Lessons in Practical Clinical and Operative Surgery

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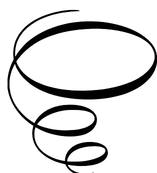
A Collection from Over Three Decades

By

Saleh M. Abbas

Cambridge Scholars Publishing



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I dedicate this book to the man who fell defending his country at the age of 22 – my brother Majid who left me too early. He left me eternally sad and forever broken.

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Chapter One

Poverty and Prejudice: An Iraqi Start to Life

When I landed at Auckland Airport at 3am on 27th August 1996, I had no idea what I had signed myself up for. I thought I spoke English relatively well, but I could hardly understand the questions the custom officer asked. “Do you have any food?” sounded like “Do you have any file?” It made no sense and as I was confused, not to say tired as I’d barely slept the last two nights, I hesitated. “Where is he from?” asked another officer, but the other man shrugged. Now I realise they were probably thinking I had drugs on me as they took me into a side room, went through my suitcase and examined everything. One of the officers paid a lot of attention to a book I had. It was a medical textbook but, like many medical textbooks, it featured pictures of naked bodies. “I’m a doctor,” I told him. “These are my books.” He nodded, shut the suitcase and let me go.

Auckland was humid and the streets were empty bar some elderly people going to the shops. Everything was clean but grey and boring. Finally, I had made it to an advanced country; a country that represented freedom, where economies boom, laws are kept, people are educated, and there is hope. Hope, combined with grit and perseverance, had always been an integral part of me, even from the early days when I was a little boy, a goat shepherd in a God-forsaken famine-stricken hell hole in Iraq, a sun-scorched desert where drinking water was a luxury. My dream was to break out of what I knew even then was grinding poverty, and become a doctor.

I was born in an Iraqi village called DeJail, 60 km north of Baghdad in 1964, at a time when the United Nations declared our country was one of the poorest on the planet. I had five brothers and three sisters. The UN provided people with food rations, which included oil, cheese and rice. Unfortunately, people had never seen a plant type of oil, they were only used to natural butter, and because of this they struggled to eat the cheese with its unusual and strange taste. My village was way behind the rest of the world and the only technology we had was a bicycle, which belonged to my father. There

was no clean water, no running water at all and of course no electricity. There was no radio and no communication with the outside world.

One of my earliest memories is the Six-Day War in 1967 because some of my cousins, who were only about 10 years older than me, were conscripted. Some of them were sent to Palestine. That war was disastrous, of course, both for the Middle East and the Palestinian people. By then the tide of Arab nationalism was high because of Gamal Abdel Nasser, the Egyptian president who was an Arab nationalist leader. I was brought up on nationalism and a sense of pride of being Arabic.

At the age of six I went to school. Until then, there was no school. A prominent, and determined, person in our village battled the Ministry of Education to win permission for a school, and when it was granted the villagers built it. One of those was my father. So, I was lucky that at the age of six, I became one of the 12 to 15 kids to attend the school. Luck struck me twice as, by then, education was free for everyone. You had to bring your own notebooks, and the government provided everything else. By this age I was also working. I was looking after the livestock that my family earned their living from – about 30 sheep and 15 goats. These animals, plus a small amount of vegetables, provided our entire income, which wasn't much. We produced some watermelon in the summer but that brought in very little. In the winter we would grow wheat, which we could sell a small portion of, and that was useful to support the family – but the bulk of the wheat and vegetables was used to keep us fed.

After school, I would take the livestock away from our home to find them food to graze. It wasn't easy. In winter, I just had the shirt on my back and I was usually in bare feet. I would often trip on the rocks and it was common for my toes to be torn, bleeding and sore. I would take my books with me and while the sheep and goats were eating, I would sit and do my homework. I didn't understand the value of education then, particularly as the generation before me was illiterate. Nevertheless, I threw myself into it.

It was a hard life. In summer time the heat would go up to 47 or 48 degrees. We were always thirsty with the lack of water and of course everyone was hungry. The villages close to us were more affluent. They were near to the Tigris River and were able to grow watermelons in massive amounts and sell them to Baghdad. They would travel through our village to get there and I'm ashamed to say that, as young children, we would beg at these cars in the hope that they would give us watermelon. This saved us on many

occasions as the watermelon was a useful source of hydration and sugar to give us energy.

In the 1960s not many kids made it to school or even to adulthood (they usually succumbed to infectious diseases, like my childhood friend and neighbour Adnan, who died from TB at the age of 10). I was a little boy who had never seen a doctor, had no idea what medicine was about, but knew that people – like Adnan – died if they got sick. I had also heard that there were doctors in the big cities who can cure them. And that's not all. In those big cities they have running water, clean water, from taps, *in their homes*. My mother had to fetch water – dirty water – daily, on the back of a donkey, from a little creek 10 miles away, which only brought us typhoid fever and dysentery. We all fell ill in the summer due to a lack of good hygiene and clean water. It was a miserable illness because your temperature could rise to about 41 degrees, which would result in delirium. The medical support in the village was very primitive. Fortunately, no-one died from typhoid fever, as they were taken to Baghdad and the antibiotics by then were reasonable.

By the time I got to year six, there were only four of us in the class and a battle ensued to run the class just for us. Eventually, it happened. I did well in my final exam and I was happy to move forward to intermediate school. To attend intermediate school, I had to make my way to the next town, which was about 15 km from our village. By then I had a bicycle and I was able to ride to school (unless the winter rain made the road impassable and then it was a two-and-a-half-hour walk). It was a culture shock. Kids in town bullied us for a variety of reasons, including the fact that even though we came from only 15 km away, our accent was different. We also came from extreme poverty and the quality of our clothes displayed that. They were rags and we were in a shocking state nutritionally. We often went hungry. Breakfast would be a little piece of bread and a cup of black tea. That was a daily occurrence. On arrival back home it would be the same, just a little piece of bread and another cup of black tea. On our way back from school, we would drop by the orchards as we knew the people who owned them and would occasionally pick up grapes or apples or whatever was available. That would sustain us for the rest of the walk or ride home.

When I went to intermediate school aged 12, I discovered that I had not been registered as a citizen of Iraq as a baby. There was no compulsive registration back then and records were simply not kept. I had no records at all. My father had not served in the military and therefore the people refused to give me a birth certificate. My father battled to get my siblings and I

registered as citizens, by which I mean he had to bribe people. My actual birthdate is unknown so I was given 1st January 1964.

In that same first year of intermediate school, I had a mid-term exam in geography in which I scored 46% (which proved four months later, after many objections, to be identified as a clerical mistake – it was 86%). In those four months I was traumatised. My pride, self-esteem and ego sank under the weight of the shame of failure. It became all-consuming. I had to prove myself in everything I did. I had to be the best. Unfortunately, the habit took me over, although I did not know that at the time, and that was a real problem. I was obsessed with always thinking that I was right.

By the middle of the second term, one of the teachers became interested in my abilities; he thought that I was talented and he started to support me. Eventually, the entire school acknowledged my effort and my achievement and this continued through the whole of high school. For the rest of my time there, I got the highest marks in the school, and in my final year I scored 98%. This was a wonderful culmination of a lot of suffering and hard work. But, I'll be honest, it went to my head. I began to feel I was part of the elite and the elite did medicine, engineering or law. If they studied medicine they become big surgeons. It got me thinking about medical school.

One day I had an English language exam. It was raining, cold, dark and miserable at 5am but I got ready for school and headed off in the rain. I was adamant that I would get to school despite the fact that my two friends were a bit reluctant. After about 15 minutes we were all soaked through but decided to keep going and we arrived at 9am. We walked straight into the headmaster and his assistant who looked at us with horror. The headmaster yelled at us, "Why did you come to school on a day like this? We know where you live and the distance to get here." They ushered us in and provided us with heaters to try and warm us up and dry our clothes. Our clothing and books were soaked through. We weren't able to dry thoroughly but by 11.30am it was my turn to go into the oral English exam. I went into the class and the English teacher looked at me with pity and respect. "What are you doing here? Why did you do this to yourself?" he asked. He was so confident in me that he added, "There is no examination for you today. I have marked you at 100%. You need to go home and dry yourself off."

When I was about 15, I stopped looking after the sheep and goats. Being older meant I could do harder work. Luckily, by then the economy was a little bit better and people were starting to build homes. I had several cousins who worked in the building industry, so it was easy for me to get a job with

them in the summer. It was hard working in the heat of the day and we were very exposed. We needed to drink litres and litres of water. The wages were modest but it was better than nothing. When the day was over our clothes were white from sweat as the water evaporated and left us with salty looking clothes. I continued to do this work every summer holiday and this was the start of me becoming financially independent. I enjoyed being able to buy clothes and items to survive.

Despite the hunger and disease that dominated my childhood, I eventually made it to the prestigious College of Medicine (previously the Iraqi Royal Medical College) at Baghdad University. I lived in university halls the first year and managed to sustain myself on a minimal amount of money. The first year was all the chemistry and physics that we had studied at high school, which was a bit disappointing because I didn’t have much interest in physics and biochemistry. In the 1980s, before the introduction of problem-based learning and a module-based curriculum, which focus more on the actual clinical problem, studying medicine meant followed a didactic curriculum where basic science was disjointed from clinical study. Baghdad University established a medical school after the First World War and the system did not change much, or adjust to the progress in education that was being made in developed countries.

The real medical study started in the second year and by the third year things started to make sense. They started teaching us more clinical materials and it was much more enjoyable. Academically, I blossomed. That year, with some help from clinical exposure, I started to like surgery in general. There was only one problem: I had a fear of seeing human flesh opened and the blood visible.

In a bid to overcome this, one nice spring day my close friends and I decided to go to the operating theatre and ask if we could observe an operation. We were told that we were only allowed to watch from an observatory – a glass dome upstairs, looking onto the operating room. There were four of us, and when I looked down, all I could see was blood and red flesh; I had no idea what the surgeons were operating on. One of my friends fainted but we only realised when we heard a bang on the glass. He hit his head on the glass dome and nearly vomited. We all decided we were not going to the observatory ever again. However, a year later, after we had more experience, we summoned up the courage to do it again. We managed to see a C section, which did make sense.

Studying to become a doctor requires a lot of commitment. I suspect if I knew then what I know today, I would have been more careful when choosing my career. I found the first two years confusing. Students came from vastly different backgrounds – even Uday Saddam Hussein, the son of Saddam Hussein, was meant to join my own class and it felt strange to think such a notorious man would be a colleague. We were told that he would be with his bodyguards and a close group of his friends who went to school with him. After a few weeks, however, the situation changed and he decided to study civil engineering. That was a relief. I thought about being an architect or a civil engineer but these subjects are as dry as a bone. I was opinionated, loved literature and philosophy, was curious about biology, had an enthusiasm to help others and I concluded that in the field of medicine all these intersect, and it would open so many doors in the future.

Baghdad was a big culture shock. People in Baghdad were well-to-do, generally, and those who make it to medical school are usually from a wealthy background. Having said that, there was no discrimination regarding admission into medical school – you were selected on your merits. Once again, in Baghdad my accent was mocked, as was my name. People treated me as if I were a foreigner. There was a kind of informal segregation between people who came from the rural areas and those who came from the capital. It was annoying. Life in the capital felt full and rich to the point of being overwhelming. I kept at my studies, curious to learn and understand the nature of the human mind. I was still searching for the meaning of life, and our very own existence, and alongside the fact we are all going to die, it was mind boggling, and even scary at times. How do humans keep going knowing what there is at the end? A point of no return. I had no answer so focused on denial. Or was it hope? The hope that tells our inner voice and our ego that we are invincible, that the future will be a better place and we are here to make it happen.

I came from the country, and was a quiet boy, shy, reserved and sensitive to any criticism, but extremely well disciplined. I was afraid of my shadow and had never spoken to a girl outside my family in my life. When a female student sat next to me during a biology lecture and started asking me questions, all in English, I totally shut down. I couldn't understand her Texan accent (she was born and raised in America to Iraqi parents and had come to Baghdad to study). I managed to exchange a few words with her, but she soon realised I was hopeless, and after a few days she stopped sitting next to me.

By the second year I was essentially homeless and living with friends. I had very little money. The clothes I bought in my second year were the clothes I wore for the rest of my time there – the same jacket, a couple of trousers and two or three shirts. That year, 1982, there was, allegedly, a failed assassination attempt on Saddam. He cracked down and within a few hours tanks went rolling into the city. I got trapped. They rounded up so many people and took them away. A lot of them were executed and some were imprisoned for a very long period of time. I hid at my uncle's house but I couldn't stop thinking about my mother. She had no doubt heard the news and knew that I was in the middle of that mess. I needed to try to get to her. I had a motorbike by then and although my uncle's family tried to stop me, I rode my motorbike really slowly and said hello to every checkpoint on the way. I made it outside the town and I got to see my mother, who was in a horrible state because she thought that I was gone. The town remained in a mess for about six weeks and then the military left.

Other tragedies plagued my time at medical school including the loss of my older brother Majid in the Iraq-Iran war, which had begun in 1980. He was 22 years old and I was 19. I have never got over this. I lost my cousin in the same war. According to eye witnesses he was killed but they never recovered his body due to ongoing fighting.

I graduated from medical school after six years, in 1987, as one of the highest achieving students in 320. It was hard, but when I look back, despite many personal hardships, I think of my time at medical school as enjoyable. After I graduated, I was lucky not to be conscripted. I started work as a medical intern for a very low salary. After two years, I found a job at a private hospital. I was working two jobs from 8am to 10pm, just to make ends meet. The hospital provided me with a very small room that you could fit a bed in and that provided me with accommodation. It wasn't much, but it was the start of my career.

Chapter Two

Want to Be a Surgeon? Psychopaths Welcome

I have a psychiatrist friend who believes a lot of surgeons have psychopathic tendencies. Certainly, I know psychiatrists and psychologists have interesting ideas about surgeons and what it takes to make one. According to them, surgeons are confident, competitive, testosterone-driven, volatile and arrogant – action cannot wait for certainty, action comes before asking questions – and a lot of them have no compassion, which I find a harsh judgement as most surgeons are true gentlemen, or women.

While the field is stressful, it is glamorous and attracts certain personalities. Although there are exceptions, it is true that a lot of surgeons are self-absorbed narcissists with a sense of superiority that goes with a big ego, and they have psychopathic, even Machiavellian tendencies. As heart surgeon Stephen Westaby said, a kick in the head during a rugby game as a young man turned him into a psychopath *and* a brilliant surgeon.

It is not that surgeons are uniquely gifted with their hands (as the public think), far from it. I am not uniquely gifted with my hands. But we surgeons have the audacity to cut and violate human bodies and change and reorganise what God designed, and we do it in a unique way. Everyone who has undergone an operation will have a scar that is unique to them. Surgeons have the courage to make the big decisions, decisions that will have lasting consequences on a person's life – saving it, improving its quality or prolonging life itself.

Doctors have the courage to show up and take action when the results are unexpected and not always under their control. And it doesn't always go their way. Walking away from a theatre when a person has died, at your hand, and being able to walk back into theatre and do it again, this time with better consequences, takes its toll on surgeons. How many other jobs do you have where people die on you? Knowing you can handle that – because I can guarantee that it will happen – is something you need to consider before you make the decision to take on surgery as a career.

There are, unfortunately, a lot of slurs about surgeons misbehaving in the operating theatre, tossing instruments around, passing harsh judgment on colleagues and giving their assistants a hard time. I'll agree, they can be demanding and hard to work with; they can be passive aggressive, lack remorse, lack patience thanks to an attitude of 'I can't believe they don't know what I need next', as if people are expected to read our minds. And this results in temper tantrums and disrespect.

My interpretation is that surgeons have a different temperament. When I operate I see all kinds of problems. I have the plan in my head and I expect to get the correct instrument when I need it, or ask for it, as any delay is time wasted. If people are not operating in sync with me it becomes unenjoyable. Once you feel your team is not on the same page, you get wound up gradually because you lose faith in them and you worry that if things go wrong they may not be able to cope, and this creates some form of distrust. Of course this might all be driven by a surgeon's heightened need for attention, as I can become engulfed in my own emotions and struggle to break free. I make a conscious note of situations like this and let the emotions ebb away so we can communicate again. When the team know the surgeon does not put undue pressure on them, and is respectful and appreciative, they deliver above and beyond expectation.

Practising in New Zealand was difficult for me as I was learning a new language – some communication issues were inevitable. I had understood, belatedly, that language has an almost supernatural power that exists between people. It brings them together. It has the ability to go directly into that black vault that generates human connection, it looks for a common ground and is concerned about the welfare of each other. Why does that happen? Because they talked and had a meaningful conversation. When two people exchange words, it can be the beginning of a deep and trusting relationship. How and why we find that connection is not entirely understood by those who study science and neurophysiology. But as we are all human, we have more in common than that which separates us. Unfortunately we are not all speaking the same language. Discrimination, be it racism or elitism, are very present, and they erode life quality and spread fear.

Guts and courage are needed when you are managing complex post-operative situations, dealing with the family, as well as other medical specialists including radiologists, anaesthetists and intensive care unit (ICU) staff. I still remember in Auckland and Sydney how worried they would look when they saw the Hepato-Pancreato-Biliary doctor or registrar, as it

almost always meant a leak on the ward and the patient would need to come back to ICU, and perhaps theatre and dialysis. It was a lot of work for them.

Mostly people appreciate it if they see you as a caring person. They don't really care what experience you have, or what your knowledge is, until they know how much you care. If you are caring, and honest, they will forgive you even if the worst thing happens. The first meeting is crucial for building a relationship with patients and families. For large surgery, I allow for at least two meetings and for large cancers, I spend around an hour with each patient. For most of that time, I get the patients talking about their problem until they are finished, and only then do I ask questions. I discuss with them the results of blood tests and what the scan shows. I draw diagrams, give them statistics related to the complication rate, death rate, long-term survival rates and so on. Patients want to cling to any hope so if you give them a cure rate of only 10%, they take that to heart and build it into their decision.

I try to not to overwhelm them with details; they forget most of it, it confuses them and makes the decision-making process hard for them. They love to know the worst and the best-case scenario, which should be made clear and overemphasised.

The time from cut to heal is particularly stressful. Everyone is on edge, waiting for the results of blood tests and scans to find out what the next step is going to be. It is demanding. Doing the operation is the fun part, but the post-operative care could have more impact on the outcome than the operation itself. This is when all the complications can occur, particularly in my field of gastrointestinal and liver and pancreas surgery. We are lucky to have advanced interventional radiology and well-equipped ICUs which support the surgeon at this critical time, particularly for big operations, which we love to do.

Most of the stress endured by the surgeon is during that window of cut to heal. You are always thinking about the patient, worried about the next phone call that may carry some bad news – an anastomotic leak, bleeding, deep infection, a cardiac event, aspiration and so on. All surgeons have complications and the only way to avoid complications is not to operate at all, but that is pure theory. I learned over the years that we have to live with complications, to expect the worst and be ready to deal with it, if and when it happens. Bad things happen when they are least expected and in the worst possible time. But if you own the problem, you will get to write the ending.

Some surgeons seem to have a low complication rate, but they are the exception. When we sit in the morbidity and mortality meetings, some surgeons seem to have *no* complications, but that's only because they don't do much apart from the mundane stuff. Other surgeons do have complications, because they are daring and take great risks, they get complications and deal with them well. This group tends to be those who actually talk the talk and walk the walk. A small minority are surgeons who get into trouble and they can't rescue the situation but fortunately this group is small. The last group adopts behavioural reactions such as avoidance, denial and, worse, they blame others. These people are less friendly, difficult to work with and they lack compassion. They might be selfish, arrogant and disrespectful to others.

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It is ironic that I went to medical school with a fear of the anatomy, the very field I would end up working in. To me the human body was too sacred, too private and too daunting to violate. My first time in an anatomy lab was an indescribable horror. For a full week everything smelt like formaldehyde; the stench of the lab was with me wherever I went; food tasted terrible and compulsive hand washing did not help. I could see the faces of the cadaver everywhere I looked, its picture was vivid in my head. It was a phantom that followed me, although I wouldn't admit it of course – it would make me look weak, less of a man and certainly less of a doctor.

I knew I needed to break the huge steel-like barrier, which was the fear of cutting human flesh and repairing it. Surrounding myself with a few good friends with regular excursions to the lab at any given opportunity gave me hands-on experience which effectively cured my phobia. However, it was not before I saw some things that made me think twice.

One day I watched an inept heart surgeon perform an elective abdominal aortic aneurysm. The abdomen was opened and he dissected the tissue around the area and applied a long metal vascular clamp, one of the clamps designed by the legendary heart surgeon Michael DeBakey, the pioneer of open-heart surgery in the twentieth century. The aorta was open and the iliac arteries were also clamped individually at the level where the aorta bifurcates into two branches, one for each leg. Then he and his assistant brought a synthetic graft and started suturing the posterior wall. Someone, somehow made the wrong move and the aortic clamp came off, and a massive gush of blood nearly hit the roof. The surgeon and his assistant were covered with blood, the patient's abdomen looked like an open blood-

filled tank, the surgeon failed to replace that slipped clamp and the patient had a cardiac arrest. The anaesthetist was caught unprepared, with only one peripheral line and two units of blood. The surgeon made a last-ditch attempt and opened the chest to start open cardiac massage but there was not much blood to circulate. By the time he got control of the bleeding and got some more blood for transfusion, the patient was brain dead on the operating table. With a lot of profanity the surgeon abused his assistants who, we discovered later, were used to this. This was him: bravado, hot air, poor performance and profanity.

This incident provoked a blood-curdling fear in my mind. Not only the fear of surgery and its risk, but also the fear of surgeons, as some of them were notorious for having a disregard to human life and a willingness to abuse their juniors. Not only were they difficult to work with, they could control your future, which made it extremely challenging. One false move and your career was over before it began.

The thing is, I liked a challenge. I wanted to become not just good at surgery but I aspired to be the top guy – the captain of the ship – in the operating room, the only voice that command actions. In order to get there I had to persevere.

It took a while for me to realise that dealing with cadavers was for the common good. Yes, I'm looking at death, or rather death is looking at me in the eyes, and these cadavers used to be human beings, with their lives, children and worries, just like everyone else, but it's over for them. Everything for them is gone and there is no return, but my work on them could help save someone else's life, maybe their children's lives.

Obtaining cadavers was a difficult mission for the anatomy department. We were told that some are imported, some were donated and others were unclaimed bodies that spent months in the mortuary. When you see those it makes you think how they died; were they in pain? They must have been alone so they are likely to have died a miserable death. It made me think of my own family. I would never have allowed that to happen to my grandmother. I couldn't imagine her body lying on that rusty steel table motionless, totally naked, for doctors to 'practise' on. Where is the human dignity? I would never donate my body for teaching.

Eventually I realised that cutting flesh was the easiest part of being a surgeon. Being in the operating room, and the action of doing the surgery, are the most enjoyable parts of the profession. I loved dissection. Nothing

made me feel more like a budding surgeon than having a scalpel in my hand and cutting tissues to identify nerves, blood vessels and organs. At this point I had no idea what I was embarking on, and did not realise how massive a moral responsibility medicine was. But the possibility that one day I would get to employ these skills, not to only cut but also to heal, made everything more animated.

Outside the operating theatre, you need to talk to patients about their problems. These are strangers with whom you are responsible for building a rapport, otherwise they don't trust you which might lead to some form of conflict that tends to be unpleasant to deal with. Trust between human beings is a precarious notion which can be built in small moments, by doing little things, the attitude of both sides, their version of reality, their previous experience and a host of other factors. Lose it and it is very difficult to win it back.

The patient presents you with a problem and you take their problem, make it yours, and work on a plan that will see them through the journey. The last part of the journey is the time between cutting and healing. Before you cut you would have made a friendship of some sort with the patient; a friendship based on a mutual benefit, albeit slightly different. The surgeon is motivated by accepting to perform the procedure, not only for the material gain but the glory that can be reached when completed successfully. The patient is motivated by hope having put all his or her faith – and often their life – in the hands of the surgeon.

Doctors who want to take on surgery as a specialty are often passionate and extremely curious. Add this to the fact they have finished medical school training and proved themselves to be clever, dedicated and capable, means they hold themselves in high regards, to put it mildly. They are willing to violate a person's private world in every way imaginable. You see people when they are at their most vulnerable and invade their body and most intimate private parts, all to help cure an ailment or at least cut out their cancer and give them hope. We all live in hope that our future is going to be a better place, even if it is just our imagination it gives us some comfort, some reassurance, and that what we need when we are facing a life-threatening situation.

Chapter Three

Bloody Day and Nights in Baghdad

When I started as an intern in September 1987, I was passionate and enthusiastic, but so green and fresh that the first dose of reality was overwhelming; they kind of let you off the boat too early. I was focused on paperwork and doing what I was told to do, and I wasn't being allowed to make decisions. There was no place for emotional reactions – these, you are told, are not good for you. Do what you are told, give minimal explanations and don't show emotions. The place was tense, the atmosphere was highly charged, led by a medical dictator and a nursing tyrant. My natural reaction was to say, "What in hell got me to do medicine?" But it was too late, I was already in the thick of it.

I was interning at a centre for open heart and chest surgery in Baghdad, one of only a few such centres in the country. In Iraq, surgeons are like gods – they are highly revered, always right and what they say goes ("Your wishes are my command, Sir!").

My natural reaction was confusion, lack of direction, sunken morale and doubts about the whole business of surgery. There was nowhere to go to ask for help about dilemmas and destructive self-doubt and uncertainty dominated my thoughts. It was uncomfortable but I decided to soldier on. Whether you call this my ego, shame, face-saving or whatever, each of those was active and playing their roles.

I was there to prove my capability and demonstrate my skills, to perform and please the boss and get a healthy dose of validation, or at least a nice compliment, but rivalry between juniors often thrusts itself in the middle and makes the waters murky. I was locked on surgery and wanted to do it very much, but the route was fiercely competitive, with few training spots, and many of those were taken via nepotism. I was in need of a role model, a mentor, someone I could trust for advice, but there was no-one. None of my family was a medic so it wasn't as though I could call on an uncle or cousin for a meaningful chat.

One afternoon, the ward nurse asked me to put an intravenous (IV) line in for a patient who had his aortic valve replaced and was having antibiotics and antifungal treatment for an infected valve. I was confident as I'd had some experience in venous cannulation. The man was elderly and on my first attempt, his vein ruptured, the blood started flowing and his arm started to swell up. I ran out of gauze and tissue and yelled for help. The nurse took over, and solved the problem which gave her a jolt of satisfaction and made me feel as if it had been a setup to break the will of this confident young man.

The unit had a 32-year-old patient whose mitral valve had been destroyed, he was suffering from atrial fibrillation and he had a blood clot in the left atrium. Two days before his planned mitral valve replacement, at 7am, a nurse called me to say that he could not be roused. I found he was unconscious due to a massive stroke. The blood clot had blocked a major artery in the brain and no treatment was available. The poor chap only survived for two days. I still see the sorrow and grief in his mother's eyes as she sobbed by her dead son's body. This was 35 years ago and I still remember it clearly.

Shortly after, we admitted a 2-year-old chubby beautiful infant who was born with an abnormality in his lung, as one of the lobes of the right lung was underdeveloped. He was having recurrent bouts of pneumonia and the chest surgeon tried to convince the parents not to have surgery but they insisted on having the operation. As interns we slept in a room on the ward and that night a senior member of staff was staying with us.

There was a knock on the door from the night-shift nurse. She told us the child was having a grand mal seizure. We had no idea why this was happening and, even worse, what to do about it. The senior staff member suggested an anti-convulsion injection, which was given, and the seizure settled down, but the infant's oxygen saturation started to go down. We attempted to contact the surgeon on call, but he was nowhere to be found. Within two hours, the child had a cardiac arrest and died.

The next morning there was a big squabble between the surgeon and the family, full of verbal abuse, accusations and threats.

My senior resident, Ahmed, was a very capable, very nice person, who was loved by everyone; he also had amazing dexterity. He stayed with us in our shared room next to the ICU. One November afternoon, the operation list had been completed – I had observed a mind-blowing operation to replace

a mitral valve damaged by rheumatic fever on a 19-year-old from my hometown, his brother taught me chemistry at high school. I was in the unit being abused by the experienced nurses when Ahmed came out of his room in his sleepwear, opened the fridge, poured himself a glass of water, had two or three gulps then leaned on the open fridge door and fell asleep. I assumed the poor soul must have been up all night. A middle-aged nurse with dyed red hair told me to wake him up and help him to his bed, which I did with no hesitation. I didn't ask what was happening.

Shortly after, a colleague, Majid, returned from his holiday. I told him about Ahmed hugging the fridge. "Don't you know?" he said. "No," I replied. "Can I trust you with a secret?" asked Majid. I nodded. "Ahmed is a pethidine addict." Apparently, this started when his mother was dying from breast cancer. She had bone metastases, was in agonising pain and her palliative care physician put her on a long-term opioid injection. Ahmed had access to it as he was her main career. Then he started injecting himself, I suspect to ward off depression. He got addicted. Pethidine induces a very pleasant feeling, a euphoria that lasts for several hours. I had no idea how he functioned that well as an addict.

Majid came up with a weird idea to make Ahmed quit. He observed what Ahmed did and saw that he would have a 10ml syringe filled to the brim with pethidine, and would inject 1ml and draw blood back. The syringe now looked like a blood sample so people wouldn't become suspicious. The syringe was always on his bedside table in our shared room. Without me knowing, Majid did something that could have been catastrophic. He took the syringe, tipped the bloodstained pethidine in the wash basin and filled it with expired blood that was being removed from the blood fridge. No doubt Ahmed injected himself. The next day he was as sick as a dog, with a high fever, sweating, bone pain and lack of appetite. Unsurprisingly, he was out of action. We ran some tests on him and found everything was normal bar some bizarre changes in his white blood cells and liver function. He was sick for three weeks then gradually got better. I suspect he figured out that someone had tampered with his drug, but was not in a place to tell us because it would expose his secret habit.

Majid only confessed to me after Ahmed had recuperated. I was shocked. "You could have killed him," I said. "Why on Earth did you do something that risky?" I kept the secret for a long time. I have no idea where either of them are now.

After that, I discovered many doctors and nurses in Iraq were addicted to pethidine. They stole it from patients as it was not available outside the hospital system in Baghdad. Iraq was then a drug-free country. Saddam would execute any person who had any relation to drugs, whether selling or consuming. That same year, a young female paediatric surgical trainee was found dead in her bed with a pethidine-filled syringe sticking in her groin. She had been injecting into the femoral vein.

One day, as we followed our consultant on a ward round, we came across a lady in her late forties who needed a cardiac valve replacement. The consultant was a real gentleman and, in order for him to find a suitable valve, he asked whether she was planning to have more children. She said no so he decided to insert a metal valve that would require lifelong treatment with warfarin but survives longer than the tissue valve.

Later that week she had her operation and was sent intubated to ICU. An hour later there was massive blood coming from her the chest tubes that are usually left in to monitor the bleeding. I was horrified when I got to the unit as there was blood everywhere. The surgeon cracked her chest open and found that one of the metal parts of the valve had penetrated the muscular wall of the left ventricle and made a gaping hole that could not be repaired before she had a cardiac arrest and died.

I have never to this day seen a surgeon look so distraught. He was broken and took it upon himself to tell everyone exactly what had happened. He was at the bottom of some stairs when a hospital orderly appeared and the surgeon started explaining everything again, condemning and swearing at the company that manufactured this particular valve.

Seeing see my boss in such a state of despair left me deflated. He was a great surgeon with a well-deserved and brilliant reputation. I would love to know how he recovered from that, if indeed, he ever did.

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After two rotations in surgery, I was assigned to do medicine and then paediatrics, followed by coronary care. When I got to the paediatric ward, it was a shambles. I was delegated to the haematology and oncology unit run by a gentle giant, Professor Adil Al-Attar. Adil did his training in the US; he was a big name and an outstanding paediatrician. The work was demanding. We needed to give the children certain cytotoxic protocols as IV infusions. We didn't have the modern technology you expect to see in hospitals so we had to make manual calculations to deliver the treatment

over a given timeframe. I was impressed by all the protocols and the availability of those medications, despite the fact our country was at war with Iran.

Regrettably all these children, who came from all parts of the country, were extremely sick. They had all types of lymphoma, acute lymphoblastic leukaemia and neuroblastoma. It was disappointing and frustrating that a large percentage came in after relapsing, and then died. Some died from sepsis as the chemotherapeutic drugs destroyed their immune system. One 10-year-old Kurdish girl died because her father continued to give her azathioprine two weeks after the intended period. She came in unrecognisable with swollen lips, her skin partially dead. We were horrified to see her in that situation; her temperature was 41 degrees and despite the antibiotics and support she died a few days later.

Death was common. One day when three children died from recurrent leukaemia, the senior nurse, Samira, asked me what I planned to do with my future. I said general surgery. She said, “Good for you” and added, “You see what happens here? All the kids have leukaemia and survive only on chemotherapy. Then they relapse and don’t survive for long.”

I moved to the internal medicine ward on level 6 at the main Baghdad hospital (then known as Saddam Medical City, now known as Baghdad Medical City). The situation there was even more grim. We’d see elderly people with massive strokes but we had no CT scanner at the time and no-one knew whether it was a haemorrhagic stroke or embolic, and nothing could be done about it apart from supportive care. Families would get frustrated and take their patient home with no rehabilitation and no organised follow up. Scores of adult patients with leukaemia and lymphomas were dying due to a lack of effective treatment. The options were so limited; only some patients with Hodgkin’s lymphoma could survive.

Ischemic heart disease and diabetes were the major killers. Coronary angiography had just started, but there were no stents, only balloon dilatation on a very limited scale. Scores of people died from heart attacks – a lot of them didn’t even make it to the hospital. Kidney failure patients were regular customers. They came in extremely unwell with acute dehydration or sepsis, or their potassium was dangerously high. They didn’t survive very long. Surgical patients with fairly routine needs – those who got their gallbladder or appendix, or thyroid removed – seemed to do well, as did breast cancer patients. But most of those with cancer didn’t, in particular pancreatic cancer. It got me thinking what I wanted to do in the

field of surgery. I knew I wanted to fix problems that were struggling to be fixed, or at least have a good go trying

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In 1988, the war between Iraq and Iran, the senseless war between Ayatollah Khomanie and Saddam Hussein, was still raging. It was now eight years old and had already claimed the life of hundreds of thousands of people, including my older brother, Majid, who was just 22 when he died in July 1983. The loss was massive, it impacted the family hugely and left me devastated and grieving for years. I struggled to get over it for decades. I don't think I ever will.

Majid was close to me. We did everything together as children, played together, shared everything, including clothes, and went to school together. He was conscripted at the age of 18 as part of the compulsory military service and was dispatched to the frontline in a short period of time. He escaped death twice – the first time in 1981 when a road-side bomb went off and destroyed the truck he was travelling in. The incident left him with concussion and a loss of sense of smell, his mood was altered and he had frequent temper tantrums, but after six months he was better and went back to war.

Iraq had taken over the disputed border province of Ahwaz, displaced its people and took its capital Almohamara late in 1980. The Iranians considered this to be a major insult and brought the best of their trained forces to restore their land. The Iraqi army defending Ahwaz was well trained and well-equipped but outnumbered by the Iranians who used massive human waves of volunteer soldiers (martyrs). The Iranians also had knowledge of their land and a better attack plan. Soon after the start of the attack, the elite Iraqi forces lost a massive number of its fighters and officers.

My brother was fighting in a less intense area and when he got the news of the defeat, he fled hastily back to Al-Basrah. Soldiers around him were getting killed by the Iranian Air Force but he escaped to fight another day. Then on 31st July 1983, he was taken down by an Iranian sniper bullet at the border town of Zurbatiyah. I have felt the loss every day since. Interestingly, when I talk to parents who have lost a child through cancer or in an accident, they almost always have the same feeling of grief; a wound that never completely heals, you take it with you wherever you go and it bleeds any time it gets rubbed.

In 1988, just a few months before the war ended, the attacks on both sides intensified. Whether this was a desperate attempt to ascertain superiority, settle some scores or gain the upper hand for a negotiation that might have been coming, I have no idea.

Doctors were asked to leave the hospital in Baghdad. We were told to pack a bag as we were needed at the frontlines, to the borders of the city of Amarah. Shuttles took us to the airbase and from there we – a number of surgeons – were flown in a charter plane for around an hour before landing and being taken by road to a hospital on the frontline. The hospital was a new building, poorly designed, with only a few operating theatres. It was overwhelmed with the number of injured people who had come, covered in battle dust, to wait for treatment. I imagine these were the lucky few. I suspect anyone who was bleeding died at the scene or during transfer.

I was very junior so I was assigned small jobs. The first group of injured people I met were Iranian prisoners of war (POW), captured after being sprayed with nerve gas – we probably only got the few who survived. They had swollen eyes, running noses, coughs and were begging for their lives. We didn’t have any medication that would help them, and we had never seen such injuries, so we had nothing to offer. They were taken back to their POW camp.

The wards were filled with injured people. Some went to the operating theatre for amputations of damaged limbs, or spleens, or just to tidy a big wound. One man had his right axillary artery severed. A surgeon attempted to repair it but 24 hours later it was evident that his arm was dead and would need to be amputated.

I think we saved at least one soldier who had heat stroke (the worst I have ever seen), a man in his twenties, crying from discomfort and pain, disorientated, with dry, darkened skin, a heart rate close to 200, very low blood pressure, and no urine output. We got buckets of cold water and poured it over him then established venous access and started infusing saline. After several litres of IV fluid he stabilised, but still had no urine output. He was sent to a central hospital for further treatment.

The day after we arrived senior doctors asked us to do a ward round. To my surprise there was a huge number of injured people who had been admitted a few days before, and no-one had seen them. They were hungry, thirsty, had broken bones and head injuries. Some soldiers with broken femur bones were crying out for help to treat their pain. Half way through the ward round