A Day in the Life of a Medical Student

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I looked up the origins of the word 'doctor' the other day. I've spent the last 4 and a half years studying towards earning that title and it dawned on me that I didn't know the root meaning of the word itself. It startled me to find that "doctor" derives directly from the Latin word docēre, meaning to teach. Teacher, not healer, or anything medically suggestive, but simply teacher. In hindsight I should have realised, given the dogma surrounding its use in academia and its honorary status for use in medicine, but it's quite a powerful thought. Doctors are meant to teach; their patients, their students, their teams, their colleagues, even themselves. Clearly public perception of the meaning of the word 'doctor' has changed over the last few hundred years, due to advances in medicine and the sheer volume of media coverage (such the proliferation of medical TV dramas). However it still remains, at it's core, a teaching profession. This is easy to see, when entering a hospital or GP surgery as a professional or a patient; students are everywhere these days! Hopefully this account will shed some light on what we medical students tend to get up to.

The Morning

07:00am: Wake up, hit the snooze button on the alarm and weigh up having an extra fifteen minutes curled up in bed against breakfast, that all important meal of the day. I choose the former, knowing I'll regret it later.

07:15am: Eventually out of bed, I get ready for the day, packing lunch and checking emails. Occasionally if I get up earlier (no chance), I'll try and do a little reading, depending on what I'm doing for the day. This afternoon I have a 'communications master-class'. I briefly look through the scenarios we're expected to review before heading out the door.

08.30am: Get into hospital in good time for the ward round, that time honoured tradition. Now ward rounds can often be a mixed bag for a student. Sometimes it's great, if just one person out of the entourage takes the time to whisper explanations, or even the odd dry joke to make you feel welcome, regardless of whether it's the fearsome consultant or the frazzled looking junior. Otherwise you can sometimes feel a little useless or intrusive, awkwardly shuffling after this bizarre procession through the ward. The team know me now and welcome me warmly when I join them, involving me in their gentle chat.

As a younger student, I often found it particularly difficult to build up meaningful relationships with each team I rotated through; the sheer speed at which students rotate through departments currently means that as soon as you start feeling settled, off to the next one. This whistle-stop tour of the hospital reflects the sheer volume of information we have to learn and the speed at which we need to absorb it. In 1950 the volume of medical knowledge (including clinical care) took 50 years to double, while in the 1980s that rate was estimated at 7 years. Now it's suggested to be less than 3.5 years and still accelerating[1].

Returning to the scene, the consultant pauses after conversing with the patient to ask a question of me (the evidence for the clinical value of digoxin in heart failure). He grins at my ponderous expression and encourages me with a few leading questions after I honestly answer him that I don't know. When I eventually arrive at the correct response, having exhausted all other possibilities, the whole team smiles with him. Now, in my final year, I understand the actual practice of medicine is shifting from what you know to how you behave (to any student reading, that doesn't mean you can stop studying; indeed quite the opposite). My honesty has been rewarded with a quick bit of friendly tutoring, and I feel comfortable here in being professionally candid with my seniors, knowing when and how to ask for help. I scribble down a note to read up on digoxin later to patch the gap in my knowledge so I don't get

What is an authority gradient?

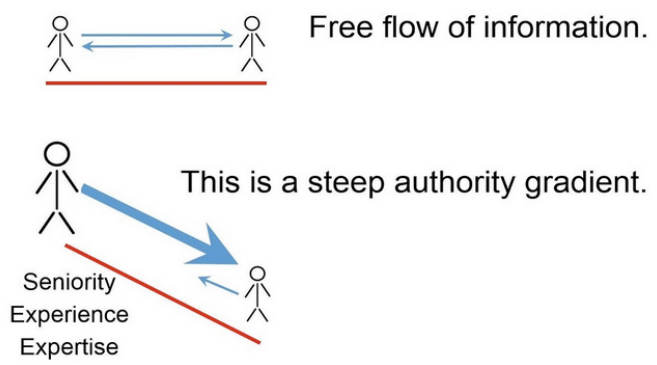

Figure 1. Authority Gradients Explained.

The term was first coined in the aviation industry, where they noticed in times of stress, communication often broke down. This happened especially when there was a significant difference in experience and seniority between the pilots i.e. an authority gradient. The greater the difference the larger the authority gradient and the harder it becomes for the junior to communicate, while the senior finds it easier to enforce commands and lead. A steep authority gradient is most likely to cause harm when information is incomplete, decisions are rushed and actions irreversible, while a lack of an authority gradient (i.e. no leadership) can also be damaging in those situations. A balance must be struck.

caught short again.

It's interesting how malleable "authority gradients" (figure 1) can be to good teachers. Undergraduate clinical teaching is almost universally hierarchical (the apprenticeship model) and therefore depends on a steep authority gradient. This model works well, but the inherent weaknesses in this approach should always be considered[2]. The best teachers I've had were able to scale the authority gradient up and down according to the situation at hand, according to what their learners need and respond to. Since authority gradients are known to contribute to adverse events in the provision of clinical care as a team[3], I'd cheekily suggest that those teachers able to reduce or increase authority gradients appropriately might also be safer clinicians (and perhaps more enjoyable to work with and for).
For fellow undergraduates curious about ways to improve their communication when dealing with steep authority gradients in a professional manner, I found Peter Brindley and Stuart Reynold's recent article on critical communication helpful[4].

10:00am: My stomach's betrayed me with a traitorous howl. The FY1 I'm standing next to is holding back a little bit of laughter. Should have had breakfast...

10:**15am**: Ward round is over! After a quick cup of tea I ask what I can help out with for the morning. There's a new patient on the ward who's a bit of a "character" according to the nurses; let's call her Mrs X (to ensure I maintain confidentiality and do not get struck off the GMC register before even getting on it). The registrar decides that I need a challenging clerking since its fifth year and sends me to her…

10:**20am**: While conversing with aforementioned patient and flicking through her notes, I find out she's been banned from the trust previously for assaulting staff... but got brought here on account of her acute medical state. I don't feel threatened, and she seems well behaved currently, but on balance I better check with the team as I'm unsure of what we are required to do in this situation.

I venture out to the nurse's station and ask, prompting a number of the nurses and doctors around me to start discussing the politics surrounding "zero tolerance" policies and the implementation of them. With the ever-increasing focus on patient safety, I briefly wonder about the safety of healthcare professionals too. I feel safe on the ward here though, and the registrar tells me to come find him straight away if I feel at all uncomfortable.

10:**30am**: I return to Mrs X, our patient who technically shouldn't be here. Mrs X seems a lovely lady when talking to me currently, more anxious about what's happening and why she's here. Her mental health issues are clear from the notes and talking to her, and I build quite a good rapport by simply listening to her interesting medical stories. I do wonder if the reason that medical students can often establish quite a substantial rapport is simply less time pressure, or whether the decreased authority gradient at play also allow the patient to be able to be frank and speak in a more casual way sometimes. There is evidence to suggest that psychiatric patients and those with difficulties in communicating to others are three times more likely to experience preventable harm in hospital settings[5].

That's quite a disheartening figure, even more so when you think of the internal frustration these patients must suffer with due to not being able to communicate effectively with those responsible for their care.

11:**10am**: Finally finish the clerking. Mrs X was extremely well behaved throughout and was quite happy with me for listening to everything; I explained that I'm allowed to take a bit longer with patients than the qualified doctors, and that often they are quite busy. I pause to ask her if she'll behave herself for us, to which she chuckles and nods.

The Afternoon

After a quick lunch, I head to our communication master-class. One of the advantages of HYMS is the emphasis on improving and constantly developing communication skills in a directly applicable way. This is done through simulation-based medical education, using actors as simulated patients to achieve a high level of fidelity (i.e. how immersed the participant is in the scenario) for communication skills. Personally I think it works well, and the evidence supports the investment they make in us, suggesting a dose-response relationship in terms of showing desirable behaviour change[6]. While there is no replacement for hands-on clinical experience, the increasing emphasis on patient safety and care can impede our educational involvement.

This is especially true of high-stakes situations such as resuscitation, and high-technological fidelity simulation (figure 2) can be used to bridge that gap and prepare us[7]. HYMS is starting to implement this for undergraduates, while HILS is already providing this in combination with human factors education to local junior doctors. Human factors considers the interactions of professionals with their colleagues, environment and systems they work within, and how this impacts performance[8]. It significantly alters patient outcomes[9], particularly in high-stakes situations where success hinges on effective, clear and fast communication[10]. If you search online for "just a routine operation", the tragic case of Eileen Bromiley[11] illustrates the necessity of human factors, and was indeed the catalyst for the human factors movement we see today. The integration of human factors into clinical curricula has the backing of the NHS[12], GMC[13], NMC[13], WHO[14] and a whole host of other organisations who generally strike fear into

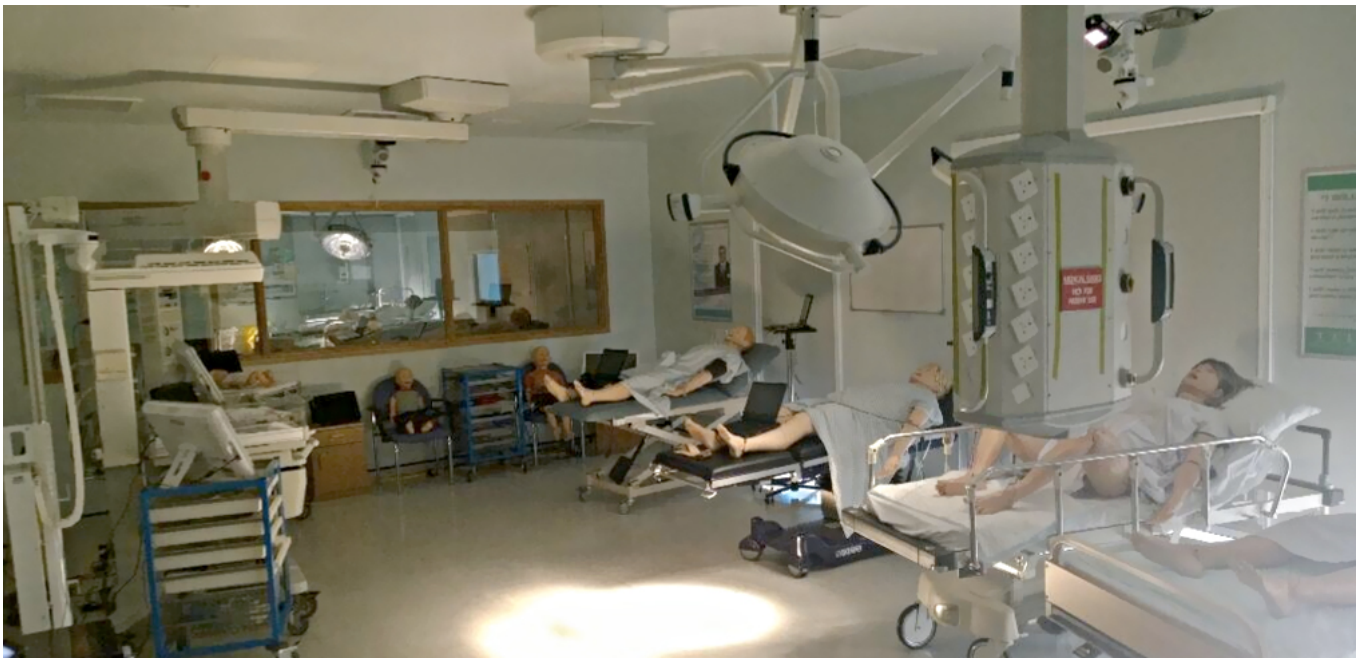

Figure 2. An operating theatre for simulated practice.

An example of high technological fidelity simulation. High fidelity patient simulators such as SimMan 3G can be combined with an immersive environment to make the scenario look and feel realistic for the participant. This gives the participant a chance to develop and improve their acute management skills in a safe environment. Image courtesy of HILS.

the hearts of undergraduates with their imposing acronyms.

Why would undergraduates care about this though? I would make the case that human factors issues such as situational awareness, situational overload, fatigue/stress, working culture and authority gradients are extremely relevant to any junior doctor straight out of medical school; why shouldn't we be taught how to recognise and guard against these? Additionally, the drive to change the culture of the NHS to a patient safety focused culture in the wake of the Mid-Staffordshire Inquiry[15] could be also addressed by educating and empowering undergraduates who are much more malleable in their attitudes. If we get started earlier the potential benefits are greater, protecting our patients (and careers too).

Anyway, I digress. The overarching theme of the session is professionalism. My scenario sets me as a newly qualified FY1, with a fellow junior doctor (the actress) confiding in me that she's struggling to cope at work. "Eeek" was pretty much my first thought. It's not a clear-cut scenario at all. Maintaining good professional relationships versus upholding patient safety and care standards, plus supporting a colleague. She opens the conversation and I coax her into talking more, using the time to organise everything in my head while allowing her to vent. When she mentions the effect it's having on her work, I place a subtle question to check for patient harm. I feel like the conversation has taken a slightly Machiavellian turn with this question, which I'm not comfortable with, so I tell her honestly what my main two priorities are: her well-being and patient safety. It's a slightly pregnant moment as she pauses to mull over what I've just said, but I get rewarded with a smile and she continues to talk.

About ten minutes in, the facilitator calls time, and the debriefing starts. Good debriefing makes all the difference for us; we get so much more out of the session if the group feels safe to talk candidly while still being respectful and supportive of each other. I get a good review, dissecting into the guts of the scenario as it played out, with some nice learning points to take away. Onto the next scenario… Uh oh, someone's getting shouted at for giving the wrong drug…

Anyway, that's a snippet of my life as a medical student. Like everyone, sometimes I get elated, sometimes exasperated, but since moving to Hull I can honestly say I've enjoyed it, and am proud to be here. I hope you've enjoyed reading this as much as I've enjoyed writing it, and thank you for your time.

I've made sure to remove all potentially identifiable details from this article to ensure privacy of the individuals mentioned. I would also like to thank all the individuals involved in my day, and all my other days as well, patients and staff alike who have contributed to my education and inspired me in my work. I'd lastly like to thank both HYMS and HILS, two organisations which have helped me grow both personally and professionally.

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