-
18.	Guangxi Medical University, Guangxi	100	528
19.	Sichuan University, Sichuan	100	494
20.	Chongqing Medical University, Chongqing	100	501
21.	Harbin Medical University, Heilongjiang	60	284
22.	University of North China (Beihua University, Jilin	40	482
23.	Jinzhou Medical University, Liaoning	60	426
24.	Qingdao University, Shandong	60	346

25.	Hebei Medical University, Hebei	60	380
26.	Ningxia Medical University, Ningxia	60	193
27.	Tongji University, Hubei	60	90
28.	Shihezi University, Xinjiang	60	200
29.	Southeast University, Nanjing, Jiangsu	60	276
30.	Yangzhou University, Jiangsu	60	400
31.	Nantong University, Jiangsu	60	399
32.	Suzhou University, Jiangsu	60	458
33.	Ningbo University, Zhejiang	60	600
34.	Fujian Medical University, Fujian	60	118
35.	Anhui Medical University, Anhui	60	220
36.	Xuzhou Medical University, Jiangsu	60	260
37.	Three Gorges University, Hubei	20	250
38.	Zhengzhou University, Henan	60	350
39.	Guangzhou Medical University, Guangdong	60	60
40.	Zhongshan University (Sun Yat-Sen University), Guangdong	60	60
41.	Shantou University, Guangdong	20 (earlier intake was 60)	60
42.	Kunming Medical University, Yunnan	60	300
43.	Chuangbei Medical University (North Sichuan Medical College), Sichuan	40	200
44.	Southwest Medical University, Sichuan	60	150
45.	Xiamen University, Fujian	60	120
	Total	3370	12445

Source: Indian Embassy in Beijing, 2019; and MCI 2019a

According to the MoE, PRC statement earlier this year, “Schools not listed (in the list of 45 universities) shall not recruit undergraduate students majoring in clinical medicine (teaching in English) to come to China, but only undergraduate students majoring in clinical medicine taught in Chinese” (cited in Patranobis 2019). While the Indian embassy states that there are 21,000 Indian students studying medicine across China, those studying in the 45 recognised medical universities are only 12,445. Over 8000 students are located in universities that do not offer the

course in the English medium. They have to learn Chinese to get a degree in clinical medicine as the medium of instruction is in Chinese. The universities that have Chinese as the medium of instruction have a lower fee structure. As a result, it is a viable option for students from the lower middle classes. It is only recently that the Indian government has derecognised the other universities.

The eligibility criteria for Indian students applying to Chinese medical colleges have been made a slightly more stringent. Earlier any Indian student could apply to a medical university in China based on their high school marks. But many colleges took students irrespective of their score in high school. Hence, there was no quality check of the students going to China. The Indian Medical Council Act has made some reforms. From 2017, the students seeking to go to foreign universities for studying undergraduate course in medicine are required to qualify the NEET in order to even apply. The number of Indian students in China has therefore come down now in the last two years. The students feel that the criteria of qualifying NEET for Indian students who go to foreign universities is a good reform.

“Earlier a student with a 90 score and 30 score, could both apply to the Chinese universities. So when the NEET was introduced and students had to at least score a 50 to even apply, the quality and quantity of students became better”

(Student, Beijing, May 2019).

i. Rationale of Indian Students for Studying Medicine in China

There are a number of reasons for Indian students opting to study medicine in China. These included both individual and familial aspirations to become doctors; unable to get a good score on the centralised qualifying NEET exam; the high cost of private medical colleges in India; reasonable fee structure and living costs in China compared to Western countries and the safety of living in Chinese cities was an added attraction for single women. At the core are the students with aspirations who wish to study medicine but are unable to make it to medical colleges in India. According to them, China is the first preference outside India.

In 2019, there were 1,410,755 students who appeared for the NEET for getting entry into a medical college. Out of these almost 800 thousand cleared the NEET exam. The number of medical seats available was only about 80,000 in India and those who qualified the NEET were around 700 thousand or more. A small percentage might be able to afford the tuition fees in private colleges while a large proportion will not (*Indian Express 2019*). Those who are unable to gain admission in a government medical college and unable to pay tuition fees in private colleges go to study in universities abroad mostly to Russia, Ukraine and Central Asian countries. A large proportion of them find their way to China.

Through individual interviews and group discussions the students articulated their aspirations to become a doctor, the constraints of qualifying in the entrance exam, the formal and informal networks that helped them in their mobility for medical education to China.

“I am from Ahmedabad and the major reason to come here was that I had low scores in my exams. I was getting admission in a private medical university in India but the fees were very high. I chose China because the course variation is the least in China and some of my friends were already studying in China so I preferred to come here. I also came through an agent but I had family relations with the agent.”

(Student, Beijing, May 2019)

“I had two options Russia and China but Russia it is 6+1 and China it is 5+1 years and therefore I opted for China.”

(Student, Beijing, May 2019)

There were two students who said that they had been in China before and felt they wanted to study in China since there was a sense of familiarity.

“My story is a bit different. My father worked in China and I did my schooling in an international school in China. I am from Andhra Pradesh but have been living away so wanted to study here.”

(Student, Beijing, May 2019)

“My dad had connections and we have a few friends over here and also the agent helped. Everything was ready but I had passed the NEET and it would have been rude not to join. I was comfortable with China and did not want to lose the opportunity”

(Student, Beijing, May 2019).

For many, China is an emerging economic power and they felt it was a better country to study in, than Russia or countries in Central Asia. Some of the women students said that they had heard China was safe for women and hence that was one major reason for them opting for China.

“I feel culture shock in China is very less. It is much similar to India and very safe. Majority of the people come from Maharashtra, Gujarat. Agent has office in Nagpur and Mumbai.”

(Student, Beijing, May 2019)

“Among other options China was safer. I was the first one to go out of the country in my family, so China was considered safer and of course the price was reasonable.”

(Student, Beijing, May 2019)

For some students, money is not a big issue as parents are able to afford, but for many coming from lower middle-class families, the decision is not an easy one. The status enhancing profession puts a lot of pressure on students, where families push their children to study medicine.

“I had the dream of becoming a mechanical engineer. But I got low scores in my exam. The next option was studying medicine. My mother is a government sector homeopathy doctor and was keen I practice medicine. My father works in Kerala state government. Both parents wanted to make me a doctor. Many friends were

sitting for medical exam, All India Pre Medical Test (AIPMT), and some joined private medical colleges like Manipal. But I couldn't clear. My parents wanted me to repeat but Physics was hell for me." The student decided on China despite a senior who warned him against studying in China. "A senior told me that students were not going to classes, enjoying parties – he told me not to come to China. For me the focus was to become a doctor so I went to the agency who convinced me that China is a good option to study. For me it was a path to escape, so I came. I didn't want to come but still it was an escape. Parents had to then take a loan and send me"

(Student, Shenyang, May 2019).

Low costs were one of the major reasons to study in China.

"Within the half amount donations that we give to private medical colleges (in India), we complete our course here (China)."

(Student, Beijing, May 2019)

The fee structure for one of the colleges in Beijing is given below (Table 9).

Table 9: The fee structure for international students studying medicine in Beijing, 2019

<p>Fee for Pre-medicals: 25,000 RMB (tuition and accommodation)</p> <p>Fee for Clinical medicine: 50,000 RMB (per year for 6 years) – the medical college in Beijing gives a waiver of 10,000 RMB, therefore, payable amount is 40,000 RMB.</p> <p>Other charges:</p> <p>Dormitory (double occupancy for Clinical Medicine) for 6 years – 11,000 RMB/year</p> <p>Application, Admission (one-time payment at reporting time) – 14,800 RMB</p> <p>Registration (one-time) – 800 RMB</p> <p>Medical Check-up (one-time) – 600 RMB</p> <p>Resident permit per year – 400-500 RMB / year</p> <p>Insurance per year – 600 RMB / year</p>
--

Source: Compiled from Medical College in Beijing, 2019.

Based on an approximate calculation, a student in Beijing would spend around Rs. 5-6 million for a six-year MBBS training inclusive of all costs. This would be the highest in terms of cost compared to other colleges since Beijing is the capital city and the cost of living is high. This would hold true for Shanghai as well, which is a first-tier city as well.

There is variance in costs across provinces. For instance, a student from Shenyang said,

“35000 RMB is tuition fees for a year, 6000 RMB dormitory fee for a year, 800 RMB for resident permit and 600 RMB for medical insurance – this is per year. In the 4th year, we were asked to go to the city as the main campus is in the city, which is very expensive. We had to rent apartments. When we told the agent, he said try and adjust and share with each other

(Student, Shenyang, May 2019).”

Compared to this, costs for getting a seat in a private medical college in India is very high and ranges anywhere from Rs.400 thousand per year to Rs.4 million per year only for fees. There are then costs – related to stay and other living expenses as well as hidden costs. Many colleges also take capitation fees where seats can be purchased at a cost by giving donation, which is illegal but is still rampant.

ii. Informal and Formal Networks used by Indian students for gaining entry into China

Indian students studying medicine in China is a complex phenomenon involving several actors and agencies – formal and informal. The information they gather about medical colleges is from either a friend who has already studied there, some distant relative and/or the agent they are recommended to.

The agent is a critical actor here – he is the one who gives all the information to the aspiring students. Each agent has links and contacts with one particular college in China. There are sub-

agents within the university who liaison between the university in China and agents in India. The agent in Beijing is from Pakistan while the one in Wuhan is from Nepal. They could be former students or senior students pursuing post-graduate studies. Some Indian students act as informers or become sub-agents for the agents and help agents in India with details of admission in China.

a. Informal Networks

Informal networks include family, friends and former students who have studied in China. Personal networks of family and friends include those who had some connections with China that helped them decide.

There seems to be a clustering of students in some medical colleges from particular states. For example, there is a large representation of students from Northern Kerala in Wuhan Medical University, Hubei province and from Kerala, Telangana and Tamil Nadu in China Medical University, Shenyang, Liaoning province. Capital Medical University in Beijing had more students from Maharashtra and Gujarat. In many instances, a senior who is a relative or a family friend and studying or finished studying medicine in the university informed the students about the university.

In the case of Wuhan and Shenyang, these informal networks are mostly senior students from same hometowns who are the first point of contact and motivators, and assist in providing the initial set of information and in settling down when they reach China. They say they are a community and help each other across generations of students. When a fresh batch comes they take care of the new batches. The students are taken care of, in the first few weeks and then they are on their own. This scenario was different from that of students in Beijing where every student was more or less on their own, and there was less of a community feeling there.

There is a thin line between formal and informal networks, as the agent could also be a family friend or a relative. As Ashok writes in her piece in the *Indian Express*,

“the ‘agent’, a crucial conduit for this journey to China, can be anyone — a high school teacher, a friendly neighbourhood uncle, an NGO in rural Tamil Nadu, or

seniors who graduated from medical schools in China but couldn't clear the FMGE. In one case, it was the student's uncle. This student even got a discount, but only on the commission he paid his agent-uncle"

(Ashok 2019).

b. Formal Networks for Medical admission

The key player in the formal network is the agent. The role of the agent in this phenomenon of student mobility is very important. He plays a critical role in mobilising students to study medicine in China.

The agents are scattered all over India. The main agents are located in Delhi, Mumbai, Gujarat, Kerala, Tamil Nadu, Andhra Pradesh. There are agencies and their franchisees that operate across these states. According to the students the agents commission varies according to the ranking of the university and could range from 200-500 thousand per student.

Most students who seek admission into medical colleges in China are dependent on agents who give details of the institution, fee structure, living conditions and the course itself. Every medical college has a direct link with these agents and they often accompany students at the time of admission and completion. The airfare for the agent is borne by the student. There were instances when students felt 'duped' by the agent who did not give them full information regarding the costs to be incurred. They said that there were 'hidden costs' which they found out only after arriving in China. The interviews with students suggested that a few students become sub-agents in the later years of their stay in China. This entails senior students endorsing the programme thereby providing encouragement to prospective students. The main agents pay the sub-agents a commission for doing this. The contact point for all agents is with the administration of the International Student's Office in medical colleges.

"This is a revenue generating model for the Chinese university and a win-win for the agent as well as the international school of the medical college. I do not want to blame the MoE in China but for international students in China it is an educational tourism"

(Student, Shenyang, May 2019).

One agent started his business with apples in Shenyang and then ventured into a far more lucrative business with the universities in 'luring' Indian students to China. The students are most vulnerable with the agents. The agent plays on the vulnerabilities of students unable to get the requisite marks to study in India, and their aspirations. The agents are powerful. One could apply directly but students are mostly unaware of how to choose universities and the procedures to apply on line. They are dependent on these agents for all details.

“The Agents are accountable to no one. It is a business for them. They misguide students by playing on their vulnerabilities. My agent didn't give the correct picture about the compulsory internship year in China. I was told that I could do it in India instead. Also I had no clue about the separate medical curriculum for international students.”

(Student, Beijing, May 2019)

Most of the students in Capital Medical University that the researchers met had applied through agents in Mumbai or Nagpur. They were given the contact through a friend or relative who had studied in China before. The agent takes all the documents and forwards it to the university. The university sees all the paper work and gives the admission date. An agent in India generally has close connections with one university in China. Agents are more like brokers and have tie-ups with specific universities. They have links with the top administrative officials managing the division for international students. For instance, in the medical university in Wuhan there were over 400 students from Kerala who had come through the same agent. The agent from Kerala directly negotiates with the agent in Wuhan University who is from Nepal.

Main agents are in Hyderabad and Trivandrum and have multiple sub-agents across Kerala.

“There are 5-6 agencies in Trivandrum and many are in Kozhikode. Many of these are sub-agencies with the main agent in Hyderabad. There is Apex and Excel who have franchisees in various cities”

(Student, Shenyang University, May 2019).

The agents are insecure about allowing new batch of students to interact with senior students who have already passed out of medical universities, so as to keep information vague.

“I was given the number of a senior by the agent accidentally, he did not wish to give. This senior passed from 2005 batch and is working in a private hospital in Kerala. She told me that believe only 20 per cent of the what the agent says”

(Student, Shenyang University, May 2019).

Some agents even travel with the students they recruit to assist them in settling down.

“The agent came with us to Shenyang, arranged everything, cooked for one week, did the shopping. He spent everything from his pocket but we paid for his air ticket separately and his commission was one lakh (100 thousand) per student. This was the cheapest one and he was the most transparent in the city of Trivandrum”

(Student, Shenyang University, May 2019).

There are several incidents regarding the hidden costs that students get to know of, when they arrive in China. These are seen mostly in the provincial universities, as there is less information available about these.

“There was a racket that was caught in our school recently. Even I had paid a huge sum to the agent and then not told about the actual costs. The University took a huge sum before pre-medicals, a wholesome amount during pre-meds that was for five months and then another sum of money when I became a student of the university. So students should be able to go to the website of the university directly and apply to the university. Most of the students from other countries apply to the universities directly”

(Student, Shenyang University, May 2019).

In another issue in the same university students complained that they were not told that they had to move to the city in the fourth year which increased their cost of living.

“Agent told a lot about China but hid many things. He said it is very easy to get a degree and that the expense is very low. He told me that the expense was around 500-600 RMB per month. He told that there would be an Indian restaurant and Indian teachers will be there. Most agencies do this. Our agency was little more transparent. He also charged one lakh (100 thousand), which is less than other agencies. He said the tuition fee for a year was 25000 RMB and 6000RMB was the dormitory fee. He arranged the bank loan since we didn't have this money. The agency convinced the bank and organised it all. But he did not tell us about the hidden charges about the fees. Its only when we came here, we were told that after 3rd year we have to go to the city campus which is in a developed district, Shenhe and cost of living is higher.

(Student, Shenyang University, May 2019).

The lack of information on university websites, compounded by deliberate withholding of information by agents creates difficulties for students who come from lower income background and have taken loans to study.

“Information should be available on university websites on the different rules. For instance, in some universities internship year is compulsory, in others it might be optional. Students never get a clear picture about this from the agents. This information should be directly available on the university website or the student representative of a particular medical college. Obviously a lot of information is withheld by the agent because it is a business deal for him. He is just interested in the number of students he can send to China”

(Student, Wuhan, May 2019).

But, students agreed that agents made the work easier while applying to a university, as there were several questions that students had that might not be easily available and accessible due to

language concerns and lack of time. But all students agreed that there needed to be some transparency in the system. Hence, the embassy portal needed to have a much more detailed information on recognised or 'licensed' agents.

Interestingly, many students become sub-agents. Many young students like spending money and travelling and do not get sufficient funds from homes to pursue these activities. Many families take loans for the education. Students sometimes take up the work of being a sub-agent to the main agent in India. Some even go on to become main agents. The role of the agent in the recruitment of students to study in China requires separate attention.

iii. Perceptions and Experiences of Indian Medical Students in China

Based on individual in-depth interviews and group discussions, the researchers attempted to gauge the perceptions and experiences of students studying medicine in China. Most students were from Gujarat, Maharashtra, Telangana, Andhra Pradesh, Kerala and Tamil Nadu. They seemed to come from middle and low- class families and many have mobilized loans to study in China.

a. Curriculum, Pedagogy and Evaluation

The curriculum and pedagogy in China is very different for the international students from the Chinese stream. Before leaving for China, most students had no clue that there was a separate curriculum for the international students from the Chinese students studying medicine in China. The curriculum of the two streams is at variance with each other and is transacted very differently. There is no standardised system of medical education provided across colleges. There are provincial variations. The practical exposure and training also varies across streams and colleges.

While the curriculum, pedagogy and evaluation systems differ from one university to the other they are broadly similar. Medical curriculum for the international students is a six-year

programme that includes five years of course work and one year of internship. Each year is divided in to two semesters (Table 10).

Table 10: Six-year medical curriculum programme for International Students in a Medical University in Beijing

Courses	Semester	Hours	Credits		Courses	Semester	Hours	Credits
General Information on China	1	36	2		Pathology	5	54	3
Chinese	1-3	192	12		Experimental Abnormal Morphology	5	45	2.5
Physical Education	1-4	64	4		Medical Chinese	4-6	136	8
Advanced Mathematics	1	54	3		Medical Statistics	6	54	3
Medical Physics	1	90	5		Neurobiology	6	54	3
Basic Chemistry	1	72	4		Medical Ethics	6	27	1.5
Computer Basics	2	54	3		Preventive Medicine	6	54	3
Organic Chemistry	2	72	4		Physical Diagnosis	7	117	6.5
Systematic Anatomy	2	153	8.5		Experimental Diagnosis	7	45	2.5
China and Foreign Medical History	3	18	1		Medical Imaging (including ultrasound)	7	54	3
Regional Anatomy	3	63	3		General Surgery	7	45	2.5
Cell Biology	3	45	2.5		Anaesthesia	7	27	1.5
Biochemistry	3	72	4		Introduction to General Practice	7	27	1.5

Medical Biological Experiment (1)	3	30	2	Internal Medicine	8	171	9.5
Medical Genetics	4	36	2	Emergency Medicine	8	36	2
Molecular Biology	4	27	1.5	Surgery	8	180	10
Medical Biological Experiment (2)	4	32	2	Nuclear Medicine	9	18	1
Physiology	4	81	4.5	Obstetrics & Gynaecology	9	90	5
Medical Function Experiment (1)	4	34	2	Paediatrics	9	90	5
Medical Microbiology	4	45	2.5	Infectious Diseases	9	72	4
Medical Immunology	4	45	2.5	Neurology	9	45	2.5
Human Parasitology	4	18	1	Ocular Science	9	27	1.5
Pathogen Biology and Immunology Experiment	4	36	2	Otolaryngology	9	27	1.5
Medical Psychology	5	18	1	Stomatology	10	27	1.5
Medical Literature Retrieval	5	18	1	Dermatology & Venereology	10	27	1.5
Pathophysiology	5	45	2.5	Psychiatry	10	45	2.5
Pharmacology	5	72	4	Clinical Epidemiology	10	18	1
Medical Function Experiment (2)	5	42	2.5	Evidence-based Medicine	10	18	1
Histology and Embryology	3	99	5.5	Clinical Pathology	8	18	1

Social Medicine and Health Administration	5	18	1	Clinical Pharmacology	8	18	1
Chinese Medicine	6	45	2.5	Rehabilitative Medicine	9	27	1.5
Acupuncture	6	54	3	Health Law	10	18	1
Nutrition and Health	6	18	1	Health System Funding	10	18	1
Clinical Immunology	8	18	1				

Source: Compiled from a Medical College in Beijing, 2019

Going by the curriculum described by the students from a medical university in Beijing - the first year is a foundation course that consists of Chinese language and basics of Physics, Chemistry, Biology and Mathematics. Since this is an international students' curriculum, not every student comes with the basic knowledge of the sciences. The college takes up the basic courses in the first-semester. The language training also begins in the first year. The language not only includes basic Chinese but also medical Chinese so that students are able to interact with patients during internship. Second semester includes chemistry, computer basics and systemic anatomy. From the second and third year there are pre-medical subjects, including anatomy, physiology, histogeny, biochemistry and the rest. The language training continues in these years. The pre-clinical subjects continue till the third-year first semester. In the second semester of the third-year they have subjects related to traditional Chinese medicines (TCM), acupuncture and so on. Once they enter the first semester of the fourth year, they get into the clinical side of the training related to the subjects they covered during the first three years of pre-medical training. The fourth year is the introduction to clinical subjects and it is during this year that they get exposure to patients. In Wuhan while the curriculum is more or less the same, they have four years of theory and the 5th year is clinical year and 6th year is the internship year. During the six years they learn basic Chinese in the first two years and medical Chinese in the next four years.

Their perceptions on the curriculum are as follows:

“The curriculum layout is very abrupt, a student might take time to finish a subject in 7-8 months, we have to do it in 3-4 months. Even for the best student, this becomes impossible. They haven’t broken up the subjects properly. Some semester you do not have anything to do, and some you have everything. You can’t finish a particular topic while sitting in a class for one hour. In my textbook the same topic is 25 pages. The number of classes, course layout, structure of the programme needs to undergo change. But this is very different for every university.”

(Student, Beijing, May 2019).

On the other hand, students observed that the stream of medical education for Chinese students was quite different.

“Chinese students finish their course in five years – their course is evenly structured and distributed, for us some semesters are very clustered. For instance, first year is complete chill out, second year you pick up momentum, third year you will be sleeping for hours. When you reach fourth year you realise you have start again and reality hits you but its too late then because you have already entered clinical and you don’t know anything. You lose motivation. You also do not have the motivation to compete because as we said the evaluation system is not rigorous – the seniors will pass on the papers to you”

(Student, Wuhan, May 2019).

So while the Chinese students have a very rigorous curriculum for their undergraduate course, the International students have comparatively a superficial one and the pedagogical techniques are vastly different and not up to the mark. Students are taught through power points and language is a major barrier. There is limited interaction between faculty and students. As a result, explanations offered by the faculty are not clear.

When asked how the Chinese professors treated the international students in terms of academic competencies as compared to Chinese students, a student said:

“Even Chinese medical colleges are ranked. The university that I go to probably has a higher ranking than AIIMS but it is the Chinese stream that gets the ranking. Chinese also study in English in the seven-year course that they have. They use the standard foreign textbooks. They are exactly like it would be in Indian medical colleges. They don’t have reviews like us, they have exams. Ours is more like a kindergarten experience. The Chinese have foreign lecturers and regular seminars. We have made Chinese friends and we sometimes go and attend these lectures. Most of the day we just play games and it’s like a holiday”

(Student, Shenyang, May 2019).

The mode of transaction through power point presentations provides only a summary and overview of the subject matter. Class discussions are restricted due to the language barrier for both the teachers and the students. Classroom interaction with the teachers is minimal.

“Most of the time the lectures by the Chinese faculty is uninteresting. It is non-interactive and if we ask questions, most of the time they do not understand the questions”

(Student, Wuhan, May 2019).

The students find the teaching inadequate and often in a Power Point (PPT) mode without much explanation.

“Theory is not strong here, not so much because of the language but the kind of presentations they give us in the classrooms and the way it is transacted. You need to understand the theory to understand the practical, when you understand the practical you understand the theory even more better. So in those terms, I would say that we are not even taught 50 per cent of theory here. They just teach 30-40 per cent of what they should actually be teaching. They cover the USMLE course, but only on the surface. They touch and they leave it to you to cover”

(Student, Beijing, May 2019).

The students at the medical college in Beijing said that the training and the pedagogy in the second year included practical training too, with cadavers to study anatomy. The classroom lectures generally was supplemented with lab classes.

“For example, if we are studying the shoulder region in the class, we will have two to three lab classes to cover the same region.”

(Student, Beijing).

These were guided practicals and were demonstrated by the teacher. While in Wuhan, there was less exposure to practical training and even if there was it was only observation. They got hands on experience only in the 5th year of their curriculum.

There are a few things that the agents do not divulge. These include problems that could arise regarding language. The impression that is conveyed is that the medium of instruction will be in English. As discussed, the MoE provides names of only 45 universities that will provide MBBS in English. Even if that is the case, communication and interaction with faculty is limited due to lack of fluency in English. They also do not give them full information about the curriculum or evaluation. The fact that the first year consists of basic science courses is not revealed and hence many students feel it is a waste of time since they have already covered this course in their high school years (curriculum given in Table 10).

It is a challenge for both the faculty as well as the students to interact and communicate. The faculties feel that international students are generally hard working but the quality of students has only improved in recent years. This probably corresponds to the reform by the Indian government that has made qualifying the NEET mandatory for all students applying abroad. This eligibility criterion was brought in as a means to regulate the quality of students two years back.

Some of the books used in the curriculum are standard books that are used internationally while others are English translations of Chinese textbooks. The students said that they were free to select whichever book they wished to study. Some opined that the theoretical component was weak and therefore, they felt under confident. There is variation in exposure to clinical practical across colleges. Some colleges encouraged students to interact with professors and Chinese

students while others just left them alone. This leads to a sense of loneliness and a lack of direction and purpose. A few junior students said that they have “fun” and “enjoy” their time here. They feel a sense of liberation being away from parental control and societal restrictions that they face back home.

The universities under Ministry of Education fare better compared to those universities under provincial government. One student from a medical university under the provincial government felt it was an utter waste of time to study in China.

“My opinion to future students of medicine is that they should crack the NEET exam and study in India. They should not come to China, it is waste of time. Or else they should go to Philippines. Most people cracking FMGE are from Philippines. The course structure is like India and is taught in English. During internship period students are able to talk in English with patients unlike in China. Also similar kinds of tropical diseases as in Kerala can be seen there. Here we can see more of chronic diseases, no communicable diseases”

(Student, Shenyang, May 2019).

Comparing quality of education between India and China, one thing that was said by students across universities was that the resources in medical universities in China were abundant. The students observed that:

“It was more of an individual thing, here teaching is more power point presentations and it is not stimulating. But on the other hand, the practical training is better, we get one cadaver for twenty students. The resources here are immense and abundant for practicals and research when you compare to India. But the setback is that you are not fluent in language and theory is weak. They have a lot of material and information and are very good in their subjects but they don’t know how to teach. We both lose lot of time in trying to understand, and teachers lose time trying to explain. In India, teachers will be pushing you, they keep a tab on you – we are used to that since school. Here, you are left on your own.”

(Student, Beijing, May 2019).

There are times when there are guest faculties who are invited from other countries and students find these more interesting and engaging. But these are far and few.

“All teachers are Chinese. They do not hire non-Chinese teachers. Very few who might have stayed abroad – for instance, a teacher who taught cardiology was really good because he had studied in Germany for few years. So some of these teachers who have spent time abroad are fantastic with their subject and can teach really well”

(Student, Beijing, May 2019).

“In India teaching must be definitely better but I don't like the pressure they put on students. Here the pressure is much, much less. It is more like self-study. We have some guest lectures by non-China faculty which is good. They do not teach power point presentations and are more interactive”

(Student, Wuhan, May 2019).

An Indian medical doctor who was temporarily a guest faculty for international students in a medical university in Beijing said that curriculum was vastly different from India. She said that 10-15 per cent students were studious while the rest seemed quite casual. The rest 85 per cent were also the ones who did not have strong foundation and did not have the capacity to absorb. She said,

“I had to teach very simply, give them the basics. Since I was a guest lecturer, not many people felt the compulsion of attending. It was good that the University asked me to teach and assist students to clear their doubts but then the students were not coming to class so the University stopped my classes”

(Indian Guest Faculty, Beijing, May 2019).

On the positive side, some students from Beijing felt that the practical exposure they received was more compared to their Indian counterparts. This view varied from other universities. They felt that medical education in India was text book oriented and practical exposure was limited. And even in the best of government medical colleges this is the case.

“Here that is the plus point. I know people in their later years of MBBS or Masters and have never entered a surgical room in India. You learn a lot when you see a lot of things – here the surgical exposure is a lot. I know I wouldn’t get to see many operations that I get to observe here. Here you are given cadavers where four people work on it and 20 are observing. In India you do not get that exposure. All of us got the first-hand experience to dissect. In the second year practicals, when we have biochemistry and other subjects, we were given mice, rabbits, frogs. All of this is banned in India now. If we talk of practicals, we are doing extremely well here. But if you link it with theory, there are gaps and we have to catch up with theory on our own. It is completely up to the individual.”

(Student, Beijing, May 2019).

But a lot of these practical exposures are through observation and not hands-on. Technologically, the Chinese universities have kept up with the latest and have advanced infrastructure and equipment. There are transactions through computer simulations in these universities too. They have installed these simulations in corridors and anyone can do it anytime but interactions with patients and treating patients through direct contact is limited. On that the students from Beijing said,

“In India, a government college student, since that should be our standard, is working with patients from day one, we start that somewhere in the 4th or 5th year. Besides that, the student is doing it on a live patient. Here we are doing simulations. For instance, I know the procedure for connecting an IV line, but I have not done it on a patient here ever. The moment I have to do it live, risk factors increase. So even if my clinical exposure is better, the student in India will have a much better skill than me, because I have not applied my clinical knowledge on anyone. There they get a range of patient exposure, go to camps, village camps”

(Student, Beijing, May 2019)

A student from Shenyang observed,

“There is simulated learning and cadaver learning but patient learning is very weak. So you probably do not even know how to take the BP of a patient. Also clinical set and the skill set to match it are absent. There are gaps”

(Student, Shenyang, May 2019).

When it comes to practical training, language becomes a major impediment when it came to interacting with patients. Given their lack of adequate proficiency, patient interaction becomes difficult. Some also said that given their lack of confidence in themselves and the fact that they were foreigners also created a distance with Chinese patients where patients did not want to be touched by a foreign student.

Another important insight was that, epidemiologically the cases that they see in Chinese hospitals are very different from India. They get to see a range of non-communicable diseases and not enough of communicable diseases common too tropical areas. They need to learn many of these afresh, when in India. This is a drawback for them when they have to give the FMGE.

On interaction with Chinese students studying medicine in the same college, a student said,

“Initially we had no communication or contact with the Chinese part of the university, probably because we were scared to reach out, but from 4th year onwards we realised that we could reach out. In India there are lot of exchanges inter-college events, here it is not so. You are too scared to do anything but then later you realise you can make connections with the Chinese counterparts. We have taken initiative to play cricket with the other schools”

(Student, Beijing, May 2019).

Inter-university interactions among international students from various universities are far and few, so international students do not know what is happening in other universities. But the students feel this is gradually changing.

There was a clinical skills competition across 30 universities for international students in the last semester of 2018, which was helpful for students who got to meet international students from other universities in China.

The systems of evaluation for the international and Chinese stream are very different. The Chinese stream has a centralized exam. The international stream is internal evaluation based on review tests, assignments and attendance. The Chinese government has stipulated a minimum attendance of 60 per cent per semester in order to qualify for continuation. The evaluation was restricted to reviews at the end of each semester. This is generally out of a score of 100, out of which 20 marks is for practical exams. Most students opined that reviews lacked rigour and were often repeats of earlier question papers, easy and predictable. These papers were given in advance to students so most would prepare the answers that ensured that they get at least the minimum passing mark. Many of them opined that this was a dilution of the standards.

“We have reviews every semester and we are given the paper from before. They keep repeating the same questions for review. Now things are changing. But even for clinical subjects if you tell teacher you need the review, they will send the screen shots of the review”

(Student, Shenyang, May 2019).

“Most of the time the evaluations are easy, predictable. They no longer give the questions from before but 60 per cent of these are MCQs and come from the power points. The rest 40 per cent, if you write in points they will give marks, if you write paragraphs they won't give marks”

(Student, Wuhan, June 2019).

There are no oral or practical examinations:

“In India you have oral viva as part of the evaluation, here you do not have anything like that. Here, for internal assessment, everyone is sitting around a book and you are having a discussion with the teacher. It is not even a discussion, one person who knows everything will discuss with the teacher while there will be ten others who know nothing. And these ten others will just write what is in your paper.”

(Student, Shenyang, May 2019).

Chinese also aspire to be global player in medical education and hence are more aware of the criticisms they face and issues of quality that they need to address. The low pass percentage in FMGE is also a reflection on them. Hence, there is a conscious shift by the faculty in the international stream to no longer repeat the review papers in the recent years.

“Earlier exam papers were the same as what our seniors would get. So they would send us the papers with the answers. Now this is changing, since they also realise that they need to make these changes”

(Students, Beijing, May 2019).

b. Internship year

In some universities 6th year of internship is compulsory while in some others it is optional. Internship year is critical for all students and they feel they do not get enough training due to lack of communication. In the Capital Medical University in Beijing, the students said that they have to give a Chinese language exam before they enter the internship year but that is not the case in other universities. Sometimes patients do not want to interact or be touched by international students. Most of the times students observe and if motivated, ask questions to the faculty.

“I personally feel that it would be better to do internship in India. Communication becomes a big issue here. MCI needs to put in a clause stating that anyone finishing education abroad has to do internship only back home. In some universities, students can finish their 5 years and go back home to do internship. Here, we have to finish

all 6 years, including last year of internship since that is what the university programme states. Since universities here are autonomous, they won't make changes here. Only if the laws change back in India, will the universities here be compelled to make the changes"

(Student, Beijing, May 2019).

The experience is contingent on the initiative and hard work of the student.

"Here, you are a foreigner, as a foreigner we can't really touch people. We can observe as much as we want, if you are good at the language, you can pick up a lot of things, but if you are not, then that is a problem. The teacher will give you more privileges if you are good at the language. If the student is showing interest, they will invest, but you have to put the extra additional work"

(Student, Beijing, May 2019).

Compared to India, students feel they get to observe much more than their counterparts in India.

"Doctor-student ratio during internship is really good. If you are good at the language, lot of opportunities will be there. Some of the doctors are the best in the world, so you can pick up many things"

(Student, Beijing, May 2019).

Due to the lack of hands-on experience with patients in China some students suggested that they be allowed to intern in India after they complete the education in China. It could be in the form of 'supervised internship'. They could do this during the period that they prepare for the FMGE. They felt that this way they would face less pressure from families and society and would not be perceived as doing nothing.

c. The Foreign Medical Graduates Examination (FMGE) in India

On their return to India, the FMGE is a necessity for getting a license to practice in India. Some students even said that most of their time studying in China was geared towards clearing the FMGE. They often start preparing for this exam in their fourth year itself. However, the percentage of students clearing the FMGE is low. Most are unable to clear it in the first attempt. This is a huge source of anxiety since they are in a limbo after completion of the course and waiting for clearing the FMGE. Very few have cleared it in the first instance while others have attempted even up to eight times.

There are impediments to clearing FMGE. According to some students,

“It depends on the individual – how much you study or get distracted. You know your standard of education back home and you know what you have to give at the end of six years. If a student understands that, they manage to clear the FMGE. We cannot get up and give the FMGE on the basis of what we study here. You need to take a specialised training because in India they teach you everything in detail and in-depth. Here it is more at the USMLE level but India the training is rigorous, theory based. Also, the public health system is very different here from India, so we need to cover up that too. We have to put 30-40 per cent extra to clear the exam. Few subjects like forensic medicine are not covered here but FMGE covers that”

(Student, Medical University, Beijing, May 2019).

The students in Beijing felt that the FMGE was not a tough exam. If they had studied in an Indian University, it would have been easier to clear. The standards of the FMGE are based on the focus of the Indian curriculum. When students go from China they feel they do not know the basics and have to self-study. When the students return, they take six-months training as interns. The State Medical Council allows internship.

“FMGE is a factual exam. Here we are trained in the USMLE pattern, when we have to give FMGE, it is too extensive. But to be honest, if we were to sit for an exam around the world – US, UK or Australia, the easiest exam is the FMGE, but none of us will be able to do that”

(Student, Beijing, May 2019).

One student said,

“I think FMGE is perfectly alright. If you look at it from the Indian Board perspective, they are not going to let in just anyone, the students’ knowledge has to be at par or be of some standard when compared to a student who has passed out from a government medical college in India”

(Student, Wuhan, June 2019).

Students in Wuhan felt that if there was extensive practical training and internship year was well spent, it would be easier to crack the FMGE.

“There is no guidance – what to study, what to do in the internship period. Some people study but most do not know how to go about it. We are either roaming around or sleeping. If you do one internship in India, you will crack the FMGE. Here we just go around but do not have that kind of exposure. We need hands on experience as doctors which we are not getting here and most of the FMGE questions are based on this”

(Student, Wuhan, 31 May 2019).

It is interesting to note that some of the coaching centres from India reach out to the medical colleges in China with large number of Indian students. They have created arrangements with the college to provide ‘training’ to the Indian students to clear FMGE on their return. This has of course, added to the vicious cycle of commercialisation of medical education.

“Tianjin university has this autonomous body that comes and does the training. It comes at a cost. So this autonomous body comes and prepares you for the entrance exam – it could be like taking extra classes. Lot of universities have this but our university does not. Tianjin has good percentage of students passing the FMGE. These autonomous bodies are coming from India, these are the coaching institutions

located in India and negotiate with the autonomous medical colleges in China. This arrangement did not work out with our university”

(Student, Beijing, May 2019).

Some students even observed that while there is a uniform standard for FMGE, there is no uniform standard to assess capabilities of those coming out of private medical colleges in India. They felt the need for a qualifying exam for all doctors, a level playing field and every country, according to them, had an exit exam for all doctors.

Perceptions have been created within the government, medical community and a certain kind of stereotyping about the students graduating from China has taken shape. This perception is exclusionary. There are systemic ways in which they are being excluded and the hardworking students get affected.

“Another of our senior, had cleared the FMGE and then the PG exam. When she applied for colleges in India, the website of few colleges said that students who have graduated from foreign universities cannot apply”

(Student, Beijing, May 2019).

“You need the doctors, so you need to create seats. You are running out of doctors so you need to stop rejecting. Then you start looking for opportunities in other countries. So the country is losing out on doctors”

(Student, Beijing, May 2019).

Earlier students gave FMGE only when they returned to India but in later years they sought clarification from the MCI and figured that they could give the exam during the internship year, which they feel is better as they can avoid facing the family and societal pressure.

“Since there are so many Indian students now in China, things have slightly changed. Students can give the FMGE exam during the internship year. That way they forgo the pressure they face from family and society, when they return. Even if

they clear it in the second attempt they are already able to handle the pressure. Earlier batches had no clue about this and were not informed, till some senior found out about it and attempted to try it out last year”

(Student, Beijing, May 2019).

There is no escape from FMGE, if they want to come back to India and work, even if they have completed their post-graduation abroad.

“If students want to apply in any country, it is the same for everyone. Every country has its own qualifying exam. Even we can apply to Germany. You can do your PG in these countries but if you don’t get absorbed in these countries, you have to return to India. And there is no way you can work in India without clearing the FMGE”

(Student, Beijing, May 2019).

There are many international students doing their post-graduation (Masters) in China – these are mostly from Pakistan and Nepal. While there are very few Indian students who continue to do their Masters in China, there are none who directly come for postgraduation. But from this year, direct admission to Masters for Indian students has been validated. One has to give the Diplomate of National Board (DNB) exam once the student returns to India with the Masters degree. DNB is in a state of crisis in India and there are on-going debates on whether it should be disbanded. So it is the students who have to face the uncertainty.

Based on the interviews with Indian students and the Ministry of Education, PRC it was clear that there is a very small percentage that stays back in China or even attempts to get a job. There are also cases of dropouts due to inability to cope with the course and socially in China. There was no data available on the number of dropouts from medical colleges in China.

Once students graduate from China – most prefer returning to India. The option of working in China is even more daunting. There is one qualifying exam to get a license to practice and their

language proficiency has to be cleared with another exam (HSK level 5).³ If they are able to do both then they can get a license and are eligible to apply for jobs. It is difficult to work as a doctor in China as the examination to qualify and enter the system is in Chinese. If a student is able to sit through the examination in Chinese and qualify, then any one can work in China. But this is a rather tough option, the reason everyone heads back to India. So a student can enter the Chinese medical system in two ways – s/he either takes the Chinese language exam and studies the Chinese curriculum and enters that way, or studies the international curriculum, clears the language exam - level HSK 5 and then qualifies the Chinese medical exam.

Few students who stay back to do Masters do that because they are keen and find a good teacher who is available to mentor them. Chinese students get to choose a mentor but the international students have to get a willing teacher. Not many students stay back to do Masters and continue with the same curriculum. In the medical university in Beijing, there are probably 10 Indian students doing an Masters programme. The Masters programme is in Chinese. Students across universities said that a lot depended on self-drive and self-motivation – on how much hard work one wants to put and how much knowledge one would like to acquire.

Some students even said that if they are unable to clear the FMGE they would choose to do a degree in Masters in Hospital Administration or other such health related course in India. These options seemed more plausible than completely leaving the line.

d. Experience of the students with the Indian Embassy in China

The Embassy is not that involved with Indian students, compared to interactions of other international students with respect to their respective embassies/consulates. Students in general said that they sorted out any issues by consulting their seniors, rather than reaching out to the embassy. But they all were of the view that the embassy should reach out more to students. The interaction with the embassy is very minimalistic, restricted to festivals and events.

³ HSK is *Hanyu Shuiping Kaoshi* is translated as the Chinese Proficiency Test. Level 5 of HSK is designed for learners who can read Chinese newspapers and magazines, watch Chinese films and are capable of writing and delivering a lengthy speech in Chinese.

They felt that they needed a better connect with the Indian Embassy –

“embassy does not have a proper perspective of helping students, they are more for the people who have settled and working. If the embassy throws a meeting or a get together of all students graduating in the same year, that would make a lot of difference. Those connections will help you in the future more than any other get together. Other embassies, the ones I know for fact, Indonesian and Ugandan embassies, throw graduation parties for the students. We are not even asking for a party, but just send a letter to all universities and invite the Indian students to come. Other embassies build the community. Here, with the Indian students who are coming from the same society, so you don’t tend to build up a community as easily with someone who is abroad. To make people more comfortable to have a conversation with each other, embassy can come up with the idea of building the community and a stronger association at the university. You see the other communities, Bangladeshis, Indonesians, they are tight, and we start fighting at the drop of a hat”

(Student, Beijing, May 2019).

The students suggested ways in which the embassy could be more proactive and engage with students. They felt the embassy could play a much larger role in keeping the student community informed and look out for them. They felt the embassy could play the intermediary between the developments occurring in India regarding changes in rules and regulations related to medical education and keep the student community in China informed. While there was a social media group that the Embassy had created, this needed moderators and a student representative from each university. They felt the Indian Embassy could also have a list of authorised agents through whom prospective students could apply and also give instructions to apply directly to the universities so as to avoid the middlemen or agents.

e. Psycho-social stresses faced by Indian Students

Adjusting to a new environment where language is a barrier is stressful. Where there are large number of Indian students there is a buffer to deal with their insecurity. The academic programme and its transaction require a great deal of self-motivation and hard work. There are handfuls that manage to do this but for many the course itself is not demanding. Most students coming to China for medical education cannot afford the high fee structure of Indian private medical colleges. They come from modest backgrounds and even the lowered fee in China is a financial burden on their parents. Some reported having taken educational loans or even the sale of assets in order to finance their children's education. Some of them feel a sense of guilt and others try their hand at work or other small business to earn some money, which is not allowed by the Chinese authorities. The loneliness and alienation leads to drug dependence among a few. The researchers were told that there are few students who have been deported for drug use and other violations and also about one tragic case of suicide by a student who had to drop out due to drug abuse and couldn't cope with life during recovery.

The family and societal pressures and aspirations have an impact on the students' psycho-social health.

Students articulated what they saw as stresses when they had to return home. Social expectations are high and they are unable to avoid the questions and snide remarks of many.

"I am looked down upon when I go home, because I haven't interacted with patients. The FMGE becomes our life once we return to India" (Student, Beijing, May 2019).

For those who are hard-working and sincere, they feel discriminated the way society back home perceives them.

"I have same aspirations as the rest of medical students graduating from India. Why should I be discriminated? I have sleepless nights and I am having mental break down as well. I have to put twice as much hard work here but when I go back home I am looked upon as if I don't know anything. And that is unfair. And if I don't pass FMGE, I am seen in a way as if I could never do this"

(Student, Beijing, May 2019).

The entire journey feels stressful to many, as if it is never-ending.

“Sometimes you are in such a dark space. Parents know nothing about what we go through here. From my family I will be the first doctor. Very difficult to explain to my parents the kind of mental torture I go through. My parents are very supportive but only thing I get to hear from them is that this will pass. But it will take me time to explain to them that this will pass for now but there is more to come”

(Student, Beijing, May 2019).

Families and society back home have their own aspirations and expectations from the children who return. A health official from the Kerala Health Department said that,

“Many of the students who return from China are unable to clear the FMGE. They are also from lower middle-class backgrounds. They get absorbed with low salaries from Rs 10,000 to Rs. 15,000 in private hospitals through some connection. The families also seek dowries for their sons who are seen as doctors with foreign training”

(Health Official, Mumbai, July 2019).

During their stay in China, students get attracted to other aspects of the Chinese lives. They venture into different forays and small businesses – this varies from being a travel agent, some other small business with an Indian trader and so on. Some also get jobs as English tutors, bouncers or even part roles in the local film industry in one province. College authorities are strict and do keep tabs but are unable to monitor activities outside the universities. Many students become sub-agents for the main agents in India and continue with it. Cases of drug abuse and dropouts are reported from time to time. The Embassy has to intervene from time to time, in order to negotiate with Chinese authorities especially when it involves a disciplinary action like expulsions or a scrape with the police.

Unfortunately, having spent six years in a country that is a critical period of their young lives, many see it as a waste of years, while others have reconciled with the fact that they are here for a purpose and wish to finish what they came for. But surprisingly, on the whole, none of them were willing to come back to China as they felt they had reached saturation. Some were fine with coming back as tourists but only to visit other cities, not the one they stayed in. The researchers had a sense that at least some would have been excited to live in a fascinating country as China but very few took efforts to reach out or understand the Chinese lives and a society that has as much rich history as India.

China was never a part of the imagination of most of these students during their growing up years, as is with other students in India, but during these years spent in a new country, they are unable to make it their home. Many are also unable to adapt to the Chinese way. A lot has to do with dealing with daily stresses of a student life. As Ashok observes in her visit to Tianjin Medical University that students are looking for comforting and familiar things,

“The signs of an ecosystem developing around the growing Indian student population are apparent in the local market at Tianjin, where Haldiram’s Murukku packets and Amul ghee sit on shelves above rows of noodles. At the Hassan Restaurant, named after the Chinese owner who carries around his pet parrot perched on his shoulder, samosas are for 3¥, dal rice for 12¥, and chicken biryani for 22¥”

(Ashok 2019).

But some students do engage with the Chinese and make friends. The sense was that the battle was a lonely one with little systemic support by the Indian government, MCI and the Chinese universities. Those students who were hard-working, sincere and focused, struggled but survived and eventually were on the path to become medical doctors. The others who did not have the capacity to cope, either dropped-out or found other means to cope and escape the stresses.

iv. Challenges and dilemmas for the Chinese and Indian governments

The quality of medical education in China and the quality of Indian students emerging from these universities is clearly a matter of concern for both governments. The quality of students is variable and is a challenge in itself. Language is one of the greatest barrier both sides – for students and faculty who teach. Firstly, instruction in English is challenging and secondly, some medical colleges are affiliated to MoE and others to provincial governments, hence there is immense variation across these universities.

According to a senior official at the Ministry of Education, PRC, “*international medical education is market driven*”. This clearly comes out from our study too.

Given the many challenges faced with teaching international students, the Chinese government started addressing some of these issues. The challenges included variable levels of competency of students applying for the course; lack of language competency of students; variable competency of teacher educators across medical colleges. To address some of these issues in 2017 a committee was set up to review quality of medical education for international students.

The Indian government has also taken few steps where qualifying NEET is compulsory for Indian students to study medicine abroad. This has been a positive reform to maintain quality and quantity of students but that has not resolved the supply issues.

What can the Indian Embassy do to address concerns of students?

- The students voiced the need for information regarding change in rules and procedures for the FMGE.
- Students would like updates on the MCI regulations governing medical education for foreign graduates
- They would like to be connected to the larger student community across medical colleges through social media but with a moderator so that only relevant information is posted to them.
- They also suggested to create a network through student representatives of different medical colleges to facilitate sharing of information.

- They seek information to facilitate admissions directly with the medical colleges like other students from other countries do, rather than depending on agents.
- They would prefer Embassy officials to keep in touch with the administration of the International Office of medical colleges across provinces.

5. Policy Recommendations and Conclusions

The study has brought forth the larger picture of commercialisation of medical education in India and China. It is a market-driven phenomenon with the involvement of several actors and several ministries on either side. The larger questions of demand and supply, quality of medical education, and checking corruption have to be addressed by the government (Centre and States) in light of the recent NMC Bill. There are many issues yet to be resolved and it is yet unclear whether the NMC Bill addresses all these issues directly. Till these are addressed, the challenges facing students who go to China or other countries in Asia to study medicine will remain. But can some of the issues emerging in this study be addressed for the benefit of the future generations of students who will be travelling to China?

The students studying in China cross paths with all the ministries and actors during the entire process, but finally have to make it on their own to reach the other side of the FMGE. There are several recommendations that can be made to make this entire process smoother and coordinated to help them get a clearer picture of what lies ahead. Students need help before going to China – information on how to apply directly to medical universities was the most repeated suggestion. That way they are not vulnerable to the agent.

One question that kept emerging during the interviews was who is accountable? Is it that only the students will be held responsible and accountable for their lives because they made a choice of studying in China? The pressures of family, society, financial conditions and the system of medical education itself are all equally responsible for the choices and decisions that are made in the process. There is a need for inter-ministerial dialogue and coordination because of the multiple stakeholders (MHRD, MoH, MEA of India) involved. There must be an interface

between the MCI (or what will now be the new body under the National Medical Commission), MoH, MHRD, and the Education Department of the Indian Embassy in Beijing. They need to regularly interact with colleges and students that are recognised for international students. They should assess the core competencies of the programme provided by the medical colleges and develop some protocols for quality check along with the MoE of the PRC. Some positive developments have taken place in the past two years but there needs to be a sustained effort to keep these checks in place. This also helps to contextualise the process of student mobility to study medicine abroad and undo the negative perceptions and prejudices that have been created of students who return and struggle to find their ground. The return of students disappointed, stressed, dejected and discriminated has implications for the quality of doctors practicing in India. Of course, individual choice matters, but students cannot be held responsible for choosing to go to China. This definitely speaks of systems that are not in place, back home.

In the even larger context of India-China cooperation and ties, the phenomenon has to be handled more seriously. Both sides can improve the process, quality of education and have regulatory mechanisms in place.

Acknowledgements

We thank the officials at the Embassy of India in Beijing who put us in touch with Indian students in China, medical universities, faculty of these Universities and the Ministry of Education, PRC. We are grateful to the Indian students and faculty of the medical universities that we visited in China for taking time off from their busy schedule to talk to us.

References

Akhter, Shahid. 2019. 'A policy is needed to bring foreign medical graduates at par with Indian students: Dr Pawan Kapoor', *Economic Times*, 24 April, <https://health.economictimes.indiatimes.com/news/industry/a-policy-is-need-to-bring-foreign-medical-graduates-at-par-with-indian-students-dr-pawan-kapoor/69017430> (accessed on 24 April 2019).

Ashok, Sowmiya. 2019. 'Cheaper fees, easy admissions: Indian medical students shift gaze towards China', *Indian Express*, 29 July, <https://indianexpress.com/article/education/medical-university-education-china-hrd-mbbs-5857218/> (accessed on 29 July 2019).

Banerjee, Poulomi. 2015. 'Here's why foreign medical degrees are no longer fancy', *Hindustan Times*, 23 November, <http://www.hindustantimes.com/education/here-s-why-foreign-medical-degrees-are-no-longer-fancy/story-HpZtWmiCQFv877cfPqtXZO.html> (accessed on 20 June 2016).

Baru, Rama and Archana Diwate. 2015. 'Vyapam is the Symptom, Criminalisation of Medical Education is the Disease', *The Wire*, 12 July, <http://thewire.in/2015/07/12/vyapam-is-the-symptom-criminalisation-of-medical-education-is-the-disease-6170/> (accessed on 10 June 2016).

Baru, Rama V. and M. Nundy. 2020. *Commercialisation of Medical Care in China: Changing Landscapes*, Routledge: New Delhi.

Bhattacharyya, Rica. 2012. 'Lured by cheaper fee structure, wannabe medicos opt Chinese medical colleges', *The Economic Times*, 17 August, http://articles.economictimes.indiatimes.com/2012-08-17/news/33249708_1_medical-colleges-private-colleges-aspiring-medical-students (accessed on 7 July 2016).

Clark, Nick. 2013. 'Indian Study Abroad Trends: Past, Present and Future', *World Education News and Reviews*, 6 December, <http://wenr.wes.org/2013/12/indian-study-abroad-trends-past-present-and-future/> (accessed on 20 June 2016).

Diwate, Archana (2016) *Social Characteristics of Private Medical Colleges in India: A Study of Select States*, Unpublished PhD Thesis submitted to the Centre of Social Medicine and Community Health, Jawaharlal Nehru University, New Delhi.

Desikan, Shubashree. 2013. 'Silk route to knowledge', *The Hindu*, 14 July,

<http://www.thehindu.com/features/education/college-and-university/silk-route-toknowledge/article4911836.ece> (accessed on 7 July 2016).

Embassy of India. 2019. Press Release, Embassy of India in Beijing, 2019, <http://www.eoibeijing.gov.in/Regarding-Medical-Education-in-China.php> (accessed on 22 May 2019).

Embassy of India. 2019. Guidelines for Indian Students Wishing to Study in China, <http://www.eoibeijing.gov.in/guideline-for-indian.php> (accessed on 22 May 2019).

Embassy of India. 2019. Advisory by the Consulate General of India in Shanghai, https://www.cgishanghai.gov.in/pdf/event/Medical_college_advisory.pdf (accessed on 22 May 2019).

Ghosh, Abantika. 2019. 'Just 15% of Indians with foreign medical degrees clear test once they return home', *The Indian Express*, 26 October, <https://indianexpress.com/article/india/just-15-of-indians-with-foreign-medical-degrees-clear-test-once-they-return-home-6088550/> (accessed on 26 October 2019).

Institute for International Education. n. d.a 'Project Atlas', <http://www.iie.org/Research-and-Publications/Project-Atlas> (accessed on 21 June 2016).

Institute for International Education. n. d.b 'Project Atlas', <http://www.iie.org/Services/Project-Atlas/China/International-Students-In-China#.V2feFvI96M8> (accessed on 21 June 2016).

K. Deepalakshmi. 2018. 'US continues to be preferred destination for Indian students; UAE sees a surge', *The Hindu*, 27 July, <https://www.thehindu.com/education/us-continues-to-be-preferred-destination-for-indian-studentsuae-sees-a-surge/article24533290.ece>, (accessed on 8 June 2019).

Khosla, Varuni. 2015. 'Around 3 lakh Indian students go abroad annually, 33% take property-backed loans', *The Economic Times*, 28 August http://articles.economictimes.indiatimes.com/2015-08-28/wealth/65969493_1_north-india-credila-students (accessed on 20 June 2016).

Kumar Vr, Krishna. 2013. 'Asia Weekly: Just what the doctor ordered', 20 December, *China daily Asia*, http://www.chinadailyasia.com/life/2013-12/20/content_15107472.html (accessed on 27 June 2016).

Medical Council of India (MCI). 2016a. 'List of Colleges Teaching MBBS',

<http://www.mciindia.org/InformationDesk/ForStudents/ListofCollegesTeachingMBBS.aspx>
(accessed on 20 June 2016).

MCI. 2016b. 'New list of Chinese Medical Institutions admitting International Students for Academic Year 2016-2017',
<http://www.mciindia.org/MediaRoom/ListofChinaColleges.aspx> (accessed on 20 June 2016).

MCI. 2019a. List of Colleges Teaching MBBS, <https://www.mciindia.org/CMS/information-desk/for-students-to-study-in-india/list-of-college-teaching-mbbs> (accessed on 8 June 2019).

MCI. 2019b. Medical Council of India, Competency based Undergraduate curriculum for the Indian Medical Graduate, 2018, <https://www.mciindia.org/CMS/information-desk/for-colleges/ug-curriculum> (accessed on 8 June 2019).

Mishra, Alya. 2012. 'China has become preferred destination for medical education', University World News, Issue No: 238, 9 September,
<http://www.universityworldnews.com/article.php?story=20120904100946519> (accessed on 7 July 2016).

M. M. Advisory Services. 2015. 'Indian Students Mobility Research Report: Latest Trends from India and Globally', <http://mdotm.in/wp-content/uploads/2015/05/Students-Mobility-Report-web.pdf> (accessed on 21 June 2016).

Nagarajan, R. 2019a. 'How medical colleges in India became a business, one policy change at a time', *The Times of India*, 8 June,
<https://timesofindia.indiatimes.com/india/how-medical-colleges-in-india-became-a-business-one-policy-change-at-a-time/articleshow/69707594.cms> (accessed on 10 June 2019).

Nagarajan, Rema. 2019b. Money, not quota, dilutes merit in medical admissions, *The Times of India*, 11 June,
<https://timesofindia.indiatimes.com/india/Money-not-quota-dilutes-merit-in-medical-admissions/articleshow/64534518.cms> (accessed on 15 June 2019).

Nagarajan, Rema. 2019c. Some MBBS students got 0 or less in NEET papers, *The Times of India*, 16 July, <https://timesofindia.indiatimes.com/india/some-mbbs-students-got-0-or-less-in-neeet-papers/articleshow/65002249.cms> (accessed on 20 July 2019).

Nagarajan, Rema. 2019d. 'New bill could be jackpot for private medical colleges', *Times of India*, 24 July,
<https://timesofindia.indiatimes.com/home/education/new-bill-could-be-jackpot-for-private-medical-colleges/articleshow/70354437.cms> (accessed on 24 July 2019)

National Board of Examinations (NBE). 2019. Result of FMGE (Screening Test), December 2018,

https://www.digialm.com/per/g01/pub/1258/EForms/image/FMGE_DECEMBER2018_RESULT.pdf (accessed on 7 June 2019).

Ni Dandan. 2019. 'Why China's Young Doctors Want Out of the System', *Sixth Tone*, 11 January, <https://www.sixthtone.com/news/1003446/why-chinas-young-doctors-want-out-of-the-system> (accessed on 16 June 2019).

Nundy, M. 2016. 'Indian Students in Higher Education Abroad: The Case of Medical Education in China', *ICS Analysis*, Issue No. 40, Institute of Chinese Studies.

Onsman, Andrys. 2013. 'Why do international students go to China?', *University World News*, Issue No. 293, 25 October,

<http://www.universityworldnews.com/article.php?story=20131022125122189> (accessed on 27 June 2016).

Patranobis, S. 2019. Only 45 varsities allowed to teach MBBS in English in China: Beijing, *Hindustan Times*, 29 April, <https://www.hindustantimes.com/education/only-45-medical-varsities-listed-to-teach-mbbs-in-english-in-china-beijing/story-pYavo9INMulCQrvKafThuL.html>.

Prabhu, G. 2019. 'The Disappearing Act: Humanities in the Medical Curriculum in India', *Indian Journal of Medical Ethics*, Vol. 4, No. 3, <https://ijme.in/articles/the-disappearing-act-humanities-in-the-medical-curriculum-in-india/?galley=html>, (accessed on 4 September 2019).

Press Trust of India. 2015. 'Number of Indian students in China crosses 13,500', *Economic Times*, 25 May, <http://economictimes.indiatimes.com/nri/nris-in-news/number-of-indian-students-in-china-crosses-13500/articleshow/47420552.cms> (accessed on 20 June 2016).

Press Trust of India. 2016. '77 percent Indians with foreign medical degree fail to clear MCI screening since 2004', *The New Indian Express*, 20 March,

<http://www.newindianexpress.com/nation/77-Percent-Indians-With-Foreign-Medical-Degree-Fail-to-Clear-MCI-Screening-Since-2004/2016/03/20/article3337157.ece> (accessed on 22 June 2016).

PRS Legislative Research. 2019. 'The National Medical Commission Bill 2019', <https://www.prsindia.org/billtrack/national-medical-commission-bill-2019> (accessed on 24 July 2019).

Rajya Sabha Secretariat. 2016. *The Functioning of Medical Council of India*, Department Related Parliamentary Standing Committee on Health and Family Welfare, Report No. 92, Parliament of India, New Delhi.

Snehi, Neeru. 2013. 'Student Mobility at Tertiary Level in India: Status, Prospects and Challenges', National Institute of Educational Planning and Administration, New Delhi, <http://www.niepa.ac.in/New/download/Publications/Occasional%20Paper%2044NeeruSnehi.pdf> (accessed on 20 June 2018).

The Telegraph. 2015. 'Doctors abroad but failed in India', August 11, http://www.telegraphindia.com/1150811/jsp/nation/story_36588.jsp#.V2u1VPI96M8 (accessed on 27 June 2016).

The Wire Analysis. 2018. 'As NEET Undercuts Merit Entry to Medical Colleges, Reserved Category Students Suffer', *The Wire*, 13 June, <https://thewire.in/health/neet-mbbs-medical-students-mandatory-merit-fees> (accessed on 24 June 2019).

UNESCO. 2013. 'The International Mobility of Students in Asia and the Pacific', UNESCO, Bangkok, <http://www.uis.unesco.org/Library/Documents/international-student-mobility-asia-pacific-education-2013-en.pdf> (accessed on 21 June 2016).

Wu, L., Y. Wang, X. Peng, M. Song, X. Guo, H. Nelson and W. Wang. 2014. 'Development of a Medical Academic Degree System in China', *Medical Education Online*, 19: 23141, <http://dx.doi.org/10.3402/meo.v19.23141>.

Zhao, Xinying. 2015. 'More Indians studying in China', *China Daily*, 25 May, http://www.chinadaily.com.cn/china/2015-05/25/content_20807203.htm (accessed on 27 June 2016).

ICS OCCASIONAL PAPER *Back Issues*

ICS Occasional Papers showcase ongoing research of ICS faculty and associates on aspects of Chinese and East Asian politics, international relations, economy, society, history and culture.

Issue No/ Month	Title	Author
No. 51 June 2020	Analyzing China's Mediator Role in MENA - More than Just a Global Responsibility?	Jayshree Borah
No.50 May 2020	Launch-On-Warning and China's Nuclear Posture	Samanvya Hooda
No.49 May 2020	US-China Rivalry: A Strategic Moment for India?	Sujan R. Chinoy
No.48 May 2020	COVID-19, China and Anatomy of Fang Fang Phenomenon	Hemant Adlakha
No.47 Mar 2020	How History Shapes the March Towards Rule of Law – Lessons from India and China	Vishal Tripathi and Ieshan V Misri

PRINCIPAL SUPPORTERS TO ICS RESEARCH FUND

TATA TRUSTS



MINISTRY OF EXTERNAL AFFAIRS
GOVERNMENT OF INDIA



INDIAN COUNCIL OF
SOCIAL SCIENCE RESEARCH

GARGI AND VIDYA
PRAKASH DUTT FOUNDATION



JAMNALAL BAJAJ
FOUNDATION

PIROJSHA GODREJ FOUNDATION

ICS PUBLICATIONS



A short brief on a topic of contemporary interest with policy-related inputs



Platform for ongoing research of the ICS faculty and associates



Authored by the faculty, also emerging from research projects and international conferences



Draft paper of ongoing research

ICS JOURNAL



In its 56th year, *China Report* is a refereed journal in the field of social sciences and international relations. It welcomes and offers a platform for original research from a multi-disciplinary perspective, in new and emerging areas, by scholars and research students. It seeks to promote analysis and vigorous debate on all aspects of Sino-Indian relations, India-China comparative studies and multilateral and bilateral initiatives and collaborations across Asia.

China Report is brought out by Sage Publications Ltd, New Delhi.

Editor
Associate Editor
Assistant Editor
Book Review Editor

Sreemati Chakrabarti
G. Balachandirane
Rityusha Mani Tiwari
Vijay K Nambiar



INSTITUTE OF CHINESE STUDIES

8/17, Sri Ram Road, Civil Lines,
Delhi 110054, INDIA
T: +91 (0) 11 2393 8202
F: +91 (0) 11 2383 0728

<http://www.icsin.org/>
info@icsin.org

twitter.com/ics_deihi

facebook.com/icsin.delhi

in.linkedin.com/icsdelhi

soundcloud.com/ICSIN

youtube.com/ICSWEB

instagram.com/icsdelhi