

Striving for Equity: Exploring Gender-Inclusive Medical Leadership in India

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Introduction

There is a notable gap in studies examining the impact of gender within socio-cultural norms in non-western professional settings, especially concerning the well-being of women physicians.

Methods

Using purposive sampling and thematic data analysis, we recorded interviews with 30 physicians in India during May to July 2023. Participants were aged 34 to 65 years, with experience ranging from five to 35 years, in various clinical (37%), surgical (30%), para-clinical (23%), and hospital administration (10%) roles, 97% were postgraduates, and 53% were women. The research questions explored how leadership roles happened, managing key challenges, barriers and enablers, and practical interventions to support women into medical leadership positions.

Results

Findings revealed that the majority of interviewees believed gender-related barriers were obstructing women's progress and success in medical leadership roles in India. These barriers were identified within three overarching domains: (i) specialty, (ii) organisational, and (iii) socio-cultural. Interviewees commonly acknowledged the male-dominated landscape of medical leadership although some women stated that they did not perceive any barriers for women's advancement into leadership roles. Interestingly, some men surgeons held the perception that women might not be as effective in certain surgical disciplines, such as orthopaedics and neurosurgery. Some men physicians, however, considered women physicians in India are highly effective multi-taskers.

Conclusion

We recommend structural reforms in medical education, leadership development, workplace systems and cultures, and improved implementation of equality, diversity, and inclusion policies in the Indian context.

What is already known on this topic

Gender inequalities, in terms of the under-representation of women in leadership roles as well as socially constructed gender norms of who constitutes a leader, can derail health systems innovation and sustainability.

What this study adds

By addressing the research gap in understanding Indian physicians' perspectives on medical leadership and gender equality post-COVID-19, this study seeks to contribute valuable insights in a non-western context.

How this study might affect research, practice or policy

This research can drive positive change by guiding interventions in healthcare settings, and shaping policies that foster inclusive medical leadership in India.

1. INTRODUCTION

The robust representation of women in senior leadership positions in healthcare organisations enhances overall organisational performance [1, 2]. The under-representation of women in medical leadership roles, therefore, raises concerns [3]. Moreover, research identifies various barriers impeding women's entry into medical leadership such as socio-cultural, organisational, and personal factors [4]. These hurdles range from gender stereotypes and inadequate childcare support to inflexible working hours, hierarchical organisational structures, and a scarcity of mentorship opportunities [5]. The impact of these obstacles is particularly pronounced for women, who typically dedicate twice as much time as men to childcare and unpaid household responsibilities [6]. However, some of these barriers also present challenges for male doctors who strive to achieve a balance between their personal lives and professional leadership roles [7].

Globally, women constitute 67% of the health and care workforce, but only 25% hold senior leadership positions, and 5% lead healthcare organisations [8]. In India, the healthcare sector employed 9.3 million workers in 2021-22, predominantly in the private sector (85%) [9]. Women account for 29% of medical doctors, over 80% of nursing staff and midwives, and nearly 100% of Accredited Social Health Activists. Yet in India, women occupy only 18% of leadership roles, with an average gender pay gap of 34% [10]. Interestingly, urban middle-class families encourage boys into engineering and girls into medicine in the country [11]. Compared with other STEM professions, physicians must demonstrate total commitment to caring for patients, research, and teaching with often uncontrollably long working hours and relatively high levels of workplace violence [12-13]. There are particular forms of gendered segregation in specialties such as very low numbers of women orthopaedic consultant surgeons [14]. Working lives in Indian medical schools are characterised by punishing hours, physicians overloaded with patients and emergencies and huge family life and work pressures with women feeling particularly high stress levels [15] and more likely than men not to be recognised as physicians [16]. Medical students experience excessive psychological distress, burnout, and emotional exhaustion [17].

In India, cultural norms place a strong emphasis on family responsibilities, with the concept of joint or extended family being prevalent which is different from many other societies in the west. The extended family often collaborates to share domestic duties, reducing the reliance on hired help beyond the nuclear family, particularly in metropolitan cities. While domestic help is common in urban areas, it varies based on socio-economic status. Parental leave entitlements are a mix of government and private policies, with the former typically providing six months maternity leave, two-year childcare leave, and 15 days paternity leave benefits. However, private companies may offer more comprehensive parental leave packages including six months maternity leave. Pursuing medical education in India can be financially demanding, requiring a certain level of privilege due to high tuition costs in private colleges and highly competitive entrance exams to enter government medical colleges, where fees are highly subsidised. These cultural, educational, and professional aspects highlight the complex interplay of privilege and societal expectations in India and limits to generalizability in other contexts.

In the past decade, India's medical education sector has witnessed substantial growth. As of 2023, there were 1.3 million registered allopathic doctors and 0.5 million AYUSH (Ayurveda, Yoga and Naturopathy, Unani, Siddha, and Homoeopathy) doctors, with a combined doctor population ratio of 1:8 per 1000. Currently, there are 660 medical colleges, including 360 government and 300 private institutions. Since 2014, 273 new medical colleges were added,

reflecting about a 70% increase (98% in public and 45% in private colleges). Noteworthy investments have led to a 96% rise in undergraduate (MBBS) seats, totalling 101,043, and a 109% increase in postgraduate seats, reaching a nationwide total of 65,335 [18]. Yet, medical leadership competency gaps and gender inequality persist in the Indian healthcare system [19].

While research within Indian healthcare has informed substantial medical leadership competency gaps in both public and private sector hospitals, [19-20] we know little about the perspectives of Indian physicians, particularly women and their leadership development needs following the COVID-19 pandemic. In this paper, we investigate how physicians' experiences and perceptions of leadership impact the dynamics of professional behaviour change within the medical field. This qualitative study seeks to extend available research evidence in India on medical leaders' competencies and gender gaps to guide leadership capacity building in a resource-constrained non-western context [4].

This study addresses three broad areas: (i) factors that (de)motivate physicians to take on leadership roles, (ii) barriers to such involvement, and (iii) opportunities for improved support and leadership development. We examine gender issues in medical leadership from semi-structured interviews with individuals from a range of medical and surgical specialties to enrich our understanding of the barriers for women physicians to advance into leadership positions. Questions asked during the interviews included: 'How did this leadership role come about?', 'What challenges have you faced and how have you managed these challenges?', 'What do you consider are the barriers and enablers for women in medical leadership?' and 'What practical interventions would you suggest that might better support and encourage doctors, particularly women, to take on leadership roles?'

2. METHODS

Data were collected from four tertiary care hospitals (two public and two private) and one non-government clinic. Most participants in the sample work in public hospitals, i.e. All India Institute of Medical Sciences (AIIMS), New Delhi, and AIIMS, Jammu. In AIIMS New Delhi, a premier medical university hospital, it is estimated that there were about 30% women physicians compared with AIIMS Jammu where over half of the women are physicians. In all institutions, there is a critical lack of women in specialties such as spinal surgery, which results in tokenism [21].

Using a purposive sampling approach, we recruited 30 consultant-level physicians (both men and women) for recorded interviews, lasting 40-60 minutes, which the first author based in India conducted during May to July 2023. Sixteen interviews (53%) were conducted using Google Meet and 14 (47%) were face-to-face. Participants were anonymised and assigned code numbers to protect confidentiality. The sample had a reasonable degree of diversity. Participants were aged 34 to 65 years, over half were women (16, 53%), with experience ranging from five to 35 years, 97% had a postgraduate degree in medicine, and were from diverse disciplines such as clinical (37%), surgical (30%), para-clinical (23%), and hospital administration (10%) (Table 1). Three of the research team members thematically analysed the transcripts following established approaches [22-23]. To ensure the integrity of interpretations, both individual and collective reflexivity were employed, anchoring the analyses in the data rather than the individual researchers' preconceptions.

Initially, each researcher (re)read the transcripts independently to identify overarching themes. Subsequently, the dataset was systematically coded into (sub)categories, with continuous refinement of the codes. The second stage of analysis adopted a theoretical focus, with

researchers continually iterating between data analysis and interpretation. Key themes and relationships were identified at individual, institutional, and socio-cultural levels, considering both domestic and work responsibilities. In the third stage, patterns were conceptualized to emphasize relationships among various sub-themes, thereby constructing an understanding of perspectives on medical leadership development needs in India, particularly regarding gender, work and society. To maintain research rigor and mitigate potential bias, the coding process was documented. The research findings were disseminated through workshops and blogs [24] and through checking [25] within the medical community.

Ethics

The study was approved by the Institutional ethics committee of AIIMS, New Delhi (No: IEC-958/13.01.2023).

3. RESULTS

Gender-related barriers

The majority of interviewees believed that gender-related barriers were obstructing women's progress and success in leadership roles. These barriers were identified within three overarching domains: (i) speciality, (ii) organisational, and (iii) socio-cultural.

(i) *Speciality*

Some interviewees held the perception that women might not be as effective in certain surgical disciplines, such as orthopaedics and neurosurgery. For instance, one male orthopaedic surgeon stated:

'Traditionally, orthopaedics is a man's branch and there aren't many women. Orthopaedic surgery requires a lot of manual labour and force. You can say that it's carpenter's work.' (2M)

Another woman physician explained that patients often do not perceive women surgeons as competent enough to perform surgery.

'When a patient comes for a surgery and they see a female surgeon, they go into doubt whether she will be able to manage. But when you see a male surgeon, you certainly have an unspoken level of confidence in that surgeon.' (1W)

In contrast, a senior woman practitioner commented that in some clinical branches, the working environment is more favourable for women compared with surgical disciplines.

'I would say that in the departments which have a very fair share of both males and females, for example paediatrics and neurology, the working environment is better rather than if you go to extremes like orthopaedics. So, specialty plays a key role.' (2W).

Another woman physician leader highlighted that women are now entering into all specialities, including surgery:

'Times have changed. Now women are in every branch – orthopaedics, neurosurgery and what not.' (12W)

(ii) Organisational barriers

At the organisational level, there was insufficient support for introducing greater flexibility and advocating for work-life balance. A woman physician explained that the top administration often does not support women, even in emergencies:

'I recently had an experience when my mother-in-law had a fracture. So, when I asked for leave, I was told "it's your personal problem. It's not the hospital's problem." This response suggests you can't manage things at home. But, ironically, it's not like this when men ask for time off.' (1W)

Another woman physician leader pointed out that management views taking childcare leave unfavourably:

'There's a little bit of sexism in everybody's mind. People don't like women taking childcare leave. They think that women are receiving a free salary for two years.' (3W)

Women in government services in India are entitled to two years leave for the two eldest children (the second year is paid at 80% salary).

One male interviewee expressed the opinion that policymakers do not assume that men are responsible for childcare. Men in government services are only entitled to 15 days leave within six months of a birth or adoption.

'It's also systematised by the government that men aren't given childcare leave. It's not expected from a man to sit at home and make a kid study. They don't have that option.' (12M)

Interviewees observed that women physicians were frequently perceived as not being taken seriously because they were overly feminine and did not conform to stereotypical leadership traits. This was particularly the case when gender and age intersected:

'It seems that being a young female head of the department and very junior to the director, people don't take me seriously. The first impression is "how is she going to do anything?" This lowers your confidence. A woman has to be really strong, loud, and aggressive to make her presence felt.' (10W)

(iii) Socio-cultural barriers

The patriarchy and motherhood were the most commonly cited socio-cultural barriers to women assuming leadership roles in India. Several interviewees emphasized an inherent challenge in trying to balance the demands of a high-intensity medical career with household responsibilities and motherhood:

'I'm the only woman in my home and the male family members like my husband can't cook food. There's a barrier in my husband's mind that only women should do these things.' (9W)

Another female physician emphasized that gender bias is deeply rooted in boys' upbringing in Indian society.

'The root of the problem lies right from the upbringing of the male child – it's conditioning.' (2W)

A senior male consultant acknowledged the socio-cultural advantages men often have, which grants them more freedom and facilitates their ascent to leadership roles:

'The freedom to do what I want to do is, I guess, societally more given to a man than to a woman. No one expects men to look after household chores or kids.' (12M)

Most interviewees emphasized that women physicians sometimes refrain from taking on leadership responsibilities due to their personal and social commitments, as well as to avoid potential legal troubles:

'When it comes to leadership roles, women are less enthusiastic about taking on such demanding roles. This is possibly because of their family commitments, personal fears that they can get trapped if they sign policy papers without knowing the technicalities, which can attract problems and they could lose their jobs.' (4M)

Under-representation of women in medical leadership

Interviewees commonly acknowledged a male-dominated landscape of medical leadership. In the words of one women consultant, *'I always feel that to make myself heard, I have to work a lot. For men, there's an old boys' club. It's very difficult to break the nexus of old boys in medicine'* (6W).

Interestingly, some interviewees argued that women's under-representation in senior roles is a global phenomenon of perceptions about lower competency amongst women leaders:

'Our health system is dominated by men, but I think it's not just India, it's a universal problem.' (8M)

'It's generally believed that women are less competent than men. These biases undermine women's credibility and limit their opportunities for advancement. Though I personally believe that women are sometimes more competent than men because they are born multi-tasker and they do things with dedication.' (9M)

While there was an acknowledgement of men's over-representation in leadership positions, interviewees held varying perspectives regarding whether this disparity stemmed from gender-related barriers. A minority of women interviewed said that they did not perceive any barriers for women's advancement into leadership roles. Within this group, typical responses included statements such as:

'It's one's individual approach. Gender, I think, does not have any role in that.' (5M)

Another woman leader asserted,

'I've not seen any bias in being a woman in my 20 years' experience.' (5W)

These responses reflected the belief that leadership roles were granted to individuals who aspired to these positions and to the most suitable candidates at a particular moment. Some women denied they had experienced gender discrimination. Such denial tends to reproduce the concept of scientific organizations as rational and meritocratic [26].

Some interviewees, nevertheless, considered gender disparities in leadership roles as natural and somewhat inevitable. There was a prevailing perception that biological roles were considered unalterable and that women frequently opted out of leadership positions to allocate more time to their families and socio-cultural demands. As one female interviewee explained:

'It's a little bit challenging and taxing because two things simultaneously happen – like your professional peak and settling down in your 30s on average. At 30-35, you're supposed to do all your tasks like get married, have children, keep your family and social circle happy, and then professionally also do well.' (1W)

Empowering women for leadership excellence

We asked interviewees to suggest effective strategies for advancing women physicians in leadership roles in the Indian healthcare system. Interviewees identified several proactive strategies to bolster women's representation. They stressed the crucial roles of individuals, organisations, and the wider profession in addressing gender barriers.

One senior female consultant recognised the challenge of altering socio-cultural norms and stressed the necessity for leadership training in medical education,

'We can't change our social system. Gender bias is always there. We can fight it. It's not an issue. The only thing is that leadership should be taught to us from the very beginning, right from medical school at undergraduate level.' (8W)

Another source of support came from individuals and networks outside the workplace, which aided in balancing competing demands and responsibilities. These sources of support encompassed domestic helpers and other family members.

'It's tough to manage both home and work. I believe that support from your family and spouse play a critical role.' (7W)

Another woman consultant emphasized the significance of a support system and highlighted family commitments as a potential obstacle to reaching leadership positions.

'Our homes run with the support of domestic help. That setup has to be very strong for a working woman. I think women can be much better than men in leadership but because our families are our priority, things may take a back seat.' (8W)

Interestingly, one male consultant acknowledged that it is the responsibility of men to involve women-leaders in decision-making processes.

'It's more of a man's responsibility in healthcare to involve women medical leaders in decision making.' (13M)

Both men and women recognized male hegemony, and one woman said men also want work-life balance, particularly following COVID-19 pandemic burnout. Some women said they fought against gender social norms. For example, one woman surgeon engaged in entrepreneurship by opening her own regional clinic, which is rare, as professional women are under-represented in surgery and as entrepreneurs. Another woman surgeon with administrative responsibilities asserted that she would go without sleep if necessary to ensure she could still spend time practicing surgery in her busy role. One woman physician in a new leadership position doorstepped her boss and insisted that he listened to her concerns. She also relied heavily on her husband and in-laws to take responsibility for the household and son's care while she dedicated her time fully to her role in a new institution for the first few months. However, several appeared to be mothers at home and in the workplace, spreading themselves thinly to care for family, patients, colleagues, and students, which are less likely than activities such as publishing to lead to promotions [27]. Women physicians may be entrapped as an "emotional specialist" [28] in the workplace, nurturing male colleagues.

Interestingly, we did not note any significant differences between the experience of participants in the private and public organizations. A key difference in terms and conditions is that women in public sector organizations are entitled to childcare leave for up to two years, which offers better work-life balance compared with their counterparts in private sector hospitals.

4. DISCUSSION

Research emphasizes the vital role of effective medical leadership in enhancing workplace environments and patient outcomes [29]. However, there is a notable gap in studies examining the impact of gender within socio-cultural norms in non-western settings, especially concerning the well-being of health workers, particularly women [30]. This study explores the intricate connection between gendered organisations and the disadvantages professional women face in male-dominated societies, particularly in contexts where boardroom access is crucial for decision-making and systemic changes. The unique dataset supports our argument that developing medical leadership capacity is pivotal in addressing systemic sexism and discrimination in the Indian health system. More inclusive cultures can improve healthcare outcomes and working conditions for women doctors in India. A lack of acceptance of women's leadership remains commonplace in healthcare as well as in higher education and business more broadly [31] as masculine traits associated with leadership tend to be viewed as competitive, cold, and authoritarian compared with more caring and warmer stereotypes of women leaders [28].

Healthcare systems comprise various types of leaders: (i) institutional leaders (CEOs, directors), (ii) service leaders (heads of departments, chiefs of centres), and (iii) frontline leaders (those directly engaged in patient care) [3]. While institutional and service leaders are crucial for strategizing healthcare delivery, frontline leaders significantly influence clinical outcomes and organisational performance due to their direct patient interactions [32]. These medical leaders bear responsibility for departmental and organisational performance, focusing on outcomes, functional improvement, innovation, multidisciplinary collaboration, and influencing and empowering their colleagues [33].

In alignment with the UN's Sustainable Development Goals [34] three, five, and eight (good health and well-being, gender equality, and decent work and economic growth), this study actively advocates for enhancing women physicians' leadership competences as part of healthcare reforms in India. We emphasize the promotion of gender equity in healthcare leadership and underscore the importance of supporting physicians' active involvement in leadership roles. In this research, we posit that the development of medical leadership serves as a dynamic capability crucial for optimizing the utilization of limited medical human resources. Dynamic capabilities [35] are an organisation's ability to integrate, build, and reconfigure internal and external competences effectively in order to navigate swiftly evolving environments. The imperative of cultivating responsible, systemic, and adaptive medical leadership is highlighted by the challenging nature of physicians' work conditions within the healthcare sector. It is critical to recognise that isolating physicians from institutional responsibilities, with a sole focus on clinical duties, is counterproductive. Instead, we call for the implementation of distributed leadership within healthcare systems [36]. This approach becomes especially vital when navigating substantial and ongoing volatility, uncertainty, complexity, and ambiguity [37].

India is the world's largest democracy with a population of around 1.4 billion people. A defining quality of a democratic society is equal opportunities for all its members, irrespective of race, gender, or ethnicity. India aims to be the world's second largest economy by 2047 and it is investing significantly in modern hospitals. However, in the World Economic Forum's *Global Gender Pay Gap Report 2023*, [38] India was ranked 127 out of 146 countries world-wide. Further, significant medical leadership competency gaps [19] exist in Indian health sector, which can be addressed through leadership development programmes [20]. India's 2017 national health policy [39] recognises this need for leadership and states that "human resource management is critical to health system strengthening and healthcare delivery ... [and it] recommends development of leadership skills ... in [the] public health system." More women physicians can lead to better patient outcomes which support the nation's health [29, 40].

5. LIMITATIONS

Our study is novel in highlighting persistent inequalities in women physicians' working lives from the perspectives of a medical leadership gap and institutional disenfranchisement. However, the study's sample size was relatively small (n=30), and gender was only one focal dimension. Consequently, the viewpoints presented here should be regarded as exploratory in nature.

6. CONCLUSIONS

Evidence shows that leadership competency gaps in medicine can be addressed through leadership development programmes. Moreover, increasing diversity, equality, and inclusion in healthcare have been found to improve standards of care, quality of working lives, community relations, and the ability to combat challenges within healthcare systems. India is a patriarchal society where inflexibility in medical training and jobs, negative public attitudes towards women doctors, career immobility, and marriage and domestic responsibilities are major barriers for women physicians.

Findings of this first-of-its-kind study indicate that India needs to establish a policy framework that supports decent work and working lives for women physicians in senior positions [27]. This is consistent with previous observations about the benefits of physicians leading organisational

change. To address gender-related barriers and to improve inclusive medical leadership capacity in India, we make four key recommendations:

- (i) Medical school admissions criteria and curricula, decisions on hiring, promoting, and rotating doctors must emphasise practical medical leadership potential for all doctors to include men and women equally.
- (ii) Mandated continuous medical leadership development for doctors at all levels. This needs to be underpinned by evidence-based medical leadership models, drawing on multi-speciality research collaborations and in partnership internationally with medical leadership training providers.
- (iii) Systems within healthcare workplaces need to be adapted to provide women doctors and medical leaders with dedicated resources and flexible working arrangements that promote good work-life balance.
- (iv) Finally, there needs to be better implementation of equality, diversity, and inclusion policies with anonymous systems for reporting misconduct and unprofessional behaviours in the Indian healthcare sector.

The authors believe that incorporating these recommendations into policy frameworks will help to achieve the national health policy objective of strengthening healthcare leadership capacity, good governance, and promoting gender equality within the Indian health landscape. This is vital if India is to achieve ‘nari shakti’ (women’s empowerment) [41] and its *Viksit Bharat@2047* ambition of becoming a developed nation by 2047 [42].

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Authors' contributions

KG and JD made equal contributions to this article, both sharing first authorship. AGF and ARS assisted in the review of literature, sorting data, and contributing to the initial draft of the manuscript. The collaborative efforts of all authors culminated in unanimous approval of the final manuscript.

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Data availability statement

Data will be made available on request.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Table-1: Demographic characteristics of study participants (n=30)

No.	Code	Age (Years)	Sex	Education	Designation	Speciality	Organisation Type	Experience (Years)
1.	1W	41	Female	MS	Associate Professor	ENT	Public	11
2.	2W	44	Female	DM	Professor	Neurology	Public	22
3.	3W	35	Female	MD	Associate Professor	Pathology	Public	9
4.	4W	48	Female	MS	Associate Professor	Paediatric surgery	Public	18
5.	5W	56	Female	DM	Professor	Neurology	Public	30
6.	6W	47	Female	MD	Professor	Psychiatry	Public	35
7.	7W	45	Female	MBBS	Director	Hospital administration	Private	20
8.	8W	46	Female	MS	Associate Dean & Head of Department	Obstetrics and gynaecology	Public	18
9.	9W	34	Female	MS	Assistant Professor	Obstetrics and gynaecology	Public	5
10.	10W	37	Female	MD	Head of Department	Haematology	Private	8
11.	11W	39	Female	MD	Associate Professor	Anaesthetics	Public	10
12.	12W	44	Female	MS	Associate Professor	Obstetrics and gynaecology	Public	17
13.	13W	38	Female	MD	Associate Professor	Anatomy	Public	15
14.	14W	45	Female	MD	Consultant	Radiology	Private	20
15.	15W	40	Female	MS	Associate Professor	General surgery	Public	9
16.	16W	37	Female	MD	Assistant Professor	Medical oncology	Public	8
17.	1M	40	Male	MD	Associate Professor	Internal and emergency medicine	Public	12
18.	2M	48	Male	MS	Associate Professor	Orthopaedics	Public	17
19.	3M	60	Male	MS	Chairman	Orthopaedics	Private	30
20.	4M	44	Male	MD	Medical Officer	Clinical	Public	20
21.	14M	47	Male	DM	Consultant	Cardiology	Private	17
22.	5M	47	Male	MD	*Additional Professor	Hospital administration	Public	16
23.	6M	46	Male	PhD	Head of Department	Physiotherapy and medical rehabilitation	Public	25

24.	7M	52	Male	DM	Professor	Neurology	Public	28
25.	8M	46	Male	MD	Professor	Laboratory oncology	Public	22
26.	9M	65	Male	MPH	Professor and Head of Department	Community medicine	Public	30
27.	10M	39	Male	DM	Additional Professor	Psychiatry	Public	20
28.	11M	50	Male	MD	Head of Department	Hospital administration	Public	13
29.	12M	44	Male	MD	Additional Professor	Anatomy	Public	17
30.	13M	42	Male	MD	Additional Professor	Paediatric surgery	Public	14

*An additional professor is a consultant-level position between associate professor and professor.