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The Economically Viable Salary for Fresher Medical Graduate in the Public Sector of Contemporary India

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6 Abstract

7 Background:Background: The apex court has intervened in the conduct of the medical

⁸ entrance test and has directed to conduct a common entrance test through the country. It has

⁹ also ensured regulation of fee structures in all the colleges. This has created opportunities

¹⁰ where medical education market can be studied with some confidence. Aims and Objectives:

¹¹ To compare the tutuion fee for completing medical graduation and salary received by fresh

¹² Medical graduate in the public sector of contemporary India

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14 Index terms— fresh medical graduate, remuneration, costing of medical education.

15 1 Introduction

¹⁶ 2 Economic

17 evaluation has become a fundamental part of planning processes in several countries. In India, efforts to 18 supplement the salary of the doctors in the public sector were made right from the 1920s in the forms of 19 Non-Practicing Allowance and Special Pay, etc. However, no efforts have been made to evaluate the income 20 threshold for attracting doctors to work in the public health sector.

In the republic of India, public sector is the major recruiter of the medical professionals and they are facing 21 difficulty to recruit doctors for jobs in rural and difficult areas. ?? The national average in the public health 22 sector is one doctor per 10189 population, ranging from 28391 for Bihar to 2203 for Delhi. 1 Lack of inclination 23 among the doctors to join in the public sector and very high attrition rates, are the point of concern for most 24 of the public health sector across the country. One of the problems faced by most of the state government 25 is to determine appropriate remuneration, which will attract and retain freshly passed out MBBS graduates. 26 Moreover, it has been experienced that the salary structure provided by the state governments is the basis of the 27 remunerations offered by the private sector to the fresh medical graduate doctors, contrary to the wellestablished 28 senior consultants, which is determined by their reputation and marketing potential. 29

There are increasing concerns expressed by different stakes holders in the rising cost of health care in India. The role of the physician on the health care can be in two ways:

1. Directly by increasing the fee for the consultation. 2. Indirectly by way of choice, he made for the patient concerning the technology and resource required during the treatment.

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The direct way is not so high, but the physician being the final decision maker and the existence of information asymmetry in health sciences, this role needs to examined further.

Given the changing trend in medical education, a paradigm shift is observed in recent years with the increase in the number of private medical colleges and effectively increased the number of doctors trained by them in the country. According to the Medical Council of India, there are 479 Medical Colleges in India, out of which 226 are managed by the public sector and 253 by the private entities. Similarly, out of 61,145 seats of MBBS, 30,880 are in public sector, and 30,265 seats are in the Private Medical Colleges. 2 Professional education market in India

42 until in the recent past was unregulated, with no regulatory framework and mechanism for the fee structure in

 $_{\rm 43}$ $\,$ the medical education. With the introduction of NEET (National eligibility cum entrance test and fixation of

44 fee structures in medical education institution, an opportunity has been created to analyze the fee structure of 45 medical colleges across the country.

This study was conducted to find the average economic burden on a medical student for doing MBBS in a private medical college and the financial break-even period for an MBBS doctor employed in the government sector at present rates of remuneration. A break-even analysis was conducted.

⁴⁹ 4 Type of study:

The present study is Descriptive. Duration of the study: January to March 2018. Study Area: All the deemed medical universities who were participating in NEET counseling for the 2017 session were included for the study.

52 5 Statistics tool:

The Microsoft Excel Worksheet was used for descriptive statistics and the interrelationship of the various factors. Premise: This study is based on the assumption that anationalized bank has financed the fees for the complete duration of the course. During the discussion with bank officers, we found that the student has to repay the loan after the completion of the course (5.5 years including one-year compulsory internship), and till then, only interest component is levied. The financial sheet was prepared with the assumption that the rate of interest and other factors will remain unchanged during the entire repayment period. For a pay-back period of 10 years, i.e. 15.5 years after the first payment of fees was made, EMI comes out to approximately Rupees 1,02,000.

It is pertinent to mention here that in case any student pays the fees on his own without taking the loan, an opportunity cost is assumed for the amount of fees paid. The duration of the internship was assumed as a nonprofit, no loss year.

For this study, we assumed that the student would be offered a government job as soon as he passes out from the college.

Data Collection: The website of NEET was explored to find out the structure of fees charged by the medical colleges across the country. Fees of medical institutions available under the category of deemed universities were considered for the study. Only one medical college with zero tuition fees was excluded from the study. Only tuition fees are considered for the study, all other types of fees like Hostel fee, Admission Fee, College Security,

Hostel Security, Bank Guarantee and any other charges usually levied upon the student was not included, as
 there is variability in that and no reliable data was available.

To calculate the monthly income, the entry-level pay scales of one of the states in North India, with all the parameters such as Basic pay, Dearness Allowance, Non-Practicing Allowance, and Medical Allowances. Along with this, the standard deductions such as the National Pension Scheme, Group Insurance Scheme, and Income

74 Tax were taken into consideration. The household expenditure/ consumption is taken as rupees thirty thousand

⁷⁵ for the first year, and standard inflation as experienced is added for each year. 3 IV.

⁷⁶ 6 Observations and Results

The fee was calculated using the fee structure of the deemed university from the NEET web site, DGHS, Ministry of Health and Family Welfare (GOI). ?? The fee structure of twenty-four deemed universities was considered for the study, which ranges from rupees nine lakhs to twenty-five lakhs per annum with an average of 14.61 lakhs.
The average fee for the MBBS course (whole duration of 4.5 years) comes to 65.74 lakh.

81 The present salary structure of one state government was taken for the study. The Basic pay of a newly appointed M.O. is Rs.56100 with D.A. (5%), 25% NPA (House rent allowance was not included as it was assumed 82 that M.O. has to avail that facility). Taking into consideration the present rate of rising in the DA is likely to 83 increase up to 35 % after five years. The gross salary of the Medical Officer is expected to be Rs. 95,169 as per 84 Table -1 In the above calculation, it is clear that M.O. will get Rs.78,811 as Net Salary, after deduction 85 of Rs 5610 for NPS, Rs 60 as GIS and Rs 10,688 as Income Tax. To sustain life and to fulfill the obligations 86 towards family, an M.O. will incur an expenditure of 25,000/-monthly and Rs 53,811 would be left as disposable 87 income. Out of that, he is expected to pay an EMI of Rs 1,02,000/-. 88

For tracing the financial position for the next ten years, the standard inflation factor added to the expenditure, and disposable income calculated accordingly.

The following table shows the calculation of all parameters for ten years: It is evident from the table that the gross salary of an M.O. will be above the EMI in the 2 nd year of service, and the net salary will be above the EMI in the 4th year of service, which means he has nothing in hand to lead his life. However, the disposable income (Net Salary minus Household Expenditure) will be above the EMI only in the 10 th year.

Graph 1: The area between the EMI and disposable is the gap the medical officer has to generate for sustaining his life. The different components/ parameters of salary EMI and disposable income are shown in Figure ??1 and Table-3. As evident from above, the present salary of MO is inadequate to repay the loan. The sustainable monthly salary for the M.O. was calculated to be Rs 1, 58,333 only.

99 V.

100 7 Discussion

The problem of low salary is common in other countries also. According to one study at university of Yale in the United States of America the average debt on the medical students is \$161,290 (Rs 1, 06, 79,011) while the average income at the start of her carrier per year is \$55,000 (Rs. 36, 41,550). The average salary of the freshly pass out medical student is not sufficient against the financial burden. He has to spend 80 hours per week or almost 13 hours per day for a week of 6 days regularly, having repercussions on patient safety issues. Also as per estimates, there would be a deficit of more the 130,000 doctors by 2025.

The increase in the number of MBBS graduates is not likely to have any change in the health sector. The graduates passing out of private medical colleges are least likely to join the public health sector, because of the financial situation. This may even induce them to adopt unethical practices achieving breakeven. 5 As the medical industry in India is practically unregulated, the chances are there that overtreatment and costly technology would be able to gain its foot very firmly. There are higher possibilities of them settling into the urban areas and resort to income supplementing activities or having more inclination to costly medical technologies, even when low-cost alternatives are available.

The policy of an open economy in the field of medical education will have far-reaching impacts, as analyzed above. The graduate produced from such a system will be unaffordable to the government sector in the absence of any additional means of income. Or the option of unethical practices or concealed private practice will be hard to prevent in the absence of incentive. The importance of how much he is going to be paid increases as the financial burden of getting a medical graduation increases. 6 We can also say that higher the financial burden for getting medical graduation, higher is the income consciousness.

Various state governments in India have adopted a different type of stick and carrots policies for providing medical facilities in rural areas. A few of them are monetary also. It is the right time to adopt the policy of repayment of loan by government on the pattern of USA. 7 VI.

123 8 Conclusion

124 The study indicates an action on the following three fronts:

1. Reduction of the rate of interest on the education (medical education in particular) loan. 2. The increase in the salary of the doctors in the government sector (particularly state governments), so that the salary becomes enough to break even within ten years. 3. Regulation of medical education, particularly fee structures. The hospitals that are performing well and have existed for more than 5-10 years should be allowed for medical education so that the students need not finance the treatments of the patents from the higher tuition fees. 4.

130 In addition, more studies may be required for finding other factors having implication on the medical education

market. Limitations of the study: It is assumed that every student has to take a 100% loan for his education.

132 This has many limitations:

133 1. No bank is financing 100% tuition fees 2. Everyone need not to avail the facility of loan 3. The maximum limit for education loans is 25 lakhs.

Pay component	Amount	Deduction Amount		EMI	Household expendi- ture
Basic pay	56100/-	NPS	5610/-		
DA 35%	19635/-	GIS	60/-		
NPA $@25\%$	18934/-	Income	10688/-		
		tax			
Medical Allowance	500/-				
Gross Salary	95,169/-				
Net salary	78811				
Total				1,02,0	002/5,000/-

Figure 1: Table 1 :

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	EMI	Gross salary	Deductio n for NPS	Income Tax	Net Salary	Household Expendi- ture	Disposable income
1 st Year	1224	1202.5	68.8	128.3	1004.7	300	704.7
2 nd Year	1224	1313.3	70.9	161.5	1080.2	317.1	763.1
3 rd Year	1224	1434.8	73	197.9	1162.4	326.8	835.6
4 th Year	1224	1682.6	79.3	272.3	1329.6	341.5	988.1
5 th Year	1224	1809.7	83	310.4	1414.8	360.9	1053.9
6 th Year	1224	1914.6	85.5	341.8	1485.7	419.5	1066.2
7 th Year	1224	2044.5	88.1	380.8	1574.1	458.5	1115.5
8 th Year	1224	$2179.\ 3$	90.8	421.3	1665, 8	482.9	1182.9
9 th Year	1224	2312.7	93.8	461.3	1756.9	539	1217.8
10 th Year	1224	2436.2	96.7	498.4	1840.5	578.1	1262.4

Figure 2: Table 2 :

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	EMI	Gross salary	Deduction for NPS	on GIS	Income tax	Net salary	Household Expendi- ture	Disposable income
1 st year	12.24	12.02	0.69	0	1.28	10.04	3	7.04
2 nd year	24.48	25.15	1.39	0.04	2.89	20.84	6.17	14.67
3 rd year	36.72	39.5	2.12	0.02	4.87	32.47	9.43	23.03
4 th year	48.96	56.33	2.92	0.04	7.59	45.76	12.85	32.91
5 th year	61.2	74.42	3.75	0.05	10.7	59.91	16.46	43.45
6 th year	73.44	93.57	4.6	0.07	14.12	74.77	20.65	54.11
7 th year	85.68	114.02	5.48	0.08	17.93	90.51	25.24	65.27
8 th year	97.92	135.81	6.39	0.1	22.14	107.17	30.07	77.1
9 th year	110.16	158.94	7.33	0.1	26.75	124.74	35.46	89.27
10 th year	122.4	183.3	8.3	0.11	31.74	143.14	41.24	101.9

Figure 3: Table 3 :

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