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Chapter 3

Nursing Students in India: A Preliminary Analysis

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Abstract

The international mobility of nurses has recently increased. As India is estimated to be the second largest 'exporter' of nurses to developed countries under the current internationalised nurse labour market, this paper discusses the socio-economic background, motivations to become nurses and future career prospects of nursing students in India. BSc students are more likely to be Christians, urban and relatively well-off than diploma students. Less than half of the students chose to study nursing of their own will, and ease of finding a job is the most popular reason to study nursing. Religion, caste, course and some motivation factors seem to affect their career prospects.

Keywords: Nurses, Education, International Migration

1. Introduction

Due to caste and religious norms (i.e. purity, pollution and seclusion), nurses in India are traditionally regarded as lower on the occupational pyramid despite requiring higher education. Nurses come into contact with many unknown patients, deal with all types of bodily fluids and, from some patients' points of view, seem to be engaged in a type of work that resembles simple household chores. The stigma and moral suspicion attached to nursing prevent many Hindus and Muslims from entering the nursing profession. Therefore, nursing used to be regarded as a job mainly for Christian women.

However, traditional and cultural constraints on occupational choice have been gradually transformed by increasing overseas employment opportunities and remittances. The emigration of nurses from India on a small scale dates back to as early as 1950. In the 1970s, many nurses migrated to the Gulf countries, where hospital construction was booming. A much larger outflow of nurses to various countries began in the 1990s, as it

became easier to apply for passports and visas (Healey, 2013). In recent years, developed countries have demanded more nurses due to population ageing, a shortage of homegrown nurses and the lack of ability and availability to take care of their dependents under the current demographic and economic transformation. India is reported to be the second largest 'exporter' of nurses to some developed countries after the Philippines (OECD, 2015). The estimated number of Indian nurses abroad was reported to be 640,078 in 2011 (Irudaya Rajan and Nair, 2013). English proficiency is a competitive advantage for Indian nurses in English-speaking developed countries and Gulf countries.

The economic benefit of nurses' increased international migration has had some effects on nurses' social status (Johnson et al., 2014; Prescot and Nichter, 2014; Garner et al., 2015). Some have argued that individual nurses have higher value in the arranged marriage market due to higher earnings, larger dowries and opportunities for the husband and his family to settle abroad (Percot and Irudaya Rajan, 2007). Becoming a nurse today is increasingly regarded as a pathway to overseas employment. Having a child become a nurse is an elaborate family strategy in India (Redfoot and Houser, 2005; Percot and Irudaya Rajan, 2007).

From nursing education providers' point of view, the growing global demand, coupled with other factors, has led to the establishment of a large number of nursing institutions (Blythe and Baumann, 2009; Spentz et al., 2014). This growth is further accelerated by the state. The National Health Policy (2002) states that the ratio of nurses in in India vis-à-vis doctors/beds is very low according to professionally accepted norms and the country needs more nurses trained in super-speciality disciplines. Accordingly, the number of private institutions that offer nursing diploma programmes has increased since the mid-1990s, followed by an increase in the number of private institutions offering BSc degrees in nursing since the early 2000s (Irudaya Rajan, Oda and Tsujita, 2017).

As a result, nursing education has become a lucrative business. Big healthcare groups invest an average of \$4,700–\$7,000 USD to train each nurse and earn as much as \$47,000 USD once a student is placed abroad (Khadria, 2007). Healthcare facilities also use nursing students as 'free' healthcare staff. The privatisation of nursing education gives younger students more opportunities to become nurses; however, it often creates a problem with quality. The Indian Nursing Council, a regulatory body responsible for setting and maintaining the training of nurses, eased the criteria for establishing nursing institutions and matters related to nursing courses in the late 2000s (Bablu, 2009). One of the major regulatory weaknesses in India's healthcare system is related to professional regulation and certification, which influence training quality (Walton-Roberts, 2015). The

inspection and recognition of institutions, which is within the purview of each state nursing council, results in divergent standards across states. Hence, the quality of nursing education is polarised (Redfoot and Houser, 2005; Hindu, 2007). A survey found that 61% of nursing institutions were unsuitable for teaching and had an acute shortage of faculty and facilities (Rao et al., 2011). Our interviews with anonymous inspectors from November 2016 to January 2017 in the southern part of the country found that there were unrecognised institutions providing fake certificates even after students paid high tuition fees. Furthermore, some institutions offered a very low quality of education. Management would often attempt to do 'quick fixes' to meet the criteria, such as improving physical infrastructure, clinical facilities and teaching facilities, only at the time of inspection. Unannounced inspections are unlikely to solve these problems 'due to political pressure and inspector corruption' (Oulton and Hickey, 2009).

The quality of nursing education partly explains why nursing degrees and diplomas from Indian institutions are not automatically recognised in developed countries (Yeats, 2009). By contrast, mutual accreditation of nursing qualifications has emerged in some countries. In the case of India, degrees from four nursing institutions are recognised in Singapore under the Mutual Recognition Agreement; nurses with degrees from these institutions can practise in Singapore without any additional qualifications (Seth, 2015), although this agreement is not yet in practice.

Against this background, this chapter aims to fill the gap in knowledge about nursing students. In particular, this chapter analyses students' socio-economic background, motivations and future prospects based on our primary survey in Tamil Nadu in India. The analysis of nursing students and their potential future careers is important for two reasons: First, even after quite a large number of nursing educational institutions have been established, India still suffers from a shortage of nurses. The country's registered nurses and midwives amounted to approximately 1.8 million in 2015, and the World Health Organisation¹ estimates that 2.4 million more nurses are required. The country needs a larger nursing workforce of excellent quality. Second, as discussed earlier, due to population ageing, a shortage of homegrown nurses and the lack of ability and availability to take care of their dependents, developed countries are likely to recruit more nurses including those from developing countries. Nursing students might be an important workforce not only in India but also in developed countries in the future.

The remainder of this chapter is organised as follows: Section 2 provides a brief

¹ http://www.who.int/bulletin/volumes/88/5/10-020510/en/

background and describes the data collection process. Section 3 presents an analysis of nursing students in terms of their socio-economic background, motivations and future career prospects. The last section offers a summary of the major findings.

2. Background and Data Collection

2.1. Brief Background

Tamil Nadu is located at the southeast end of the Indian subcontinent. The share of Christians in its population is 6.1%, and the female literacy rate is 73.9%, higher than the average of the nation (65.5%). The state established India's first council of nursing in the Madras Presidency during the British colonial period, as well as the first college of nursing in India.

In the past, three-year diploma programmes, locally termed general nursing programmes, were more common than four-year BSc nursing programmes. Until 1976, only one private institution in the state offered a BSc nursing programme; it admitted only 100 students per year (Tamil Nadu Nurses and Midwives Council website).² In the late 2000s, the number of institutions offering nursing education increased significantly, particularly those offering BSc nursing programmes. In 2017, recognised institutions in the state offered more admission seats in BSc nursing courses (10,035 in 186 colleges) than in nursing diploma courses (6,775 in 205 schools) (Tamil Nadu Nurses and Midwives Council website).³ BSc nursing is becoming increasingly popular in India, including Tamil Nadu.

The admission process for nursing programmes in Tamil Nadu involves a series of nursing and paramedical counselling sessions conducted for government and a large number of private colleges. Students who are interested in studying nursing are invited for counselling and admitted to diploma and/or BSc courses based on their social background and merit rank.⁴

2.2. Data Collection

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This study is part of a much larger survey in two states in India. Data were collected mainly through face-to-face interviews with students at two nursing institutions in

https://www.tamilnadunursingcouncil.com/snp03.php and http://www.tamilnadunursingcouncil.com/snp04.php (accessed on 16 November 2017)

³ https://www.tamilnadunursingcouncil.com/recognised_institutions.php (accessed on 12 March 2018)

⁴ https://mbbscounselling.co.in/paramedical-counselling-2016-2017-seat-allotment-and-counselling-process/ (accessed on 15 March 2017)

Chennai, Tamil Nadu, using a pretested structured questionnaire. By convenience sampling, a government institution and a private institution were selected for the sample. Both institutions have BSc nursing and nursing diploma programmes.

Government institutions are generally older than private institutions. The sample government institution started as a medical college and later added a nursing diploma course in 1967 before offering a BSc nursing course in 1983. Therefore, government institutions have a longer history as nursing teaching institutions than private institutions do. They are more competitive in terms of admission because they have established a reputation in nursing education and offer lower tuition fees than private institutions. The private institution in the sample only has nursing courses attached to a private hospital, and the diploma course was introduced in 1967, followed by the BSc nursing course in 2012.

The sample was restricted to all final-year students because they were presumed to be more self-aware of their future career prospects than younger students. The survey was carried out on campus as per the institutions' requirements from August to October 2016.

The survey was followed by interviews with principals and faculty from other nursing institutions, state government officials, nursing council officials, nurse recruitment agencies and researchers working in this area. Focus group discussions were conducted with groups of 5–10 final-year BSc nursing students from 22 institutions. These follow-up interviews where administered between January to July 2017. The data collection and analytical methods employed in this study constituted a mixed-methods approach that used both quantitative and qualitative techniques. Quantitative analysis was used to generalise the students' socio-economic background, motivations and career prospects, and qualitative analysis was employed to triangulate the quantitative findings and describe the reasons for the students' answers.

3. Data Analysis and Results

3.1. Socio-Economic Background

Table 1 presents the socio-economic background of the 221 students in the sample. There are 59 students in the BSc course and 162 in the diploma course. The government institution offers more diploma seats than BSc seats, whereas the private school has more

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⁵ For example, the annual tuition fees for BSc nursing in the sample government and private colleges are INR 7,500 and INR 40,000, respectively. Moreover, most of the students in the government college are on stipend.

students in the BSc course than in the diploma course. There is no male student in the diploma course and only three in the BSc course.

The proportion of Christian students (27.6%) far exceeds the proportion of the Christian population in the state (6.1% in Tamil Nadu as of the 2011 Census). This figure is higher in the BSc course (59.3%). Among the diploma students, 81.5% are Hindu. The Christian community of Kerala provides the state with 90.0% of its nurses and supplies the majority of nurses throughout India (Mohan, 1990). However, this sample proves that nursing is no longer exclusively dominated by Christians, particularly in the diploma course.

As for caste composition, more students from other backward classes (OBCs), scheduled castes (SCs) and scheduled tribes (STs) are found in the sample, ⁶ as government institutions have reserved seats based on caste, religion and community. By contrast, the number of students from general castes (i.e. relatively upper castes) in the entire sample is only seven. Nursing does not appear to be accepted in all castes in Tamil Nadu. It is also worth mentioning that only 43.4% of the students come from rural areas. This figure is particularly low among BSc students (17.0%).

Regarding their parents, Very few of the students' parents have reached the tertiary level of education. The most common occupations among fathers at the time of the students' admission are in unskilled labour (28.1%), agriculture (22.2%) and sales and trade (15.8%). Professional occupations such as advocate, company manager, government clerk, accountant and teacher are limited in both sample groups. This reflects, to some extent, the students' economic background. Nearly all the students have mobile phones and TVs, but only 1.9% of the students' parents have a car. Diploma students tend to have fewer consumer durables and other items than BSc students. Overall, BSc students are more likely to be Christians, urban and relatively well-off than diploma students.

Table 1. Socio-economic background of sample students

3.2. Motivation

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We assumed that overseas employment opportunities are a major motivation to study nursing, as employment opportunities abroad have become more available. We listed 13

⁶ SCs and STs are stipulated by the president or each state government in accordance with the Indian Constitution. SCs were traditionally known as 'untouchables' within Hindu society, while STs largely comprise aboriginal groups. OBCs are broadly defined as socially and economically backward groups other than SCs and STs.

potential reasons that students chose to study nursing and asked if each reason was applicable to the participants. Among the students in the sample, 86.0% think it is easy to find a nursing job (Table 2), 84.2% chose nursing to provide services to the sick and 80.5% chose it because they believe it offers a better salary. The reasons differ between BSc and diploma students (the results are not shown for brevity). BSc nursing students chose to study nursing because they think it is easy to find a nursing job (96.6%), because of the better salary (96.4%) and to help their family financially (71.2%). Diploma students chose to study nursing to provide services to the sick (90.1%), to improve their self-confidence in decision making (85.2%) and because of the ease of finding a nursing job (82.1%). Ease of finding a job is the most important reason for studying nursing in both groups. Getting a job overseas is the third most important reason for studying nursing in the sample.

The literature suggests that the motivation to become a nurse is often influenced by family circumstances, particularly in Kerala State in India (Johnson et al., 2014). Nearly half (47.6%) of the sample decided to study nursing on their own or made the decision jointly with family/relatives. The rest of the sample were persuaded by family, relatives and school teachers to study nursing. Our interviews with nursing schools and colleges revealed that many of them make efforts to motivate students to study nursing, such as through a mentor system or by inviting alumni. Parents tend to be keener and happier to send their child to study nursing than the children themselves (Irudaya Rajan, Oda and Tsujita, 2017).

Table 2. Reasons why students chose to study nursing

3.3. Future Prospects

The sample students are interested in taking government jobs; 90.1% are planning to take any government exam, including state government, central government, army, navy and air force exams. At the same time, they are interested in working abroad after graduating from the diploma or BSc course. The majority (67.9%) of students hope to take overseas employment opportunities. Among their preferred destinations, Gulf countries such as Saudi Arabia, Kuwait, United Arab Emirates, Oman and Qatar are the most popular, closely followed by Singapore, the United States, the United Kingdom and Australia (Table 3). BSc and diploma students have slightly different preferences. The former prefer Gulf countries (9 students) and the United States (8 students), while the latter would like to go to Singapore (24 students), Gulf countries (19 students) and the United States (18

students). Their preferred destinations are roughly consistent with the overall destinations preferred by Tamil emigrants, including Singapore, Gulf countries, the United States and Malaysia (Irudaya Rajan et al., 2017).

Table 3. Students interested in working overseas and the countries they prefer to work in (multiple answers)

3.4. Estimation

We examined students' willingness to take government exams and to work abroad. The sample in the analysis was confined to female students, as there are only three males in the entire study sample. A probit analysis was carried out to investigate the determinants of students' future prospects. Two dependent variables were examined. The first dependent variable was students' willingness to take any government exam; it was assigned a value of 1 if a student was interested in taking any government exam and 0 if otherwise. The second dependent variable was students' willingness to work abroad; it was assigned a value of 1 if a student was interested in working outside India and 0 if otherwise.

The explanatory variables are described in Table 4. The parents' type of house was a continuous variable (1 = Kucha house, 5 = luxurious house)⁷, and the remaining variables were binary variables.

Religion and caste might matter in terms of the students' future planning. Christian nurses are pioneers in working abroad, and they are more likely to go abroad than non-Christians (Hindu and Muslim). Lower castes might be more willing to go abroad to improve their economic status and ultimately their social status. However, a certain percentage of jobs in the public sector are reserved for them, so this affirmative action might discourage them from going abroad. If students have any nurses in their immediate family, they are more likely to want to work abroad and more likely to receive information about overseas employment opportunities, or at least get some ideas about what working outside India might be like. BSc and diploma students might have different preferences

⁷ Luxurious is three or more bedrooms with attached bathrooms, concrete roof, mosaic floor, Very good is two bed rooms with attached bathrooms, concrete roof and mosaic floor, good is one bedroom, brick and cement walls and concrete or tile roof, poor is brick walls, cement floor, tin or asbestos roof and kutcha is mud walls, mud floor and thatched roof.

in terms of their future careers. The parents' house was a proxy for the students' economic conditions. Some students' motivation factors to study nursing at the time of admission were included in the explanatory variables, specifically to get a job overseas, to help their family financially in the future and to gain self-confidence in their decision making. Those who aim to study nursing as a means of getting a job overseas are more likely to be willing to go abroad.

Table 4. Summary statistics

3.5. Estimation Results

The results show that being Christian is not clearly related to the students' willingness to work abroad. However, the Christian students have a lower preference for government jobs in comparison with students from other religions (Hindu and Muslim). Although Christians are a minority, several hospitals are run by Christian organisations; hence, Christian students might opt for jobs in those hospitals.

OBC, SC and ST students are more willing to go abroad and less willing to take government exams than general caste students. Being an OBC student decreased their willingness to take government exams by 28.96 percentage points but increased their willingness to go abroad by 26.87 percentage points. Similarly, being an SC or ST student decreased their willingness to take government exams by 94.19 percentage points and increased their willingness to go abroad by 19.32 percentage points. It is assumed to be easier to improve their economic conditions and ultimately their social status by working abroad. Although they are allotted some percentage of government jobs, they are less interested in government jobs than the general caste students are. The economic conditions of their parents tend to be worse than those of general caste students. For example, the mean score for the parents' house is significantly different between general castes (4.00) and other groups (3.14 for OBCs and 3.26 for SCs/STs). General castes are more likely to possess more consumer items. For example, all the general caste students have a fridge, as opposed to only 48.4% of OBC students and 49.1% of SC/ST students.

BSc students are less willing to go abroad than diploma students. This can be due to BSc students' wider career opportunities in India. For example, they are more likely to pass government exams than diploma students, or they may be interested in jobs other than nursing that require a university degree.

As expected, those who chose to study nursing to obtain an overseas job are more interested in going abroad than those who did not choose to study nursing for the same

reasons. Interestingly, those who study nursing to help their family financially are more likely to take government exams. According to our field surveys, junior nurses in Tamil Nadu government hospitals earn INR 32,000–35,000 monthly, while their counterpart nurses in private hospitals are paid only INR 8,000–9,000 per month (Oda, Tsujita and Irudaya Rajan, 2018). As the wage level in government hospitals in Tamil Nadu and India is much higher and employment conditions are much better than those in private hospitals, working in government hospitals is a financially better option.

Students who study nursing to gain self-confidence in decision making show less interest in working in government. This is despite the fact that nurses in private hospitals are paid less and seem to have a higher turnover ratio than nurses in government hospitals. Nursing students might think that it takes less time to gain technical self-confidence in private hospitals, where only a few senior nurses and many junior nurses work. Unlike in government hospitals, where the hierarchy of nurses is established and there are relatively more middle-career nurses, nurses gain more exposure to patients in private hospitals. This can be one of the reasons behind this result. Indeed, we found that some nurses work in private hospitals just to gain experience before going abroad.

Table 5. Results of the probit analysis (marginal effects)

4. Conclusion

The global mobility of nurses has increased in recent years due to the increasing demand for nurses. International demand has led to the establishment of a large number of nursing institutions in India, which is one of the major 'exporters' of nurses. Under the current situation, this chapter examined nursing students' socio-economic background, motivations to study nursing and future prospects.

The socio-economic background of nursing students has broadened. They study nursing not only because of the overseas employment opportunities but also because of the ease of finding a job and the higher salary. In their final year, students are interested in both public service and overseas employment. Our estimation results showed that Christianity, lower castes and some other motivation factors play important roles in students' willingness to take government job exams. At the same time, lower castes are more interested in overseas employment, and BSc nursing students are less willing to go abroad.

Due to increasing reports of financial disagreements between private recruiters and nurses and of exploitation and human rights violations abroad in recent years, India's

central government has changed its policy on emigrating nurses. It now requires that recruitment be carried out through public sector recruitment agencies and emigration clearance be obtained from the offices of the Protector of Emigrants when nurses are recruited to work in certain Middle Eastern, African and Asian countries. This policy became effective at the end of April 2015. This does not clearly affect our sample of nursing students; however, further research on the impact of the global nursing market on nursing students is required.

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Reference

- Bablu J. S. (2009, January 26). Resetting standards of nursing education. The Hindu. (http://www.thehindu.com/todays-paper/tp-features/tp-educationplus/Resetting-standards-of-nursing-education/article15942476.ece)
- Blythe, J., Baumann, A. (2009). Internationally educated nurses: profiling workforce diversity. *International Nurse Review*, 56 (2), pp.191–197.
- Garner, S. L, Shelley F. Conroy, S.G. Bader (2015). Nurse migration from India: A Literature Review. *International Journal of Nursing Studies*, 52 (12), pp. 1879-90
- Garner, S. L. L. Raj, L. S. Prater & M. Putturaj (2014). 'Student Nurses' Perceived Challenges of Nursing in India,' *International Nursing Review*, 61 pp. 389-397.
- Healey, M. (2013). *Indian Sisters: A History of Nursing and the State, 1907-2007*. New Delhi: Routledge.
- Hindu (2007). Nursing Education need for better care (2007, May 22). Retrieved from (http://www.thehindu.com/todays-paper/tp-features/tp-educationplus/nursing-education-need-for-better-care/article2264245.ece)
- Irudaya Rajan S., Bernard D'Sami and Samuel Asir Raj. (2017). 'Tamil Nadu Migration Survey 2015,' *Economic and Political Weekly*, 52 (21) pp. .85-94.
- Irudaya Rajan, S. and S. Nair (2013). Assessment of Existing Services for Skilled Migrant Workers: India Project Site, ILO Promoting Decent Work across Boards: A Pilot Project for Migrant Health Professionals and Skilled Workers, funded by European Union, Draft Report submitted to International Labour Organization.
- Irudaya Rajan, S., H. Oda and Y. Tsujita (2017) Education and Migration of Nurses: The

- Case of India, Tsujita Y. (ed.) *Human Resource Development and the Mobility of Skilled Labour in Southeast Asia: The Case for Nurses*, BRC Research Report no. 19, pp. 97-139.
- Johnson, S. E., Green, J., Maben, J. (2014). A suitable job? A qualitative study of becoming a nurse in the context of a globalizing professions in India. *International Journal of Nursing Studies*, 51 (5), pp. 734-743.
- Khadria, B. (2007). International Nurse Recruitment in India. *Health Services Research*, 42 (3 pt 2) pp. 1429-1436.
- Mohan N. Shantha. (1990). *Status of nurses in India*, New Delhi: Uppal Publishing House, pp. 114.
- Nair, S. and S. Irudaya Rajan (2017). 'Nursing Education in India: Changing Faces and Emerging Trends," *Economic and Political Weekly*, 52 (24) pp. 38-42
- OCED (2015). *International Migration Outlook 2015*. Paris: OECD Publishing (http://dx/doi.org/10.1787/migr_outlook-2015-en).
- Oda, H., Y. Tsujita and Irudaya Rajan, S. (2018) 'An Analysis of Factors Influencing the International Migration of Indian Nurses,' *International Migration and Integration*, forthcoming.
- Oulton, J. and B. Hickey (2009). Review of the nursing crisis in Bangladesh, India, Nepal and Pakistan, draft for internal review, Barcelona: Instituto de Cooperation Social-Integrare S. L.
- Percot, M. and S. Irudaya Rajan (2007). Female Emigration from India: Case Study of Nurses. *Economic and Political Weekly*, 42 (2) pp. 318-325.
- Prescott, M. and M. Nichter. (2014). Transnational nurse migration: Future directions for medical anthropological research. *Social Science & Medicine*, 107, pp. 113-123.
- Rao, M., K. D. Rao, A K Shiva Kumar, M. Chatterjee, and T. Sundararaman (2011). Human resources for health in India. *Lancet*, 377 (9765), pp. 587-598.
- Redfoot, D. L. and A. N. Houser (2005). "We Shall Travel On": Quality of Care, Economic Development, and the International Migration of Long-Term Care Workers, AARP Public Policy Institute, #2005-14, October 2005.
- Seth, D. (2015, July 1). Soon Indian nurses may practice in Singapore as it signs MRA pact. *The Economic Times*. Retrieved from (http://economictimes.indiatimes.com/news/economy/foreign-trade/soon-indian-nurses-may-practise-in-singapore-as-it-signs-mra-pact/articleshow/47889977.cms)
- Spetz, J., Gates, M., Jones, C.B. (2014). Internationally educated nurses in the United States: their origins and roles. *Nursing Outlook* 62 (1), pp. 8–15.

Walton-Roberts, M. (2015). 'International migration of health professionals and the marketization and privatization of health education in India: From push-pull to global political economy'. *Social Science & Medicine*, 124, pp. 374-382.

Yeats, N. (2009). *Globalizing Care Economies and Migrant Workers*, Basingstoke and New York: Palgrave Macmillan.

Table 1. Socio-economic background of sample students

	N	%
No. of observations	221	100.00
Nursing degree		
BSc	59	26.70
Diploma	162	73.30
Type of college		
Government	175	79.19
Private	46	20.81
Gender		
Male	3	1.36
Female	218	98.64
Religion		
Hindu	155	70.14
Christian	61	27.60
Muslim	5	2.26
Caste		
General	7	3.17
OBC	154	69.68
SC/ST	53	23.98
Unclassified	7	3.17
Place of origin		
Rural	96	43.44
Urban	125	56.56
Parental education		
Father's education		
Below primary	26	11.76
Primary school	35	15.84
High school	100	45.25
Higher secondary school	41	18.55
Tertiary	13	5.88
Others	6	2.71
Unknown	0	0.00

Mother's education		
Below primary	39	17.65
Primary school	42	19.00
High school	99	44.80
Higher secondary school	26	11.76
Tertiary	9	4.07
Others	6	2.71
Father's occupation		
Unskilled labor	62	28.05
Skilled labour	15	6.79
Transport and freight	11	4.98
Sales and trade	35	15.84
Professional	16	7.24
Agriculture	49	22.17
Military and police	6	2.71
Working overseas (unspecified-occupation)	1	0.45
Retired, unemployed or dead	22	9.95
$Possession\ of\ consumer\ durables\ and\ other\ items$		
Car	14	6.31
Motor cycle	161	72.52
Mobile phones	221	99.55
TVs	218	98.20
Refrigerator	108	48.65
Computer/Laptops	126	56.76
Net connection	35	15.77

Source: Author's survey.

Notes: Notes: Unskilled labour: coolie, security guard, helper, construction worker and daily wage labour. Skilled labour: plumber, painter, carpenter, lineman, tailor, mechanic, electrician, postman, pasting, machine operator and weaver. Transport and freight: driver, three wheeler driver and bus conductor. Sales and trade: shopkeeper, shop proprietor, business, agent and vender. Professional: advocate, company manager/supervisor/employee, government clerk, accountant, teacher and computer engineer. Agriculture: farmer, fisherman and tapping.

Table 2. Reasons why students chose to study nursing

No. of s	tudents who answered 'Yes'	N	%
1	Ease of finding a job	190	85.97
2	To provide services to the sick	186	84.16
3	Better salary	178	80.54
4	Family encouragement	160	72.40
5	To improve self-confidence in decision making	157	71.04
6	To achieve better social status	129	58.37
7	Help family financially	123	55.66
8	To get a job overseas	107	48.42
9	Family compulsion	30	13.57
10	To find a better spouse	25	11.31
11	At least one parent is nurse	12	5.43
12	To escape from social pressure at home	12	5.43
13	Other reasons	3	1.36
Most in	portant	N	%
1	Ease of finding a job	67	30.32
2	To provide services to the sick	50	22.62
3	To get a job overseas	28	12.67
4	Better salary	19	8.60
5	Financial difficulties	17	7.69
6	Family encouragement	14	6.33
7	To improve self-confidence in decision making	10	4.52
8	Family compulsion	7	3.17
9	To achieve better social status	6	2.71
10	Other reasons	2	0.90
11	At least one parent is nurse	1	0.45
12	To find a better spouse	0	0.00
13	To escape from social pressure at home	0	0.00

Source: Author's survey.

Note: N=221.

Table 3. Students interested in working overseas and the countries they prefer to work in (multiple answers)

	Total	
	N	%
Interested in overseas employment	173	78.28
Countries	70	31.67
Gulf countries	34	15.38
Singapore	21	9.50
USA	21	9.50
UK	18	8.14
Australia	11	4.98
Canada	6	2.71
Malaysia	5	2.26
European countries	3	1.36
Germany	2	0.90
France	1	0.45
Italy	1	0.45
Japan	1	0.45
Mauritius	1	0.45
West Africa	1	0.45
No idea	7	3.17
Any place	6	2.71

Source: Author's survey.

Note: N=221.

Table 4. Summary statistics

Variable	Mean	Valuable Description
Interested in taking any government exam	0.9037	1 if nursing student is interested in taking governmetn exam and 0
		otherwise
Interested in overseas employment	0.6789	1 if nursing student is interested in working abroad and 0 otherwise
Christian	0.2706	1 if nursing student is Christian and 0 otherwise
General castes	0.0138	1 if nursing student is general caste and 0 otherwise
OBCs	0.7156	1 if nursing student is Other Backward Classes and 0 otherwise
SC/STs	0.2431	1 if nursing student is Scheduled Castes or Tribes and 0 otherwise
Rural	0.4404	1 if nursing student is from rural area and 0 otherwise
Nurse in family/Relative	0.1330	1 if nursing student has any nurse in family or relative and 0 otherwise
Family house type	3.1835	1 if parents of nursing student live in 'kutcha' house, 2 if they live in
	(0.2569)	poor house, 3 if they live in good house, 4 if they live in very good
		house and 5 if they live in luxurious house
BSc nursing	0.2569	1 if nursing student studies in BSc nursing course and 0 otherwise
To get a job overseas	0.4817	1 if nursing student study nursing to get a job overseas and 0 otherwise
To help family financially	0.5505	1 if nursing student studies nursing due to expected high income and 0
		otherwise
To gain self-confidentiality in decision making	0.7202	1 if nursing student is compelled to study nursing and 0 otherwise

Notes: N=218. Standard deviation in parenthesis for the continuous variable.

Table 5. Results of the probit analysis (marginal effects)

	Govt		Work	
	exam		abroad	
Religion (Base category: Non-Christian)				
Christian	-0.0804	**	0.0559	
	(0.0395)		(0.0805)	
Castes (Base category: General)				
OBC	-0.2896	***	0.2687	*
	(0.0712)		(0.1406)	
SCST	-0.9419	***	0.1932	*
	(0.0419)		(0.1100)	
Rural	-0.2571		0.0351	
	(0.0289)		(0.0705)	
Nurse in immediate family	0.0224		0.0616	
	(0.0232)		(0.0950)	
Family house type	-0.0163		-0.0067	
	(0.0149)		(0.0443)	
BSc nursing	-0.7659		-0.1917	*
	(0.0488)		(0.1125)	
Individual motivation (Base category: No)				
To get a job overseas	-0.0395		0.4038	***
	(0.0253)		(0.0584)	
To help family financially	0.0769	**	-0.0294	
	(0.0313)		(0.0687)	
To gain self-confidence in decision-making	-0.0550	***	0.0018	
	(0.0214)		(0.0869)	
Pseudo-R ²	0.2041		0.1752	
No. of observations	218		218	

Notes: Marginal effects are calculated based on the binary variables set to zero. Standard errors are in parentheses. ***, ** and * show results are statistically significant at 1%, 5% and 10%, respectively.