

Choosing a Career Path in a Neurosurgeon's Life: The Journey is More Important than the Destination



INTRODUCTION

The choice of a career path is a crucial step in anyone's professional life goals. The sheer abundance of options available in the present era can be overwhelming, leading to confusion and uncertainty. While faculty positions have long been considered a priority, consultant jobs or entrepreneurship with self-owned hospitals are gaining popularity nowadays. The reason is mainly their high remuneration, social security, and dynamic work environment. For a young neurosurgery graduate, opting for a career in the corporate or private sector can be a gateway to an exciting and fulfilling professional journey.^[1] However, in a specialty like "neurosurgery," it is often not that easy to decide your career path, especially when an individual is at the level of a fresh passed graduate. To choose between continuing academics for a few more years, or even for life, or moving on to corporate life or start-up remains a conundrum.

The information technology industry and revolution in engineering domains have already shown us the importance of "*entrepreneurship*." When we translate this entrepreneurship to our medical profession, it is nothing else but starting our clinic or hospital in a new challenging area, learning all new government hospitals, and managing a handful of employees under us – *here we take up an added charge of managerial responsibility apart from being a skilled neurosurgeon*. However, the question herein arises is "*when*" or "*at what point of time*" any individual is prepared for taking this responsibility. When a graduate enters his or her 2nd year of MCh, usually he or she has already made

up his/her mind depending on several *tangible* factors such as "you hate writing grants," "whether one is interested in research or not," and "family, moral, ethical, cultural, and commercial concerns." All these are perfectly reasonable, depending on your own values, needs, wants, and feelings regarding your career. Moreover, there are "nontangible" factors also which are not visible or felt at a young age but are more important. These factors are understood only after experiencing failures, going through hard phases, and struggling through the journey that you choose and finally enjoy.^[1,2]

In a study published in *Nature*, the number of academic research scientists in the US alone increased by 150% between 2000 and 2012. However, the number of tenured and other full-time faculty positions plateaued and even declined in some places. Sadly, the situation is mirroring in India also, that more and more skilled graduates are passing each year but faculty positions are not sufficient to accommodate them all. When a student enters a neurosurgery program, his "Professor" or "mentor" is his first inspiration. The desire to follow his mentor and learn skills to transform into a better surgeon pushes young graduates to fellowship programs, writing papers and getting grants so that they may get a faculty position. The question remains unanswered "*which path is best or on what track I should be working on to achieve what I desire*"? The answer actually lies in the question itself and that is "what is your desire."

In our review, we have interviewed several neurosurgeons of the country who have overcome the career path conundrum with success in nonfaculty-track careers. In further discussion, we will quote from stalwarts, who had actually struggled for a faculty position, got the position, worked in a premier institute, and then resigned and moved on for a second life. We interviewed 20 senior neurosurgeons, working across India in different settings and environments. We would like to quote their opinions, in an anonymous way, on their journey and retrospect feelings on the branch "Neurosurgery." Moreover, we also interviewed more than 200 MBBS students and tried to take their opinions

Table 1: General factorial which difference between life of a government versus private neurosurgeon

Factors	Government	Private
Flexibility	Usually considered as an extra edge in this category. May be divided into flexibility over your personal schedule and flexibility over the type of research and workplace	There is less flexibility in the corporate group but when you are an entrepreneur and own your hospital, the flexibility is maximum
Salary	Less	More
Teamwork	More	Less in hospital but better in corporate
Credit	Credit lies on individual	Credit is distributed between managers, accountants, researchers, surgeons, and other stakeholders
Politics	More	Less
Opportunity	More	Less
Reinvention	The individual has an opportunity to reinvent oneself and take charge of administrator or student government agencies	Target oriented
Job security	More	Less in corporate but best in private hospital
Lawsuits	Easy to handle and less common	Difficult to handle and more common

Table 2: Common points one should follow before choosing any career path

Consult with 4–5 seniors and interact with them
Job shadowing – job shadowing consists of spending time, usually a few days, at work with an experienced professional in the industry to understand their daily job duties better. It enables you to see what a typical day in their field of work looks like, and you can use that information to assess whether this is a suitable career path for you
Create your ideal professional life
Define steps to achieve your point C
Define hurdles and obstacles
Timeline should be defined and an alternate plan in case of delay
Be flexible to accept failure and trust your destiny
Note your interests
Determine your desired salary
Be aware of your main values
Obtain an additional degree as an extra edge

on the above subject. Therefore, we present views across “generations” and the perspective from very young to the senior neurosurgeons of India.

We believe that classifying the work area into “academic” and “private” no longer exists. The thin line has almost faded with the introduction of industry research and new residential scheme policy. The work area may now be classified as follows:

- (A) Government
 - (1) Institutes
 - (2) Other autonomous government colleges
 - (3) State government colleges.
- (B) Private
 - (1) Corporate
 - (2) Semi-corporate or multidisciplinary hospital
 - (3) Self-owned private hospital
 - (4) Freelancer.

After discussing with stalwarts and understanding their experiences, we could understand several factorial differences between life in government versus private institutes [Table 1].

CHOOSING A CAREER PATH

One should understand his strengths and weaknesses before deciding on a career path. The skills already acquired, comparison of one's skill with existing market level, and interest in a subspecialty are key factors in decision-making of career path.^[3,4] If one thinks that he/she has comparatively less exposure to micro-neurosurgery and he/she wants to settle in a Tier 1 city, the career path should start with 2–3 years of fellowships or experience in government setup. Table 2 highlights all the points one should follow before choosing any career path. One also needs to understand his or her type of personality so that one is “*fit to job*” after entering the ocean.^[3-5]

Every medical graduate is indoctrinated in residency that a career in academic is the noble path and that private practice is antiquated. In reality, you need to choose whatever path is right for you, and that private practice is misinterpreted mostly. A lot of people chose to be faculty, for they always loved teaching and research; however, research is a broad term and one should understand what it really meant by “*academics*” before jumping into “*academic career*.” To our understanding, real research demands a lot of time, and one may have to sacrifice time with patients also. The bitter truth is that there is insufficient time to devote in government outpatient departments (OPDs) and to be able to perform “*grant-worthy*” research of good quality. Finally, it ends up being a 50/50 time split at its best. Teaching is one of the major factors for choosing a government institute. A decade before, it was difficult for anyone to be in private practice and able to teach regularly, but there are now avenues for this also, in the form of webinars, societies, and passive participation. With the rise of DNB/MCh seats, close net involvement of neurosurgeons in teachings, and involvement of surgeons in clinical trials, this “*teaching*” factor is diminishing gradually. One can teach primary care physicians in rural settings about neuro-trauma to

improve specialty care and outcomes for underserved populations.

OUR INTERVIEWS WITH SENIOR NEUROSURGEONS

Nearly 10% of participating neurosurgeons were from the Central Government Institute, and 30% approximately from corporate, private practice, and State Government Medical Colleges. Eighty-two percentage of them had an experience of 10–20 years, while 18% had experienced between 20% and 30% in the field of neurosurgery. Three of our senior neurosurgeons said that they changed their area of work from government to private for the following reasons:

- a. No future and lack of good facilities
- b. Salary hike.

While others said that they were satisfied with whatever decision they made. The reasons of their persistence in their area of work (had it been government or private) were mainly personal as follows:

- Kept on enjoying my work and remuneration
- Professional satisfaction
- Good work and good money
- Independence
- Good boss
- Teaching
- Temporary job security.

One of the senior neurosurgeons commented “*I got an opportunity to start the Department of Neurosurgery in XXX (a Central Government Institute) as regular faculty post but I was not prepared mentally to start a department in that age. So, I continued to work in a good private setup hospital. After working for 8-years in same hospital, I developed my own patient pool and then daughter grown up and can't disturb her school now. It all depends upon priorities, I preferred to live in a metro city and work in a Private Hospital rather than going back to my district town and start my own setup.*” Therefore, one has to set priorities and work in that flow. Once we are in the track, we should not betray or waver. The old dictum “family first” plays an important role in decision-making.

One question we asked to all the participants that “*Do you think that your choice was correct or you think that you should have taken a different path?*” And 73% of people said “Yes.” We further took suggestions from seniors on what should be the mindset of the younger generation who want to pursue neurosurgery as their career choice. Some of the responses were:

- Crowd and a lot of competition now
- Patient demand is increasing in terms of service
- Lack of patience
- Hectic life
- Private practice is very demanding and becoming very difficult gradually
- Finding a good senior is difficult
- No hurdles, and cutthroat competition is on
- Struggle with government health schemes
- Incomplete training
- Equipment, workforce, and guidance problems
- No hurdles
- There is always a room at the top
- Take it, but be ready to be subspecialize and develop a passion for work
- If one is ready to work hard, then he or she may go for it
- Be ready to work very hard if you want to sustain yourself, let alone make a name in the fraternity
- It is a good branch, but only join if you have a passion for it and can do hard work
- Life is very stressful
- Work–life balance will not be possible. Need passion for neurosurgery
- All work and no money
- Better to join government institutions. Private practice is very much compromised. It takes lots of effort to convert a patient from an OPD table to an OT table
- Only interested and dedicated ones should take this branch.

Some more responses we got were “*Having a boss who does not groom you correctly while using you,*” “*Private Practice is very demanding and becoming very difficult day by day,*” “*Getting patients in private practice is very tough,*” “*I am a private practitioner and own my hospital. Any person who is Short tempered and not capable of bearing stress should not follow my path.*” With the increasing seats of MCh and DNB courses, the population of neurosurgeons around Tier 1 cities is increasing and so is the competition. Although we found that most of our responders were satisfied in their private practice and 90% did not want to change to the government setup, still 78% of them agreed that work–life balance is more disturbed compared to government counterpart. However, the responders from the government institute also showed a strange feeling of stagnation and “*something missing in life.*” From all the comments, we could conclude that a bit of everything is required in life and one has to understand the true meaning of happiness. “*Grass will always be green on the other side, until we start watering our side.*”

One very senior neurosurgeon who moved from institute to corporate set up told us “*I believe that academic programs*

are becoming more isolated from industrialisation point of view. In the era of globalisation, pharmaceutical multicentre trials are inclined towards corporate set up, may be because over-regulatory institutional environments and investigational review boards which tend to slow down the procedures. The researcher may have a good idea and potential to work, but the so called "system" will retard his/her pace."

Another senior neurosurgeon shared his experience that "It is usually easier to switch from an institutional academic practice to a private practice than vice versa. If one is undecided, it may be best to pursue a traditional academic environment first, but that is only if one is truly dedicated to and adept at all the tasks that may be required. There is always a lot to learn, so keep learning about research and teaching just as much as clinical care."

From all the interviews, we conclude that "government" and "private practice" are not mutually exclusive environments. A spectrum of clinical care, teaching, and research exists in any practice setting. What really matters is "how much of each of these activities any person desires to have in his or her career."

OUR INTERVIEWS WITH MBBS STUDENTS

The objective of our interview (done through questionnaires) was to find the perceived factors acting as barriers in choosing neurosurgery. The various reasons we found were a long time to acquire good skills, the need for infrastructure, less government seats, emergency cases, the extent of workload, and involvement of medicolegal issues. A total of $n = 277$ (79%) students took part in the study (mean age 20.76 ± 1.6 ; median 21 years, interquartile range 3 years). Nineteen percentage ($n = 53$) of students said that they would choose a subject based considering financial growth and quality of life, but quality of life has an upper edge over income or salary. Among the 53 students, 14 of them (5%) wanted to choose a branch with good social status, prestige, and honor apart from good income. Therefore, contrary to our belief, only 5% of students were interested in "Godly" branches; 13 (5%) had said that their decision of subject would be on the basis of prestige, power, influence, reputation, and status only and not money. The majority of students in this group wanted to change their stream to either Indian Administrative Services or Business Administration (MBA); eighteen students wanted to choose a branch with a high intellectual level, high skilled, and high degree of professionalism being involved. The majority of students ($n = 145$, 52.3%) wanted to choose a subject of their interest. Strangely, $n = 30$, 11% of students wanted a branch where direct interaction with patients should be least like pre- or postclinical

or anesthesia. When we asked "Do you like the subject Neurosurgery?," $n = 138$ (50%) of students gave a positive response and 91 students (33%) were rather confused or wanted to see more surgeries before deciding. The main reasons for not choosing "Neurosurgery" were (1) lack of work-life balance ($n = 39$, 14.1%), (2) high competition for government seat and private practice is difficult to start ($n = 51$, 18.4%), (3) lack of interest ($n = 49$, 17.7%), (4) high professional stress ($n = 63$, 22.7%), (5) difficult and high skilled branch so unable to cope up ($n = 8$, 3%), (6) have to pass 3 years of general surgery and do not like that ($n = 1$), (7,8) not sure but depends on rank, age of selection, and spouse ($n = 3$). Some students had multiple problems with neurosurgery that both work-life balance distorted, high stress, and financial constraints to start private practice ($n = 43$, 15%). Eighteen students had all the problems listed above (6.5%).

CHOOSING BETWEEN PRIVATE AND CORPORATE

There are many questions one should ask himself/herself before deciding to stay in or leave academia.

- Do you enjoy teaching?
- Is work/life balance important for you?
- Are you willing to spend your weekends writing grants?
- Are you able to deal with deadlines?
- How do you deal with failure?
- Are you OK when grants and papers are rejected?
- How good are you at playing political games?
- Are you good at selling yourself?

If you do not find happiness in the shoes of any corresponding author of the article, maybe a faculty position is not the right career path. One of the responses we got was "I chose to be faculty of Government Institute because I enjoy teaching students and operate difficult cases and most importantly, I get "vacations" to do my other passionate work." It is true that any government job gives you a better work-life balance and a good institution has a better salary also. However, a phase of stagnation and financial constraints will always be there. Most neurosurgeons leave government jobs in later phases of life for these reasons only. Legally, the government job is safe but then "ship is safest at shore but its destiny is to sail."

BE HONEST TO YOURSELF!

An individual's career choices are influenced by a range of factors:

- Personal characteristics
- Socioeconomic background
- Social

Table 3: Questions one should ask before choosing the right path for his or her career

Interest-based questions	Value-based questions	Trait-based questions
What do you enjoy learning about?	What is most important in your life?	What does success mean to you?
How do you like to spend your time?	What are your priorities in life?	What do you want more of?
Do you enjoy manual labor or mental labor?	Where do you find meaning?	Which of your strengths do you enjoy the most?
Do you enjoy working outside or inside?	What change would you like to be a part of?	Which of your skills are you most proud of?

- Cultural expectations
- Preferences
- Enthusiasm for community betterment
- Financial returns
- Family expectations
- Geographical location
- Cultural variation.

As a young pass-out MCh or DNB graduates, we tend to follow our seniors and teachers. However, I believe that the best guide for your future is your inner conscience and happiness quotient depends on self-satisfaction only and not on the goal one has decided of himself. Hence, one should be honest to his or her own inner conscience rather than following a path that someone else has chosen.

INTANGIBLE REWARDS AND RECOGNITION

What motivates you now may not be your petrol tomorrow. After interviewing so many senior neurosurgeons, we found that the only motivation that makes one keep going is self-motivation inside self to upgrade. Everyone wants to be recognized for his efforts or contributions. In academia, highly cited papers, grants awarded, and teaching awards define success. In corporate, such recognition is not citation and tenure but likely accolades from colleagues, service awards, or promotions. Achievements in government are generally hidden from the public eye unless you have a very prominent government position – *few do*. Timescales are also different. A paper provides some sense of reward immediately after it is published and your name is written on it. However, writing papers or retrospective research may not give you the “*same kick*” after spending 5 years in academia. Similarly, a glioma surgery may be motivational in an early career, but if you are not operating on new challenging cases (as for individuals who directly start in corporate), the surgical satisfaction is not fulfilled and a desire persists. What you “enjoy doing” and what you “value” can be helpful indicators of how you would like to spend the rest of your life. We believe that following passion as a career guide tends to be misleading and confusing.^[5,6] However, it is recommended to feel energized and excited about what you do. Table 3 shows questions about your interests, values, and traits, and considerations that one might need to answer before choosing the right path for his or her career. We should be knowing about our priorities

such as (a) salary, (b) benefits, (c) autonomy, (d) work/life balance, (e) flexibility, and (f) career growth.^[6-9]

IT IS DIFFICULT TO MOVE AN ELEPHANT BUT MOVEMENT IS MORE VISIBLE

An upside of working in government is that, when policies or other actions do get put into place, it is harder for them to be undone. It may require yet a new policy or action to replace the old, which is usually time taking. There needs to be a good reason for the change, and thus, generally speaking, actions taken in government are persistent, and hopefully, the rewards long standing.^[6] Anyone who has been through “*government meetings*” must have experienced that it is very difficult to change something in academia.^[6,7] One should be prepared to work on a longer timescale in government to get your objectives accomplished.

WHAT IS MIDDLE PATH OF LIFE: IKIGAI AND KAIZEN

In one of his papers, Prof B. S. Sharma wrote “*I chose neurosurgery because it was challenging and different. The inherent concept of “hating to lose” makes us neurosurgeons, a breed apart. We all realize that neurosurgery is a stressful sub-speciality and the consequences of small errors may lead to death or disability.*” We believe that what Buddha has said to follow a “middle path” works best in life. One should not be an extremist. All the paths taken will merge to a common goal of best clinical practice. If I think that I can become a good or skilled neurosurgeon in the government area, then acceptable; if I believe that I can be helpful to society being working in a private practice, then also acceptable. This is what most of our neurosurgeons, to whom we sent our questionnaires have also advised. *Kaizen* is essentially described in the Japanese concept of adaptability to changes as a positive practice, where we essentially do not have control or visibility of our own destiny. Essentially, taking control of the logical changes we have to face by progressively adapting to it. This ensures a gradual but positive improvement, that too sustainable. Similarly, whatever path we or destiny has chosen for us should be accepted and worked on. With every small effort from our side, we will not only help others but also glorify the noble path that we have taken. And finally love for your passion, but keeping the family, profession, and needs everything at a level of satisfaction is *Ikigai*.

CONCLUSION

The choice of career path is a difficult decision and one must understand his/her own circumstances before following anyone else.^[8-10] There are important social, financial, religious, and cultural issues one must be aware of before deciding the path. Every job is a unique opportunity and should not be compared with others. In our opinion, the faint line of academic and research is almost extinct between any good government or good private setup and the only thing that surpassed everything is “*intension*” and “*team*.”

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