Why medical students do not like to join rural health service? An exploratory study in India

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ABSTRACT

Introduction: Inadequate, inequitable distribution of the medical workforce remains a challenge across the globe, and India is no exception. Odisha, a state in India faces a major shortage of doctors particularly in rural and remote areas. In order to address this challenge, it is essential to understand medical students' career plans, specialization preferences, choices of job location and sector, and views on working in rural and remote areas. This study explored the immediate and long-term career plans of final year medical students, their intended practice locations and underlying reasons for the choices. **Methodology:** A cross-sectional survey was conducted in all the medical colleges (three government and three private) in the state of Odisha. Through the systematic sampling method, data were gathered from 390 final year students. A semi-structured questionnaire was administered to the students and data were analyzed using SPSS version 20. **Results:** Of the 390 students, 290 (74.35%) were from a government college. The most preferred immediate career goal was postgraduation studies (45.9% of students in government medical schools and 54% in private). About 17% of government students and 9% of private students showed willingness to work in rural areas, in the long run. Nearly 44.5% mentioned opportunities for career growth, followed by the possibilities for higher education (26.8%) as major the factors for preferring an urban posting. Similarly, higher pay scales, better working conditions were major factors for preferring the private sector. Most of the students maintained that good housing, better salaries, and adequate facilities at the workplace would attract more students toward rural service. **Conclusion:** Since public funded medical students are not motivated to serve in rural settings, increasing the number of places or establishing new medical institutions may not be an effective solution to the issue. Approaches such as extended clinical apprenticeship in rural health facilities, long-term community engagement during medical studentship could be considered.

Key words: Career choice, health workforce, medical students, public sector, rural health

INTRODUCTION

Many countries in the developing world are plagued with challenges of inadequate and inequitable distribution of the health workforce.[1] The result of this lack of qualified medical professionals in rural areas is that the majority of rural households receive medical care from private providers, many of whom may not be properly qualified.[2]

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India is no exception to this chronic shortage of medical doctors. According to recent estimates, the country has a doctor population ratio of 1:1800 compared to the World Health Organization prescribed norm of 1:1000.[3] Of all Indian states, Odisha faces the worst shortage of doctors with around 30% of doctors' posts at various levels were vacant across the state.[4] The number of medical doctors per 10,000 populations in the state is 3 times lower than that of other states such as Goa and Kerala. Since independence, only three government medical colleges have been set up in the state with a population of around 40 million resulting in a shortage of doctors.[5] Of late, the government of Odisha has initiated moves to address this issue by establishing new medical colleges (both private and public) and increase the student intake in the existing colleges. However, the production of a large number of doctors may not be the answer to the issue since the

majority of doctors are not interested in working in the government health system, much less in rural and remote locations.[6]

Studies have demonstrated that career preferences made while in the medical school could be a strong predictor of students' subsequent career choices. Students usually begin to consider career paths soon after their entry into medical colleges, and these ideas get crystallized by the time they are in their final years. It has been observed that many students end up in careers that are closely related to the choices they made in the final years of medical school.[7] Nevertheless, making a career choice is a complex personal decision determined by a variety of extrinsic and intrinsic factors including medical school characteristics (proportion of faculty who are family physicians), personal interactions and lifestyle preferences, personal fit and workforce factors, expected income, prestige, job opportunities, longitudinal care and societal needs.[8] Understanding the final year medical students' career intentions and identifying the factors influencing these decisions is critical. Therefore, career advice should be available during this period.[9,10]

Information on career preferences and intended practice locations of the medical students provide useful insights into the planning of the health care workforce, particularly the future distribution of physicians across regions. Studies conducted in Asian countries have shown that medical students prefer hospital-based clinical specialties, want to practice in urban locations and work in the private sector.[11,12] This results in lack of doctors in the rural areas and public facilities.[11,13] In view of the continuing challenges of physician shortage in India, an understanding of our medical students' prospective career plans, their specialization preferences, choices for job location and sector, and views on working in rural and remote areas is essential for appropriate planning of human resources. Limited studies have focused on medical students' career aspirations and their determinants in India. The present study, explored the immediate and long-term career intentions of final year medical students, assessed their intended practice locations and identified the underlying reasons in order to fill these information gaps.

METHODOLOGY

This cross-sectional study was conducted in Odisha from April to July 2012. There are three government and three private medical colleges in Odisha, all of which were included. According to Medical Council of India guidelines, all government and private medical colleges offer a 4½ years Bachelor of Medicine and Bachelor of Surgery (MBBS) course with a 1-year compulsory rotating internship. At the time of study, the total number of final year students was 600, 390 of whom, were selected through a random sampling method. With an expected prevalence of 50% students willing to join rural service soon after the completion of their course, for 80% power and 5% margin of error, the sample size was estimated to be 384. After considering 10% nonresponse rate, the total number of students required for the study was 426. First, from each medical college, the list of final year students was obtained and with their roll number entered into Statistical Package for Social Science (IBM SPSS Statistics for Windows, Version 20.0. Armonk, NY: IBM Corp). Of the 600 students, a list of 426 students was arrived at through simple random sampling method using random number generator in SPSS for each college. All the identified students were contacted, and 390 of them gave their consent to participate (response rate was 91.5%). Of 36 students who did not respond, 21 were absent on the day of the survey, and 15 refused to participate in the study.

A semi-structured questionnaire was developed in consultation with experts and was pretested. A pilot survey was carried out among 20 nonsampled students in the study setting to test for consistent reliability (Cronbach $\alpha = 0.70$) for final sample size 390.

The questionnaire consisted of closed and open-ended items and elicited information on the following:

a. Sociodemographic information of the respondents
b. Specialization of choice and career plans after MBBS
c. Their job preferences (Rural/Urban and Government/Private) and the reasons for their choice
d. Various factors are important to the respondent for joining or not joining rural service
e. Medical students' perceptions of working in rural areas
f. Job attributes that would be important for the respondent to consider working in rural areas

Data analysis

The quantitative information were entered into the Microsoft Excel and imported to Statistical Package for Social Sciences (SPSS version 20). Individual component-wise analyzes were done using tables with percentages and proportions. Analysis of the sociodemographic characteristics was done. Chi-square test together with a univariate analysis was done to estimate unadjusted odds ratio (OR) and 95% confidence interval (CI). A multivariate analysis was done for significant variables to identify the associated factors and reported with adjusted OR and 95% CI. The qualitative responses were listed verbatim, and by repeatedly going through them, the summary of the responses were identified and presented. Only key findings from the qualitative research have been described in this article.

Ethics statement

Permission was obtained from the college authorities

concerned. An explanation was given to the students about the purpose and process of the study. Written informed consent was obtained from each participant before the questionnaire was administered. The identities of the respondents were kept anonymous by coding.

The study was approved by the Institutional Ethics Committee, Indian Institute of Public Health, Bhubaneswar, Public Health Foundation India.

RESULTS

Of the total of 390 students who participated in the study, 290 (74.35%) were from government colleges. The mean age of the students was 25 years (standard deviation: 2.3 years). The male: female ratio was 2:6. Government colleges were found to have more male students (81.0%) than females (19.0%), whereas in the private colleges male (48.0%) and female students (52.0%) were almost equal. Totally, 90% of students had an annual family income of >300,000 INR (~5172 USD). More than half of the students in government colleges had completed their high school education in the regional language medium, and 65% of the private college students were from English medium schools. In both types of colleges, the majority of students belonged to urban/semi-urban area. Of 390, 304 (78.0%) students chose the medical profession on their own. Around 68%, (263) students were fully financed by their parents [Table 1].

All students were asked to describe their short-term as well long-term career goals. Out of 290 government students, 133 (45.9%) wanted to do postgraduation studies (PG) soon after completing MBBS. Nearly 30% students indicated their willingness to work in rural areas after graduation while only 17% (51 of 290) showed an interest to work there in the long-term [Figure 1]. More students from private colleges preferred to go directly for PG (54%) than get a job (46.0%). Only 5 (9.2%) out of 54 students were ready to work in a rural area after completion of their PG. Of the 46 students who wanted to get a job immediately after graduation, only 3 (6.52%) wanted to work in a rural area, and 5% of the students expressed their interest to work in rural areas in the long-term [Figure 2].

An univariate analysis showed that being male (OR: 2.0, 95% CI: 1.28–3.15), students with family income >5 lakhs (~8621 USD) per annum (OR: 3.75, 95% CI: 1.64–8.6), having gone to school in an urban area (OR:

Table 1: Sociodemographic distribution of students

Variables	Categories	Frequency (%)			*P* value*
		Government (*n*=290)	Private (*n*=100)	Total (*n*=390)	
Mean age (SD)		25.50 (2.15)	23.06 (1.94)	24.87 (2.35)	
Sex	Male	235 (81.0)	48 (48.0)	283 (72.6)	<0.0001
	Female	55 (19.0)	52 (52.0)	107 (27.4)	
Marital status	Unmarried	247 (85.2)	98 (98.0)	345 (88.5)	0.001
	Married	43 (14.8)	2 (2.0)	45 (11.5)	
Annual household income	1-3 lakhs	39 (13.4)	0 (0.0)	39 (10.0)	<0.0001
	3-5 lakhs	129 (44.5)	35 (35.0)	164 (42.1)	
	>5 lakhs	122 (42.1)	65 (65.0)	187 (47.9)	
Medium of education in school	English	102 (35.2)	65 (65.0)	167 (42.8)	<0.0001
	Local	188 (64.8)	35 (35.0)	223 (57.2)	
SSC/10th completion place	Rural	109 (37.6)	11 (11.0)	120 (30.8)	<0.0001
	Urban	101 (34.8)	76 (76.0)	177 (45.4)	
	Semi-urban	80 (27.6)	13 (13.0)	93 (23.8)	
Selection of profession	Own	220 (75.9)	84 (84.0)	304 (77.9)	0.091
	Family	70 (24.1)	16 (16.0)	86 (22.1)	
Finance for the course	Parents	209 (72.1)	54 (54.0)	263 (67.4)	<0.0001
	Other family member	63 (21.7)	20 (20.0)	83 (21.3)	
	Relatives	18 (6.2)	26 (26.0)	44 (11.3)	
Long-term career plan	Work with government	186 (64.1)	48 (48.0)	234 (60.0)	0.005
	Work with private	41 (14.1)	15 (15.0)	56 (14.4)	
	Own clinic	57 (19.7)	28 (28.0)	85 (21.8)	
	Others	6 (2.1)	9 (9.0)	15 (3.8)	
Short-term plan	Government job	113 (38.96)	24 (24.0)	137 (35.2)	<0.0001
	Private job	44 (15.17)	22 (22.0)	66 (16.9)	
	PG	133 (45.9)	54 (54.0)	187 (47.9)	

SSC: Secondary school certificate; SD: Standard deviation; PG: Post graduation; *Chi-square test

2.59, 95% CI: 1.56–4.29), studying in a private college (OR: 1.93, 95% CI: 1.22–3.06), interest in working in an urban area and having a plan for higher studies (PG 13.82) were significantly associated with choosing to work in the private sector. After multivariate analysis, and controlling for all the variables, only an annual family income of >5 lakhs (~8621 USD) (OR: 2.77, 95% CI: 1.10–6.95) and PG study plan (OR: 4.90, 95% CI: 2.48–9.68) (OR: 5.89, 95% CI: 2.84–12.23) remained significant for choosing to work in the private sector [Table 2].

Students were asked in detail about the contributing factors for wanting to work either in a rural or urban area. Of 56, 23 (42%) students chose the rural area because they belonged there [Table 3]. Nearly 44.5% mentioned opportunities for career growth, followed by more scope for education (26.8%) as the leading reasons for wanting an urban posting [Table 3]. Most of the students opined that good housing, better salaries and adequate facilities in the workplace would attract more students toward service in the rural areas [Table 4]. Increased salary, better working conditions were the leading reasons for choosing to work in the private sector, whereas respect in the community, job security, career growth were leading reasons for wanting to work in the government sector [Table 5].

Table 2: Univariate and multivariate analysis for factors responsible rural choice

Variables	Category	Unadjusted OR (95% CI)	Adjusted OR (95% CI)
Sex	Female	Reference	Reference
	Male	0.76 (0.41-1.40)	0.67 (0.33-1.33)
SSC/10th completion place	Urban	Reference	Reference
	Rural	4.15 (2.41-7.14)*	3.35 (1.86-6.01)*
Short-term plan	PG	Reference	Reference
	Job	3.15 (1.76-5.62)*	2.72 (1.8-5.0)*
Types of college	Private	Reference	Reference
	Public	3.06 (1.41-6.65)*	2.00 (0.87-4.64)
Final choice of place of work	Private	Reference	Reference
	Public	2.56 (1.40-4.67)*	1.84 (0.96-3.52)

*P<0.05. SSC: Secondary school certificate; OR: Odds ratio; CI: Confidence interval

Table 3: Reasons for interest in rural and urban postings

Rural area posting	Response (*n*=56)
	Belong to rural area (42.0)
	Respect in community (29.0)
	Low cost of living (29.0)
Urban area posting	Response (*n*=321)
	Career growth (44.5)
	Scope for education (26.8)
	Better lifestyle (24.0)
	Earning is more (4.7)

DISCUSSION

Insufficient number of doctors in public health system is a matter of concern for Odisha.[14] To address the scarcity of physicians in rural areas, the state government has introduced a range of initiatives including compulsory service in the rural areas for medical graduates. To support this, the following educational incentives will be provided: Reserved places for PG training for those who work in the rural areas, establishment of private medical colleges and the conversion of some district hospitals into medical colleges, and an increase in the number of places in the existing institutions.[14] For these interventions to be effective, it is important that the future physicians have the inclination and intention to serve in public and rural health facilities. We, therefore, sought to understand the career choices of would-be-graduates of medical schools and their interest in working in public health system particularly in the rural areas. Altogether, 390 students from both public and private funded medical colleges participated in the study.

We found the proportion of male-female students to be almost equal in private medical colleges. Similar

Table 4: Suggestions to attract rural postings

Factors	Priorities for rural posting *N* (%)
Free housing	122 (31.3)
Increase in salary	92 (23.6)
Improve infrastructure	53 (13.6)
Career growth	35 (9.0)
Improve transport	29 (7.4)
PG place	27 (6.9)
Educational allowance	20 (5.1)

PG: Post graduation

Table 5: Reasons to work in private and public sector

Reasons	*N* (%)
Reasons to work in private sector (*n*=156)	
High salary	35 (22.4)
Good working condition	75 (48.1)
Urban location	23 (14.7)
Career opportunity	20 (12.8)
Others	3 (1.9)
Reasons to work in public sector (*n*=234)	
Respect in the community	83 (35.5)
Job security	59 (25.2)
Career growth	41 (17.5)
Good salary	37 (15.8)
Scope for private practice	6 (2.6)
Less workload	3 (1.3)
Pension	1 (0.4)
Others	4 (1.7)

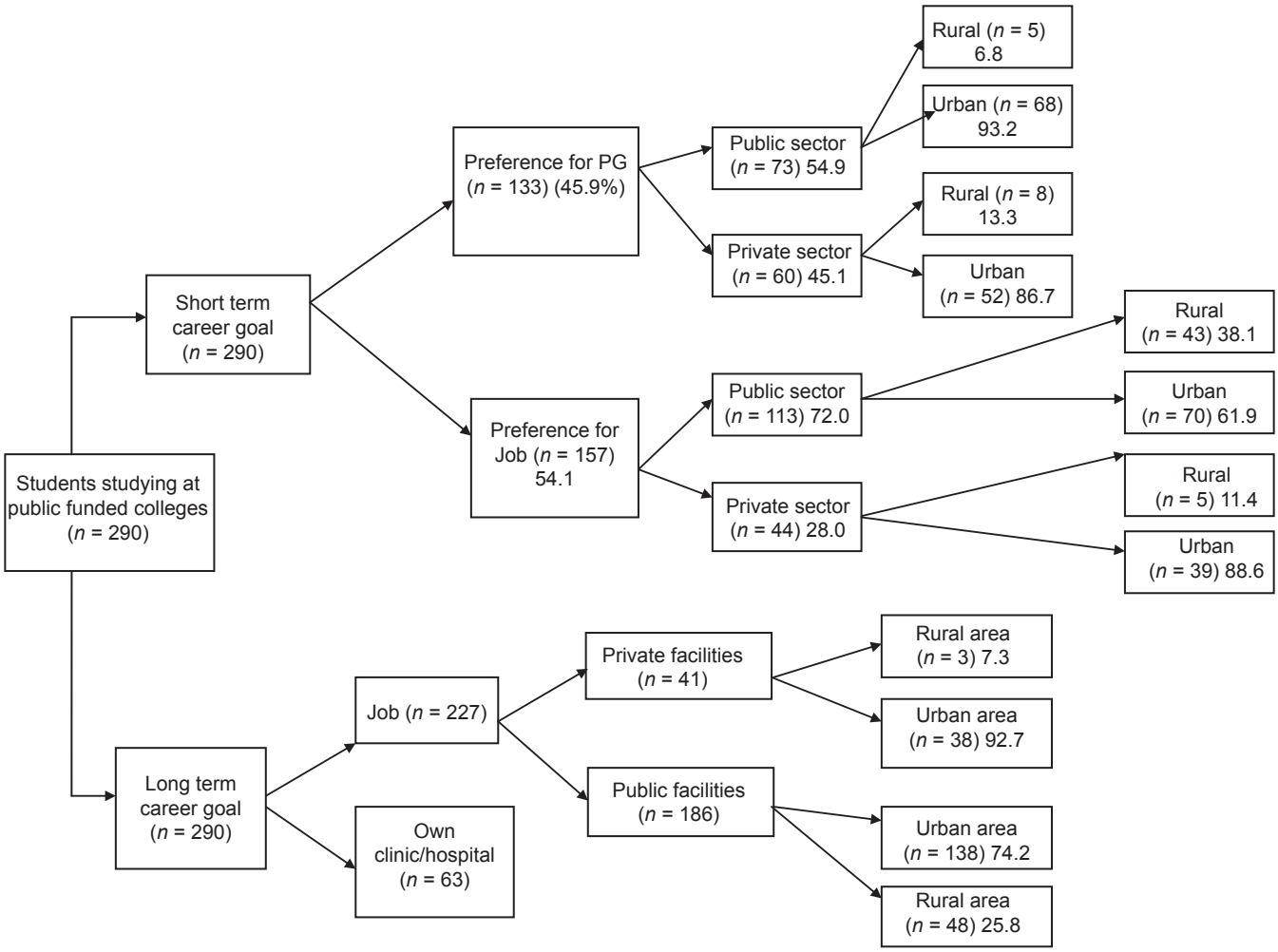

Figure 1: Career choices among student studying in government funded colle

observations were made in another state in India.[15] However, the surprise was the skewed male-female ratio observed in public medical colleges. One possible reason could be the declining interest of female students to go through the existing very competitive process of entering a public medical school. Compared to private colleges, more students in the public medical schools had a rural background and had a low annual family income. Since the education/tuition fee in public schools is highly subsidized, it gave students with low family incomes the opportunity to enroll. As everything is self-financed in the private schools, only students who can afford to pay the fees are able to enroll. The use of the vernacular as a medium of education was found to be predominant in public schools. This is expected since the majority of Odisha's population is rural, the schools in these areas predominantly use the local language as the medium of instruction. Students in private medicals schools, however, from affluent and urban backgrounds, had their formative education mainly in English.[15] The most preferred immediate aim was to get into PG (specialization). The majority of students wanted to go for specialization rather than work as a general practice (GP). This has critical implications for primary care, the core of any public health care delivery system. It is argued that the result of the urban-based, specialized care and hospital-centered model of medical education is that physicians with any form of specialization were more likely to want to work in the private sector, and in urban areas.[16] A study conducted in India revealed that undergraduate medical students preferred to do PG course because they felt that they could not manage patients with the inadequate knowledge they acquired as undergraduates. They, therefore, would rather take PG courses than join the medical service immediately after graduation.[17]

In India, primary health care is delivered through Primary Health Centers (PHCs) and Community Health Centers (CHCs), which are aligned to GP. General practitioners with only MBBS degree would serve the purpose here. At present one-third of the state's PHCs and CHCs are managed without doctors. Thus, since more students would rather be specialists, filling the existing vacancies in the near future might be difficult. Similar findings have been reported by other studies.[18,19] Nevertheless, increased interest among medical students for specialization reflects the

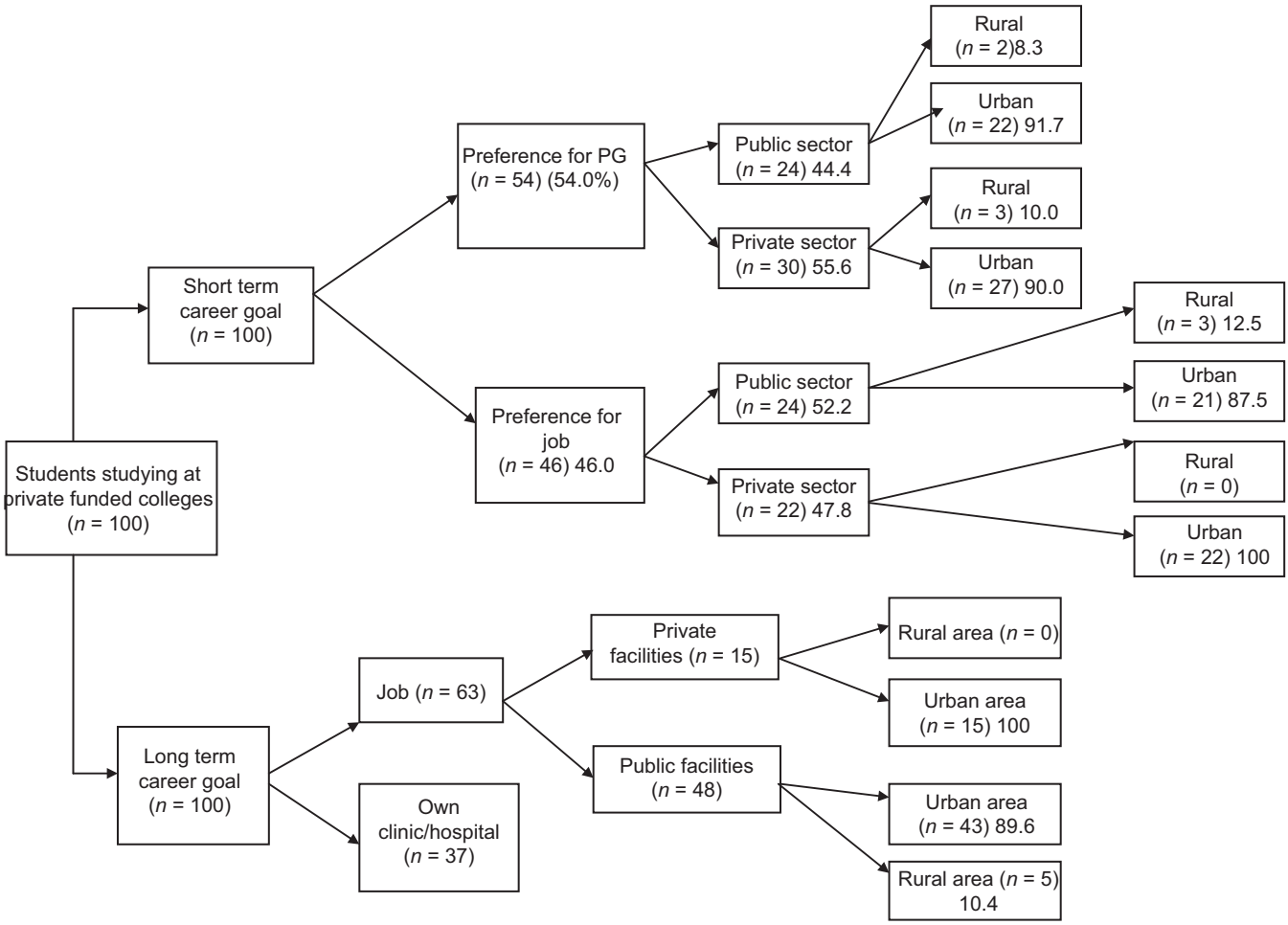

Figure 2: Career choice among student studying in private funded colleges

current medical education system, in which students are taught in a tertiary care environment with very minimal exposure to community-based health care. Therefore, it is natural for them to opt for a specialist career from the very beginning. Consideration should be given to the establishment of academic disciplines in GP or primary care in India as is done in the West.[20] Another strategy could be to initiate community-based medical education in all medical colleges. It was clear that students who underwent extended rural placement while in the medical school expressed a stronger desire to work in a rural area after graduating.[21] At present, in Odisha, medical students have a very short community engagement under the department of social and preventive medicine. Clinical apprenticeship in a rural area could provide a greater exposure of students to health care delivery in the community.

In Odisha, 85% of the total population is in rural areas and 15% in urban areas.[22] It is essential that, more than two-thirds of the total number of government doctors be placed in rural health settings.[23] In our study, only 17% of the medical students wanted to work in rural areas, although most of the public health care facilities are rural-based. Since most of these students have spent their formative phase in an urban environment, it might be difficult for them to change their attitude toward work in the rural area. A few may consider this as a temporary move in order to avail themselves of the opportunity for preferential admission to a PG program. Contrary to the common assumption that students from the rural background would want to work in rural areas, our study observed that irrespective of the place of birth and upbringing, an urban placement held a priority for most. Even students with rural upbringing or those whose homes were in the rural areas did not contemplate work in the same environment. This requires further investigation. An in-depth exploration especially qualitative probing may be helpful. Medical educationists have advocated rural medical schools as a strategy to address the growing unwillingness of students for rural medical careers.[20] Accordingly, countries like Australia have started rural clinical schools. These schools are expected to produce physicians who are sensitive to the health care needs of the rural community and interested in working in those settings.[24] Unless similar efforts are made in India to divert a considerable proportion of future physicians to the rural areas, they would simply be stationed in urban settings, which will still militate against meeting the current deficit of rural physicians.

The major urge to work in rural areas was gaining prestige in the community, rural background, low cost of living and poor socioeconomic status while incentives suggested for joining the rural service were free housing, higher salaries, improved infrastructure, opportunities for career growth, having an advantage for admission to PG study. Studies conducted in India as well as other low and medium income countries have reported similar findings.[25-27] What is worrying is that students who graduated from medical colleges funded from public resources are inclined not to work in the public sector. One of the reasons could be that since more than two-thirds of public health facilities in the state are located in the rural areas, most students perceive public health service as synonymous to rural service. Even those who indicated a preference for the public service would do so only if the health facility were located in an urban area. This perception of work in the public health sector cannot be changed in the minds of future physicians without a concerted effort on the part of the authorities.

CONCLUSION

The current government strategies to address the shortfall of health workers in rural settings may be ineffective without the infusion of some inducements, and unless these jobs are made lucrative for the physicians. Since publicly funded medical students are not sufficiently motivated to serve in public or rural settings, simply increasing the number of places or establishing new medical institutions would not be successful as a strategy. Innovative approaches such as extended clinical apprenticeship in rural health facilities and long-term community engagement while in the medical school could be considered. Existing medical colleges should promote primary care or GP as a discipline. Establishing medical colleges in rural or remote areas might be another option. With the present state of affairs, recruitment and retention of physicians in rural areas appear to remain a perpetual challenge for the government.

REFERENCES

1. Chen L, Evans T, Anand S, Boufford JI, Brown H, Chowdhury M, *et al*. Human resources for health: overcoming the crisis. Lancet 2004;364:1984-90.
2. The World Health Report 2006 Working Together for Health. Geneva, Switzerland: World Health Organization; 2006. Available from: http://www.who.int/whr/2006/whr06%5Fen.pdf. [Last accessed on 2014 Jun 04].
3. Deo MG. Doctor population ratio for India – The reality. Indian J Med Res 2013;137:632-5.
4. Reporter S. Severe Shortfall of Doctors in Odisha. The Hindu; 2014. Available from: http://www.thehindu.com/todays-paper/tp-national/severe-shortfall-of-doctors-in-odisha/article5932784.ece. [Last accessed on 2014 Jun 04].
5. World Bank. India's health workforce: Size, composition, and distribution. Washington, DC: World Bank; 2009. http://documents.worldbank.org/curated/en/2009/08/16411919/indias-health-workforce-size-composition-distribution.
6. Gupta M. State Health Systems: Orissa. Working Paper; 2002. Available from: http://www.icrier.org/pdf/WP__89.pdf. [Last accessed on 2012 Dec 28].
7. Kakkar AK, Dahiya N. Factors affecting choice of future specialty among medical students. N Am J Med Sci 2014;6:181-2.
8. Wright B, Scott I, Woloschuk W, Brenneis F, Bradley J. Career choice of new medical students at three Canadian universities: Family medicine versus specialty medicine. CMAJ 2004;170:1920-4.
9. Scott I, Wright B, Brenneis F, Brett-Maclean P, McCaffrey L. Why would I choose a career in family medicine? Reflections of medical students at 3 universities. Can Fam Physician 2007;53:1956-7.
10. Mahoney R, Katona C, McParland M, Noble L, Livingston G. Shortage specialties: Changes in career intentions from medical student to newly qualified doctor. Med Teach 2004;26:650-4.
11. Zulkifli A, Rogayah J. Career preferences of male and female medical students in Malaysia. Med J Malaysia 1997;52:76-81.
12. Nath A, Malhotra R, Ingle G, Lal P, Malhotra C. Career aspirations and apprehensions regarding medical education among first year medical students in Delhi. Indian J Community Med 2007;32:217.
13. Karalliedde LD, Senanayake N, Aluwihare AP. Career preferences of the 1984 medical graduates of Sri Lanka. Med Educ 1986;20:64-8.
14. Raha S, Berman P, Rao KD. Challanges in Recruitment of Doctors by Government; 2009. Available from: http://www.phfi.org/images/pdf/hrh_policy_note_4.pdf. [Last accessed on 2014 Nov 10].
15. Diwan V, Minj C, Chhari N, De Costa A. Indian medical students in public and private sector medical schools: Are motivations and career aspirations different? – Studies from Madhya Pradesh, India. BMC Med Educ 2013;13:127.
16. Dussault G, Franceschini MC. Not enough there, too many here: Understanding geographical imbalances in the distribution of the health workforce. Hum Resour Health 2006;4:12.
17. Rao K, Ramani S, Murthy S, Hazarika I, Kandpur N, Choksi M. *et al*. Health Worker Attitudes Toward Rural Service in India: Results from Qualitative Research. HPN Discussion Paper; 2010. Available from: http://www.hrhresourcecenter.org/node/3326. [Last accessed on 2014 Jun 06].
18. Rao KD, Ryan M, Shroff Z, Vujicic M, Ramani S, Berman P. Rural clinician scarcity and job preferences of doctors and nurses in India: A discrete choice experiment. PLoS One 2013;8:e82984.
19. Singh T. Career choices of Indian medical students. Natl Med J India 2012;25:376.
20. Hays R, Sen Gupta T. Ruralising medical curricula: The importance of context in problem design. Aust J Rural Health 2003;11:15-7.
21. Laurence C, Newbury J, Wilkinson D. Increasing rural activity and curriculum content in the Adelaide University Medical School. Aust J Rural Health 2002;10:220-8.
22. Gupta M. State Health Systems: Orissa. New Delhi: Indian Council for Research on International Economic Relations; 2002. Available from: http://www.icrier.org/pdf/wp__89.pdf. [Last accessed on 2014 Jun 04].
23. Outcome Budget 2012-13. Government of Odisha. Bhuabneswar: Ministry of Health and Family welfare, GoO. Available from: http://www.odisha.gov.in/finance/Budgets/Outcome_Budget_2012_13/H_FW_2012_13.pdf. [Last accessed on 2014 Jun 04].
24. Lawson KA, Chew M, Van Der Weyden MB. A revolution in rural and remote Australia: Bringing health education to the bush. Med J Aust 2000;173:618-24.
25. Rao M, Rao KD, Kumar AK, Chatterjee M, Sundararaman T. Human resources for health in India. Lancet 2011;377:587-98.
26. Saini NK, Sharma R, Roy R, Verma R. What impedes working in rural areas? A study of aspiring doctors in the National Capital Region, India. Rural Remote Health 2012;12:1967.
27. Kadam S, Pati S, Hussain MA, Nallala S, Chakravarty N, Panda B. *et al*. Assessment of factors influencing retention of health workforce in rural and remote areas of Odisha, India. BMC Proc 2012;6:04.

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