PERSPECTIVES IN MEDICAL EDUCATION

A REPORT PREPARED FOR

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* the evolution and organisation of the Compulsory rotating internship after the final examination, which includes 3/6 months of community based postings;

are three important and significant reforms, among many others, endorsed and recommended to medical colleges, towards the goal of producing 'basic doctors'.

4. The populist rhetoric of Doctors for Rural Areas has become an integral part of policy formulation; political party manifesto; social exhortation at every level; and media and professional reflection and debate - not showing any decrease in intensity over 40 years.

5. **POLICY GAP**

However inspite of
a) clarity in the stated goals of policy;
b) phenomenal quantitative growth in the institutional framework;
c) some efforts to qualitatively reorient the curriculum to match the policy goals; and
d) the enhanced populist rhetoric;

the situation of medical education in the country has moved towards greater and greater crisis.

i. The majority of the young doctors still opt for urban hospital and urban clinic practice and the trends towards specialization are high.

ii. The vacancies in rural and peripheral community based health centres and hospitals in the government services have reached significant proportions.

VACANCIES IN HEALTH CENTRE

"The State of Maharashtra which accounts for almost one fifth of the total national out turn of doctors annually, has about one-fourth of the sanctioned post of doctors at PHC's lying vacant as of 1st January of the current year. Uttar Pradesh with seven medical colleges has forty percent of similar posts lying vacant ....."

Bajaj , 1994 (13)

iii. Professional preoccupation, both at 'practitioner' and 'educator' levels continue to be with illness care at secondary and tertiary level centres, rather than with the challenges of care at the primary health / community levels.

iv. Finally since the late 1970's there has been an emergence of a large number of

2. DIAGNOSIS OF THE PROBLEM

An overview of the growth and development of Medical Education in the country, since Independence is a necessary pre-requisite to understand the dynamics of change and the complexities of the emerging problems.

2.1. SITUATION ANALYSIS

The country has witnessed a tremendous growth in the infrastructure and facilities for Medical Education since Independence. A perusal of tables 1 and 5 will highlight the following salient features:

a) There has been a massive, quantitative expansion in Medical college facilities in the country - from 22 colleges in 1947 admitting 1983 students to 145 colleges admitting approximately 16,200 students annually in 1993. This represents a 600% expansion in colleges and 800% expansion in admissions.

b) The Male-female ratios in admission and output have increased gradually from 78:22 in 1971 to 60:40 in 1990, with an unusual peak of over 41% admissions of female in 1977-78 and a corresponding peak of female doctors graduates in 1982-83 (44%). The overall trend has been positive and more female doctors needed by the country are being catered for.

c) The increase was gradual till 1975. Then following the Srivastava Report there was a plateau till 1985 and then another phase of expansion, till the Presidential ordinance in 1993.

The phase till 1974 was predominantly an increase in government sponsored colleges, and the phase after 1988 was predominantly the commercialization and private sector phase of medical college expansion.

d) Till 1985, we were fairly consistent about the number of colleges in the country - without much variance between government and non-government sources. Since 1985, even the publically stated estimates have varied from 130 to 170. The most recent estimate of the new Health Minister is 200(!).

2.2. REGIONAL DISTRIBUTION AND DISPARITY: (The BIMAROU dilemma!)

Based on the Mudaliar Committee norm of one college per 50 lakh (5 million) population, a review of the present regional distribution of colleges in the country taken against the 1991 census estimates show important trends (see tables 2, 4 and 6).

a) Some states like Karnataka, Maharashtra, Tamilnadu and Union Territory of Delhi show a number far beyond their entitlement and requirement.

TABLE 1

GROWTH OF MEDICAL COLLEGES AND ADMISSIONS SINCE INDEPENDENCE (1947-93)

YEAR	NO. OF MEDICAL COLLEGES	ADMISSIONS	OUTPUT
1947	22	1,983	959
1948	30	2,811	N.A.
1949	30	2,609	N.A.
1950	30	2,675	N.A.
1951	31	2,489	N.A.
1952	31	2,691	N.A.
1953	31	2,846	N.A.
1954	31	3,087	N.A.
1955	31	3,660	N.A.
1956	52	3,958	N.A.
1957	52	4,083	N.A.
1958	52	4,554	N.A.
1959	52	4,904	N.A.
1960	52	5,874	N.A.
1961	79	6,846	N.A.
1962	79	7,719	N.A.
1963	79	9,697	N.A.
1964	79	9,897	N.A.
1965	79	10,520	N.A.
1966	87	10,620	N.A.
1971	95	12,029	N.A.
1972	98	12,048	10825
1973	100	11,772	11311
1974	105	13,205	11364
1975	105	11,561	11911
1976	106	11,281	11982
1977	106	11,176	11962
1978	106	11,117	13783
1979	106	10,658	12190
1980	106	11,021	13429
1981	106	11,101	12170
1982	106	10,749	12197
1983	106	11,054	15992
1984	106	10,877	10511
1985	106	10,610	10469
1986	122	10,090	11470
1987	125	11,622	12280
1988	128	14,166	12100
1989	128	13,262	12292
1990	128	11,791	N.A.
1993	145	16,200	N.A.

* N.A. - NOT AVAILABLE

SOURCES : 1, 4, 9

TABLE 2

REGIONAL DISTRIBUTION AND STATUS AGAINST ENTITLEMENT - 1993

SL. NO.	STATES	POPULATION 1991 CENSUS (MILLIONS)	ENTITLE-MENT * *	ACTUAL COLLEGES 1993	NO. OF SEATS	COMMENTS / OBSERVATIONS
1	ANDHRA PRADESH	66.50	13	10	1120	ADEQUATE
2	ASSAM	22.40	4	3	365	ADEQUATE
3	BIHAR *	86.40	17	9	580	SHORTFALL
4	GUJARAT	41.30	8	6	885	ADEQUATE
5	HARYANA	16.50	3	2	150	ADEQUATE
6	HIMACHAL PRADESH	5.20	1	1	65	ADEQUATE
7	JAMMU & KASHMIR	7.70	2	3	260	ADEQUATE
8	KARNATAKA	45.00	9	19	3266	MASSIVE EXPANSION CAPITATION / COMMER -CIALIZATION TREND
9	KERALA	29.10	6	5	700	ADEQUATE
10	MADHYA PRADESH	66.20	13	6	720	SHORTFALL
11	MAHARASHTRA* & GOA	80.10	16	30	3004	MASSIVE EXPANSION CAPITATION / COMMER -CIALIZATION TREND
12	ORISSA	31.70	6	3	321	SHORTFALL
13	PUNJAB	20.30	4	6	520	ADEQUATE
14	RAJASTHAN	44.00	9	6	610	ADEQUATE
15	TAMILNADU * & PONDICHERY	56.70	11	15	1590	MODERATE EXPANSION COMMERCIALIZATION TREND INITIATED
16	UTTAR PRADESH	139.10	28	9	1071	SHORTFALL
17	WEST BENGAL	68.10	14	7	755	SHORTFALL
18	DELHI	9.40	2	4	460	EXCESS
19	NORTH EAST EXCLUDING ASSAM	9.10	2	1	85	ADEQUATE
20	OTHER STATES / UNION TERRITORIES	1.60	0	0	0	- - -
	TOTAL	846.40	168	145	16527	

SOURCES : 6, 10, 11

* INFORMATION ON ONE COLLEGE IN THESE THREE STATES ARE NOT AVAILABLE.

* * NORM: 1 MDICAL COLLEGE / 5 MILLION PEOPLE

TABLE 3

PATTERN OF GROWTH - NO. OF MEDICAL COLLEGES BY REGIONS AND STATES - 1965 AND 1995

ZONE / STATE	NO. OF MEDICAL COLLEGES IAMR - 1965	NO. OF MEDICAL COLLEGES - DIRECTORY OF MEDICAL COLLEGES IN INDIA - 1995
CENTRAL ZONE		
MADHYA PRADESH	7	6
UTTAR PRADESH	6	9
EASTERN ZONE		
ASSAM	3	3
BIHAR	4	9
MANIPUR		1
ORISSA	3	3
WEST BENGAL	5	7
SOUTHERN ZONE		
ANDHRA PRADESH	8	10
KARNATAKA	9	19
KERALA	4	5
TAMILNADU & PONDICHERRY	9	15
WESTERN ZONE		
GUJARAT	5	6
MAHARASHTRA & GOA	11	30
NOTHERN ZONE		
JAMMU & KASHMIR	1	3
HARYANA		2
HIMACHAL PRADESH		1
PUNJAB	5	6
RAJASTHAN	5	6
DELHI	3	4
	88	145

SOURCES : 1, 6, 9

* IAMR - INSTITUTE OF APPLIED MANPOWER RESEARCH

TABLE 4

REGIONAL PATTERN OF GROWTH OF MEDICAL COLLEGES IN DECADES

STATES / UNION TERRITORIES	PRE 1950	1950-59	1960-69	1970-79	1980-89	1990-94
ANDHRA PRADESH	3	4	1		2	
ASSAM	1		2			
BIHAR	2		3	4		
GUJARAT	2	1	2		1	
GOA			1			
HARYANA			1			
HIMACHAL PRADESH			1			
JAMMU & KASHMIR		1		1	1	
KARNATAKA	1	3	5	1	8	
KERALA		2	2		1	
MADHYA PRADESH	2	2	2			
MAHARASHTRA	4	1	4	2	10	8
MANIPUR				1		
ORISSA	1	1	1			
PUNJAB	1	2	1	1		1
RAJASTHAN		1	3	1		1
TAMIL NADU	3	1	5		4	1
UTTAR PRADESH	2		5	1		1
WEST BENGAL	4	1	2			
DELHI	1	2		1		
PONDICHERRY		1				
TOTAL	27	23	41	13	27	12
CUMULATIVE TOTAL	27	50	91	104	131	143 *

* YEAR ESTABLISHED - NOT GIVEN FOR 2 COLLEGES

Source 6,10

TABLE 5

MALE AND FEMALE ADMISSION TRENDS

YEAR	NO. OF MEDICAL COLLEGES	ADMISSIONS		TOTAL	QUALIFIED		TOTAL
		MALE%	FEMALE%		MALE%	FEMALE%	
1971-72	98	78	21.5	12048	73	26.9	10825
1972-73	100	77.6	22	11772	74.6	25	11311
1973-74	105	79	20.7	13205	76.5	23	11364
1974-75	105	78	21.8	11561	76	23.8	11911
1975-76	106	77.9	22	11213	77	22.5	11982
1976-77	106	75.5	24	11176	77	22.5	11962
1977-78	106	58	41.8	11117	78	21.8	13783
1978-79	106	72.6	27	10658	79	20.7	12190
1979-80	107	70	29.7	11021	79	20.8	13429
1980-81	109	69	30.8	11101	77	22.7	12170
1981-82	111	67.8	32	10749	74.5	25	12197
1982-83	111	63	36.8	10784	55.9	44	15992
1983-84	111	N.R.	N.R.	10877	71.6	28	10511
1984-85	116	63.6	36	10610	70.7	29	10469
1985-86	122	62.6	37.3	10090	67.3	32.6	11470
1986-87	125	61.5	38	11622	65.6	34	12280
1987-88	128	61	38.9	14166	63.7	36	12100
1988-89	128	60	39.8	13262	62.9	37	12292
1989-90	128	60	39.8	11791	N.R.	N.R.	N.R.

* N.R. = NOT RECEIVED

SOURCES : 4, 9

TABLE 6

DISTRIBUTION OF MEDICAL COLLEGES BY SEATS
SIZE OF COLLEGES (BY SEATS) - 1993

NO. OF SEATS	NO. OF COLLEGES	TOTAL	CUMULATIVE TOTAL
35	1	35	35
50	18	900	935
60	5	300	1235
64	1	64	1299
65	2	130	1429
70	2	140	1569
75	2	150	1719
80	1	80	1799
85	1	85	1884
90	2	180	2064
100	41	4100	6164
102	1	102	6266
107	3	321	6587
110	4	440	7027
113	1	113	7140
115	1	115	7255
118	1	118	7373
120	6	720	8093
125	3	375	8468
130	6	780	9248
140	4	560	9808
150	11	1650	11458
155	1	155	11613
170	1	170	11783
175	5	875	12658
180	3	540	13198
185	2	370	13568
195	2	390	13958
191	1	191	14149
200	5	1000	15149
210	1	210	15359
240	1	240	15599
300	2	600	16199
328	1	328	16527

TOTAL 142

* THREE COLLEGES - SEAT TOTALS NOT AVAILABLE

SOURCE : 10

TABLE 7

DISTRIBUTION OF COLLEGES BY SEATS (REGIONAL PATTERN)

STATES / UNION TERRITORIES	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	250	300	TOTAL
ANDHRA PRADESH						6		1	(125) - 2		1								1120
ASSAM			(65) - 1						1				1						365
BIHAR (-1) *	4				2	2													580
GUJARAT						2		1						(175) - 2			(210) - 1		885
GOA			1																70
HARYANA	(35) 1							(115) - 1											150
HIMACHAL PRADESH			(65) - 1																65
JAMMU & KASHMIR		1				2													260
KARNATAKA		1				1		(118) - 1	3		2			(175) - 1	(185) - 1	1		(328) - 1	3266
KERALA						3										2			700
MADHYA PRADESH		1				1				4									720
MAHARASHTRA (-1) *	4	1	(64) - 1			16		2	1							2	(240) - 1		2934
MANIPUR					(85) - 1														85
ORISSA							(107) - 3												321
PUNJAB	3		1								2								520
RAJASTHAN	1					3	1				1								610
TAMIL NADU (-1) *	1	1		(75) - 1		2	3		(125) - 2		1			(175) - 3					1515
UTTAR PRADESH	1			1		2	(102) - 1	(113) - 1			1				(185) - 1	(191) - 1			1071
WEST BENGAL	3										3	(155) - 1							755
DELHI	1					1			1					1					460
PONDICHERRY				(75) - 1															75
	(50) - 18	5	(70) - 2	(80) - 1	(90) - 2	41	(110) - 4	(120) - 6	(130) - 6	4	11	(155) - 1	1	(180) - 3	(195) - 2	(200) - 5	(210) - 1	(300) - 2	16527
	(35) - 1		(65) - 2	(75) - 2	(85) - 1		(107) - 3	(115) - 1	(125) - 2					(175) - 5	(185) - 2	(191) - 1	(240) - 1	(328) - 1	
			(65) - 1				(102) - 1	(118) - 1											
								(113) - 1											
TOTAL (-3)	19	5	5	3	3	41	8	9	9	4	11	1	1	8	4	6	2	3	

* INFORMATION OF TOTAL SEATS OF THREE COLLEGES IN EACH OF THESE STATES ARE NOT AVAILABLE

Especially in the first two states mentioned, this trend is further underlined by the association with the privatization / commercialization trend as well.

b) Some states like Bihar, Madhya Pradesh, Uttar Pradesh, have colleges far below their entitlement (nearly 50% less). Orissa, Gujarat, Rajasthan and West Bengal also have comparitively less than their entitlement.

c) At a National level, the overall situation evens out with only a small shortfall. However the same regional planning distortions, seen in all aspects of Health Care planning in the country are seen.

d) The Regional disparity are characterized by another feature. Karnataka and Maharashtra, the commercial belt, also have the largest admission ratios thereby proving the economy of scale theory - more admission more income and profits!

2.3. COMMERCIALIZATION - BEYOND PRIVATIZATION

In terms of ownership and governance there has been a gradual increase in the number of colleges run under the auspices of the Private Sector (Trusts or Societies) from less than 5% at the time of Independence to 30% in 1993-94 (see table 2).

While 'private sector' support to higher education may not be a negative trend per se, it is significant that most of the more recent entrants into the private sector group of medical colleges show the following characteristics:

- They belong to the 'capitation fee' charging variety of medical colleges and the magnitude of this fees has been increasing over the years; (from 1 lakh to 30-35 lakhs per seat !)

- They are initiated by trusts and societies often with caste / communal affiliations;

- They are initiated by individuals representing specific sectoral interests like sugar barons in Maharashtra State, or liquor barons and other pressure groups in Karnataka and Andhra Pradesh, all of whom are not conversant with the objectives of medical education;

It is quite significant that all the unrecognised medical colleges in the country (26 out of 146 estimated by the Ministry of Health and Family Welfare, Annual Report 1993-94) are in this group.

These represent a trend of Commercialization of Medical Education which is significantly different from the issue of privatization of higher education.

Further, reports in the media are regularly available of how colleges run on the capitation fees ethos are also contributing to fall in qualitative standards at the time of examinations, where money, power and political influence affect results.

The 'nexus' between the capitation fees colleges lobby and the political system through contribution to party funding is also a subject of media report and debate.

2.4. PROBLEMS OF NORMS AND ESTIMATES : SHORTFALL OR EXCESS?

The growth of medical colleges in the country has resulted from a application of the Mudaliar Committee norm of 1 Doctor per 3000-3500 population and the norm of 1 medical college per 5 million population. With a growing population, these norms have kept up the momentum of expansion.

However, we would like to emphasise that in our considered opinion the situation in the country with its present stock of 300,000+ doctors is one of having Too many doctors, not less. Some important facts that underscore this opinion are:

a) The Bhore and Mudaliar Committees used only 'MBBS Graduates' as being doctors in all their calculations and estimates.

In the Indian situation we have trained practitioners of a range of alternative systems. At the primary care level all these can be considered to be contributing to the health care delivery system.

When their numbers - estimated from Government reports are included in deriving doctor - population ratios then the situation changes remarkably to an excess rather than the deficiency situation, usually portrayed (see table 11).

b) It is now well documented that majority of the doctors who graduate from the **145** medical colleges (presently established in India) are not motivated to public health / primary health care and opt for specialization and / or urban practice. The doctor-population estimates are further skewed by this factor - so we have an increasing number of the wrong type of doctors in the wrong situation. Rural, tribal and hilly areas are underserved while urban areas have an excess. Doctor population ratios also show wide regional disparities.

c) Finally the estimates of 'brain-drain' both external (from India to the developed world) and internal (from the public sector to the profit oriented private urban sector) is variable but on the whole have been showing an increasing trend. It has been now well established that the tax-payer supported governmental medical education sector benefits the private sector in the country and the health service sector of the established market economies of the western world, more than the health services of the government.

While factor (a) explodes the myth of the shortage, (b) and (c) underscore that any increase in the existing type of MBBS doctors is unlikely to make any impact on the problem.

It is not at all surprising that as early as 1980, the ICSSR / ICMR Health for all Study Group(15) categorically stated that "Two immediate decisions will have to be taken.

i) There should be no new medical colleges and no increase in the intake of existing medical colleges.

ii) There is no need at all to set up new and additional institutions to train additional doctors through short term courses".

2.5) STUDENT WASTAGE AND BRAIN DRAIN

Successful human power development policies presuppose that efforts or resources paid for by the tax payer in training should bear returns of fully qualified personnel, reaching the required positions, to confidently and efficiently provide service to the community.

Wastage occurs if students discontinue or delay their studies or trained personnel seek avenues of work other than support to the public services eg: through brain drain to developed or other countries and so on.

Studies on 'Wastage' and 'Brain drain' have been rather inadequately pursued in the country. These are particularly important because there is both a urgent need for trained manpower, especially in situations of disadvantage as well as a shortage of resources, to facilitate their training.

The Institute of Applied Manpower Research in collaboration with National Institute of Health Administration and Education conducted the only known study on wastage. However, the data was from 7 colleges only, out of the potential 36 in the sample and the period of study 1954-56. Real wastage (not completing the course) was 6% and time wastage (delays in completing the course) was 9-12%. Compared to studies done in India and elsewhere these were not very alarming. However, these were not followed up.

Another area which has not received adequate attention is the attrition rate among women doctors due to family demands and child bearing. This is particularly important since there has been an attempt to increase the number of females at the intake stage, which is welcome (see table 5) .
However large attrition during the course or after graduation would make this shift counterproductive. This area of study should also help identify ways and means of support to female doctors to prevent attrition due to family demands and facilitation of reentry into the profession, with continuing education and other supports at a later stage as well.
In terms of 'Brain Drain', studies have been done to estimate the magnitude of

TABLE 10

DOCTORS REGISTERED WITH STATE MEDICAL COUNCILS (1984-1990)

NAME OF STATE MEDICAL COUNCIL	1984	1985	1986	1987	1988	1989	1990
ANDHRA PRADESH	15373	15990	16516	17108	17639	18236	18898
ASSAM	8279	8640	8912	9145	9428	9746	10099
GUJARAT	16955	17669	18417	19173	19806	20701	21576
BIHAR	21621	22217	22902	23450	24137	24872	25689
JAMMU & KASHMIR	3103	3289	3442	3622	3676	3937	4087
KARNATAKA	23470	24490	25518	26722	39355	40872	42399
BHOPAL (M.P.)	6473	7141	7867	8526	9147	9852	10542
MAHARASHTRA	35585	37394	39397	41035	42730	44684	46858
ORISSA	8831	9378	9478	9866	10081	10426	10746
PUNJAB	23096	23632	24128	24615	25130	25598	26178
RAJASTHAN	10065	10501	11059	11613	12243	12912	13475
TAMILNADU	35644	36860	38673	40023	41465	43074	44769
UTTAR PRADESH	26613	27584	28514	29376	30348	31336	32369
WEST BENGAL	35986	37005	37751	38738	39510	40210	40920
TRAVANCORE (KERALA)	13644	14208	14900	15568	16455	N.A. *	N.A.
HYDERABAD (A.P.)	11091	11504	11780	12153	12469	12805	13199
HARYANA	N.A.	N.A.	256	319	437	523	N.A.
MCI	N.A.	N.A.	794	830	1639	2412	3196
TOTAL	295829	307502	320304	331882	355695	352196	365000

* N.A. = NOT AVAILABLE

SOURCE : 5, 10

TABLE 11

DOCTOR POPULATION RATIOS - ALLOPATHIC SYSTEM AND INCLUDING PRACTITIONERS OF ALTERNATIVE SYSTEM OF MEDICINE

YEARS	ALLO-PATHS (1)	HOMEO-PATHS (2)	AYUR-VEDA (3)	SIDHA (4)	UNANI (5)	TOTAL (6)	POPULA-TION (MILLIONS) (7)	DOCTOR POPULATION 1:7	6:7
1974	190838	145434	223109	18128	30400	607909	590	1:3091	1:970
1979	249752	112638	225477	18093	25988	631948	660	1:2642	1:1044
1981	268712	115710	233824	18357	28737	665340	683	1:2541	1:1026
1984	297228	123852	251071	11352	28382	711885	735	1:2472	1:1032
1985	306966	123852	251071	11352	28382	721623	750	1:2443	1:1039
1986	319254	131091	272800	11581	28711	763437	767	1:2402	1:1004
1987	331886	N.A.	N.A.	N.A.	N.A.	N.A.	783	1:2359	N.A.
1988	355695	N.A.	N.A.	N.A.	N.A.	N.A.	800	1:2249	N.A.
1989	352196	N.A.	N.A.	N.A.	N.A.	N.A.	817	1:2319	N.A.
1990	365000	N.A.	N.A.	N.A.	N.A.	N.A.	834	1:2284	N.A.
1991	394068	N.A.	N.A.	N.A.	N.A.	N.A.	851	1:2159	N.A.

SOURCE : 7, 10

TABLE 12

NO. OF COLLEGES AND ADMISSIONS OF ALTERNATIVE SYSTEMS OF MEDICINES (1991)

STATES / UNION TERRITORIES	AYURVEDA / SIDDHA		UNANI		HOMEOPATHY		TOTAL NO. OF COLLEGES	TOTAL NO. OF ADMISSION
	NO. OF COLLEGES	ADMISSION CAPACITY	NO. OF COLLEGES	ADMISSION CAPACITY	NO. OF COLLEGES	ADMISSION CAPACITY		
ANDHRA PRADESH	3	110	2	80	3	125	8	315
ASSAM	1	25			5	200	6	225
BIHAR	11 (3)*	180	1	40	26	2135 (16)	38	2355
GUJARAT	9	258			3	190	12	448
HARYANA	4	200					4	200
HIMACHAL PRADESH	1	50					1	50
JAMMU & KASHMIR	1	0					1	0
KARNATAKA	8	195	1	15	6	435	15	645
KERALA	5	170			4	250	9	420
MADHYA PRADESH	7	187	1	25	13	490	21	702
MAHARASHTRA	17	795	1	50	24	1221	42	2066
ORISSA	2	60			3	140	5	200
PUNJAB	3	130			3	140	6	270
RAJASTHAN	3	180	3	80(2)	3	140	9	400
TAMIL NADU	2+1 **	115	1	15	1	21	5	151
UTTAL PRADESH	9	410	4	180	16	670	29	1260
WEST BENGAL	4	120 (2)			10	1236	14	1356
DELHI	4	150	2	50	1	60	7	260
TOTAL	94+1	3335	16	535	120	7453	232	11323

SOURCE : 2

*, FIGURES IN () BRACKETS INDICATE REPORTING UNITS

** SIDDHA - 1

migration and to enumerate 'push' and 'pull' factors. But here again no serious attempts have been made to identify the economic losses due to the drain. In more recent years, with the focus on NRI investments in the development process, the drain of doctors to lucrative practice overseas is often seen as a 'gain' rather than a 'drain', further complicating the issue.

A study of Doctors migrating has shown a steady increase from an annual average of 810 during the I plan phase to 5304 in 1986-87 (which represents nearly 30% of annual output) which is remarkably high.

This is therefore an area of importance for continuous monitoring and study, because of the broader economic - political - social - cultural context of this phenomena. For instance, the recent phenomena of NRIs from the US promoting High technology Diagnostic Centres in the country can be seen as the MNCs in USA opening new market avenues for high tech gadget, whose sale in the US has shown a slump in recent years. Thus while the NRI process in Health care is often portrayed in the media and policy formulations as an 'altrustic process' in reality it is a 'market economy process'. In addition there is a cultural aspect as well - that of the promotion of Western Health Care as being of higher standard than Indian health care, not withstanding the serious cultural and economic crisis being faced by the Western Health Care itself !

Much of the so called Continuing Education efforts that has become common in more recent years, especially linked to NRI supported hospitals and diagnostic centres is primarily focussed on stimulating the local medical profession to catch up with the technological gadgetry of the west. The support of the growing Medical - Industrial complex to this Continuing Education efforts is therefore not at all surprising.

"The training of health services personnel should be fully oriented to the people - their social, cultural and economic conditions and their health profile"

- ICSSR-ICMR Health for All Report, 1981

TABLE 9A

RESERVATION IN MEDICAL SEATS - A

STATES / UNION TERRITORIES	SC %	ST%	BC%	WOMEN%	GOVT. OF INDIA NOMINEE	GENERAL
ANDHRA PRADESH	15	6	25	30	1% (12 SEATS)	
ASSAM	7	15	6 SEATS		5% (20 SEATS)	45% (164 SEATS)
BIHAR	14	10	23	3	SOME %	15% (ALL INDIA)
GUJARAT	7	13	10		1% (10 SEATS)	15% (ALL INDIA)
GOA	15		4		SOME %	15% (ALL INDIA) 54% (GENERAL)
HARYANA		BOTH 33.6	22	3 SEATS	TRIPURA-3 SEATS	30 (ALL INDIA)
HIMACHAL PRADESH	13.8	736	3		7.6	15 (ALL INDIA) 43 (CENTRAL)
JAMMU & KASHMIR	8		21			
KARNATAKA	SOME %	SOME %	SOME %	SOME %	SOME %	
KERALA	8	2	25		SOME %	15 (ALL INDIA) 65 (KERALA STATE M
MADHYA PRADESH		BOTH 15		15	4	15 (ALL INDIA)
MAHARASHTRA		BOTH 10 SEATS	40		SOME %	SOME %
MANIPUR						35%
ORISSA	8	12			SOME %	15 (ALL INDIA)
PUNJAB		BOTH 25	2		STATE GOVT. NOMINEE - SOME%	15 (ALL INDIA)
RAJASTHAN	8	6			28	15 (ALL INDIA)
TAMIL NADU	18	1	50		SOME %	31%
UTTAR PRADESH	10	2	15		SOME %	50 (30 WOMEN)
WEST BENGAL	SOME %	SOME %			SOME %	15 (ALL INDIA) % (STATE GOVT.)
DELHI	15	7.5			12 (OTHER STATES) #	15 (ALL INDIA)
PONDICHERRY	7	5			24 -	38% 14% (ALL INDIA)

FROM ARUNACHAL PRADESH, ANDAMAN & NICOBAR ISLANDS, DADAR & NAGAR HAVELI LADAK, MANIPUR, MEGHALAYA, MIZORAM, NAGALAND, SIKKIM AND TRIPURA

CAPITATION FEES AS A SELECTION PROCEDURE

Among the more recently opened colleges, donations and capitation fees is a major factor of selection representing the commercialization of the medical education sector (16%). The capitation fees range from 10 to 35 lakhs and NRI's pay upto 100,000 US $ (media reports).

Inspite of official stands, mostly 'lip service' against capitation fees by the government - (both at central and state level) and professional councils and bodies at all levels, the capitation fees lobby group of medical colleges has been gaining greater and greater patronage by the active connivance of both professional and political leadership.

In state like Karnataka - even the cabinet meet to decide on the permissible levels of capitation fees which are then applied and not surprisingly, exceeded by irregular and unofficial means.

The Supreme Court Judgement in a special writ petition from Andhra has established that capitation fees as it is practiced today "violates the right to education under the constitution;

..... is wholly arbitrary;

..... is unconstitutional according to article 14 - equality before law .....;

is evil, unreasonable, unfair and unfit.....;

and enables the rich to take admissions whereas the poor have to withdraw due to financial inability .....;
and therefore is not permissible in any form ....."
In spite of this, the crisis continues and the growth of such colleges continues unchecked.

> The nexus between the capitation fees lobby and the Medical Education policy makers and leadership at state / central levels is therefore an important area that needs urgent study if the commercialization of medical education has to be halted.

2. 10) COST / FINANCING OF MEDICAL EDUCATION

Costing and financing of Medical Education in the country has been a topic, greatly neglected by policy makers and researchers. It had been estimated that the investment on every medical student for the entire phase of training was anywhere from 80,000 to 1 lakh - the range being because of varying expenditures being included in different ways by the researchers. However these estimates are all outdated (mostly 1970's) and have not been updated.

However, the wider question of who finances medical education in India and how, is still inadequately understood except for some observations from the preliminary studies of FRCH (1989).

These studies have shown that the Government till more recently has been the sole investor in Medical education (wholly financed by the public exchequer from tax revenue collected from the people). More that 70% of doctors trained by governmental institutions take up private practice. About 30% migrate to other countries especially the developed countries of the west. Public resources are therefore being used for the benefit of the private sector in the area of Medical Education !

More recently there has been an unbridled growth of capitation fee medical colleges especially in the states of Karnataka and Maharashtra. Apart from being closely linked to a pheonomenal, commercialization of medical education, the problem is worsened by the abettment of the governments, in not only providing tacit approval in spite of stated National and state level policies against such colleges, but also in providing clinical facilities and other benefits to these colleges, who make no investments in the health services of the state.

The recent Supreme Court judgement suggesting that the government subsidise the students in private colleges and even provide soft loans to them is further adding to the earlier mentioned problem of public subsidy for private sector expansion. The move to re-label this group of institutions with the more respectable label of 'self financing institutions', and the confusion caused by the central government policy initiative to secure private sector support to higher education efforts by the state, has made the situation more ambigious.

It is important to note that with the years, the costs of medical education and health care are escalating rather than falling and hence greater clarity in investment in medical education and seeking alternative avenues of support rather than direct commercialisation through donations / capitation fees will be a major challenge to the government. The recent move at both Central and State levels to introduce NRI quotas of the capitation fees variety' in Government colleges is therefore a most retorgressive step supporting commercialization' rather than 'responsible privatization'.

While a public - private mix may be unavoidable, costing / financing of medical education will have to be subject to rigorous policy studies in the next few years, so that government efforts are primarily directed to produce adequate human

power for state-run services and get over the imbalance and acute short fall in the situation of production and enrolment of nursing and allied health professionals.

Medical Education has dominated the health human power development efforts for too long and provided inadequate returns. A time for more rational planning which is need based and data based is urgently needed. Training of Doctors is only one of many tasks in health human power development. This sense of proportion in efforts need to be re-established.

2. 11) CORRUPTION IN MEDICAL EDUCATION

Corruption and graft have become the bane of public and private life in India and have crept into all sectors of development and human endeavour. Medical Education is no exception.

While the more obvious 'commercialization' of medical education - the capitation fees problem has been mentioned in earlier sections there are more insidious aspects of corruption that have seeped into all aspects of this sector as well.

Influence of money power and power politics in the selection of candidates for medical college admission; and in the examination results at various levels; are now becoming commoner.

Misuse of funds for personal aggrandisement or for improperly sanctioned institutional or departmental development; extraneous influences in promotions and transfers and the cancerous growth of private practice values in patient care within government hospitals are all manifestations of the problem.

While at the level of anecdotal and often experiential evidence, there is adequate data on the problem, it is surprising how reports and studies undertaken by professional researchers and numerous internal and external reviews, fail to highlight or even mention this fall in ethical standards in medical colleges. One wonders whether the 'conspiracy of silence' has a professional / class bias as well.

The problem is further worsened by the active involvement of medical college leadership and the seniors in the Medical profession - many of whom by virtue of being compromised personally, are unable to take a public stand against the issue. Even if they do so, it is often a blatant double standard.
Media reports and as mentioned earlier, some committed student sponsored collective action seem to be the only attempts to counter or atleast bring some public scrutiny and pressure on the system, to tackle this problem.
A major study that is recommended urgently to understand the full implications of this degeneration of the medical education sector is the in-depth study of the nexus between
a) the medical - industrial complex; and
b) the 'capitation fees' lobby of medical colleges

with the political and professional health leadership and policy makers in the country. Only then will it be able to fathom a major paradox in the Medical Education situation in India, in recent years i.e., the mushrooming and totally unregulated growth of capitation fees colleges and the fall of ethical standards inspite of central and state governmental level and professional association level stated policies against this type of commercialization.

Any quality control or applications of norms and standards to ensure training of well oriented and skilled human power including doctors in the country will come to naught if this major factor for degeneration of professional standards is not adequately researched and countered through effective legislation and other control measures.

2. 12. MEDICAL STUDENTS - PROTEST MOVEMENTS

An important phenomena in Medical Education process has been growing involvement of medical students and junior doctors in collective action - protests and strikes.

On a superficial overview, this may be seen as a sort of trade-union activity at junior doctor or medical student level to improve their own facilities and their allowances, etc., but a deeper analysis shows that the student and junior doctor community have shown a much more vigorous social concern than the 'teacher' or 'medical' professional community and the issues for which collective democratic protest action have been initiated have included:

i) Concern and action about privatization and commercialization of medical education (the whole recent, Supreme Court case against capitation fees colleges was initiated by student action). The recent Kerala students / medicos strike has also been on the same theme.

ii) Corruption in medical colleges, especially around selection and examinations.

iii) Concern about falling standards or inadequate facilities.

iv) Adhoc policy decisions in response to politically strong pressure groups.
v) Against harrassment of students by teachers in examinations and even generally

Teachers on the other hand have mostly agitated for better pay and sometimes improved facilities, showing a lack of broader social concern.

While the involvement of students / teachers in democratic protest action that could affect patient care in teaching hospitals has been a subject of some public debate, the growing and wider social concern and vitality for action of the medicos must be noted with appreciation. This should also be harnessed for promoting changes in the curriculum framework towards greater social relevance, as well as countering the disturbing trends described earlier.

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LIST OF MEDICAL COLLEGES IN INDIA
(Included in Tables)

ANDHRA PRADESH

1. Gandhi Medical College ,Hyderabad.
2. Osmania Medical College, Hyderabad.
3. Andra Medical College, Visakhpatnam.
4. Guntur Medical College, Guntoor.
5. Kurnool Medical College,Kurnool.
6. Sri venkateshwara Medical College, Tirupathi.
7. Rangaraya Medical College, Kakinanda.
8. Kakartiya Medical College, Warangal.
9. Siddartha Medical College, Vijayawada.
* 10. Deccan College of Medical Sciences, Hydarabad.

ASSAM

11. Assam Medical College, Dibrugarh.
12. Guwahati Medical College, Guwahati.
13. Silchar Medical College, Silchar.

BIHAR

14. Patna Medical College, Patna
15. Darbhanga Medical College, Darbhanga
16. Rajendra Medical College, Ranchi
17. Jawaharlal Nehru Medical College, Bhagalpur
18. Sri Krishna Medical College, Muzaffarpur
19. A N Magadh Medical College, Gaya
20. Nalanda Medical College, Patna
21. Patliputra Medical College, Dhanbad
22. M.G.M. Medical College, Jamshedpur

GUJARATH

23. B.J.Medical College,Ahmadabad.
24. Government Medical College,Surat.
25. M.P.Shaha Medical College, Jamnagar.
26. Medical College, Vadodara.
27. Pamukhaswami Medical College, PO Karamsad.
28. Smt. N.H.L.Manipal Medical College,Ahmadabad.

GOA

29. Goa Medical College,Bambolin(Goa).

HARYANA

30. Maharshi Dayanand University Medical College, Rohtak.
31. Maharaja Agrasen Institute of Medical Research and Education.

HIMACHAL PRADESH

32. Indira Gandhi Medical College, Shimla.

JAMMU AND KASHMIR

33. Governement Medical College,Jammu.
34. Govt. Medical College, Srinagar.
* 35. Jhelum Valley College of Medical Sciences, Srinagar.

KARNATAKA

36. Government Medical College, Mysore.
37. Government Medical College,Ballary.
38. Karnataka Medical College, Hubli.
39. Bangalore Medical College, Bangalore.
40. Sri. Devaraj Urs Medical College,Tamaka,Kolar.
41. Sri. Siddartha Medical College,Tumkur.
42. St John's Medical Collge, Bangalore.
43. Al-Ameen Medical College, Bijapur.
44. B.L.D.E.assosiation's Medical College,Bijapur.
45. Kasturba Medical College,Mangalore.
46. Adichunchanagiri Institue of Medical Sciences "Vishwmanava",Bellur.
47. J.S.S.Medical College,Mysore.
48. Kasturba Medical College, Manipal.
49. Jawaharalal Nehru Medical College, Belgum.
50. HRE Society's Mahadappa Rampur Medical College, Gulbarga.
51. J.J.M.Medical College, Davanagere.
52. M.S.Ramaiah Medical College, Gokhul Extention, Bangalore.
53. Dr. B.R.Ambedkar Medical College, Bangalore.
54. Kempegowda Institute of Medical Sciences, K.R.Road, Bangalore.

KERALA

55. Medical College, Thiruvananthpuram.
56. Medical College, Kozikode.
57. Medical College, kottayam.
58. T.D.Medical College, Alappuzha.
59. Medical College,Thissur.

MADHYA PRADESH

60. Gandhi Medical College, Bhophal.
61. Gajra Raj Medical College, Gwalior.
62. Mahatma Gandi Memorial Medical College, Indore.
63. Government Medical College, Jabalpur.
64. Pt. Jawaharlal Nehru Memorial Medical College, Raipur(MP).
65. Shyam Shah Medical College, Rewa.

MAHARASHTRA

66. Grant Medical College,Bombay.
67. B.J.Medical College, Poona.
68. Government Medical College, Nagpur.
69. Government Medical College, Aurangabad.
70. Govt. Medical College, Sangli.
71. Dr. V.M.Medical College, Solapur.
72. Swami Ramanand Tirth rural Medical College, Beed.
73. Sri. Vasantro Naik Govt. Medical College, Yavatmal.
* 74. K.J.Somiya Medical College, Bombay.
75. Mahatma Gandhi Mission's Medical College, New Bombay.
* 76. R.A.Education Society's Padmashree Dr. D.Y.Patil Medical College, Bombay.
* 77. Terna Medical College, Bombay.
78. Government Medical College, Nanded.
* 79. Maharashtra Institute of Medical Sciences and Research, Latur.
* 80. Mahatma Gandhi Mission's Medical College, Aurangabad.
81. S.R.T.Rural Medical College, Beed.
* 82. Jawaharalal nehru Medical College, Wardha.
83. Mahatma Gandhi Institute of Medical Sciences, Wardha.
* 84. N.K.P.Salve Institute of Medical Sciences and Research Centre, Nagpur.
* 85. Jawahar Medical Foundetion, Annasaheb Chudaman Patil Memorial Medical College, Dhule.
86. Bharathi Vidyapith's Medical College, Pune.
* 87. N.D.M.V.P. Samaja's Medical College, Nasik.
88. Rural Medical College, (Parvara Medical Trust), Ahmednagar.
89. Shri Bhausaheb Hire, dhule.
90. D.Y.Patil Education Society's, Medical College, Kolhapur.
91. Armed forces Medical College, Pune.
92. Indira Gandhi Medical College, Nagpur.
93. Dr.Panjabrao Deshmuh Memorial Medical College, Amravathi.
94. Krishna Institute of Medical Siences, Satara.

MANIPUR

95. N.E.Regional Medical College,Imphal(Manipal).

ORISSA

96. S.C.B.Medical College, Cuttack.
97. V.S.S.Medical College, Sambalpur.
98. M.K.C.G.Medical College, Berhampur.

PUNJAB

99. Government Medical College, Amritsar.