Hi, I’m Effie and I’m going to be talking about why junior doctors make mistakes.
This talk will cover these 3 points...
So let’s look at why junior doctors make mistakes...

• Why do junior doctors make mistakes?

• What are the challenges?

• What can we do?
Because they’re human! – To err is human and half the battle in terms of preventing error is to accept that no individual human being can perform complex tasks like prescribing without committing errors. We also need to understand that humans also act as safety nets, ‘catching’ errors.

Equip and Protect are extremely powerful studies that utilised a full range of qualitative and quantitative techniques to look at this very question. The headline figures are eye-catching, and familiar to us all, but there are also many important details lurking below the surface.

FY1 doctors are not the doctors most likely to make an error (that prize goes to FY2s or ‘others’), even consultants make errors on more than 1 in 20 prescriptions that they write. This suggests that whatever afflicts FY1 docs is also likely to affect FY2 docs and therefore the rest of this talk will focus FY docs in general.

If focussing purely on FY docs is not the whole answer, it is not completely unreasonable, they are probably at a more malleable stage in their career, they certainly write the most prescriptions and therefore are the greatest risk to patients in terms of sheer numbers and perhaps most importantly, they are the consultants of the future...

To me this also suggests something more: knowledge and experience improve as we become more senior, so prescription errors by consultants should be as rare as hen’s teeth. But this is not the case. This means that, either, knowledge is not the only factor in safe prescribing, or that the knowledge is so complex that even consultants cannot have full
mastery of it.
We need to go back to the qualitative data, to hear what FY docs are telling us, and a recurrent theme is that of the culture in which they work...
“... whereas if it had been the other consultant I would probably have started antibiotics ... so it just depends on who the consultant is, you have to know who you are working for”


This idea that the ‘right’ answer to a prescribing dilemma depends on factors other than the patient is a common theme in research speaking to junior doctors.
‘Despite the rhetoric about evidence-based medicine...FY1 doctors...learn prescribing by prescribing in specific settings and within specific teams’


This is a quote from the conclusion of same paper, looking at transitions (e.g. from student to FY1) as learning experiences.

We need to consider the context within which FY1 doctors work. They are not independent practitioners by the definition of the GMC and indeed their prescribing rights are only granted within the limited terms of their FY placement.

The interviews with 1st year graduates in the Equip and Protect studies (as well as studies carried out in Australia) and others have shown that FY1 docs are rarely the sole decision-makers when prescriptions are written and the errors that they make are fraught with communication, team-working and environmental error-provoking conditions.

Half-understood messages, relayed through third parties in stressful situations with multiple distractors are a common theme through these narratives and we need to work to address these and to equip FY docs with the skills to navigate these muddy waters.

We known that prescribing safety varies from one ward to another...culture matters.
“...you’ve been rewarded for this all in the past ... you have been told you are very independent and self-driven ... now all of sudden you have to write an order for insulin ... they don’t want to ask for help every other second...”

Kennedy, T.J.T. et al., 2009. ‘It’s a cultural expectation...’ The pressure on medical trainees to work independently in clinical practice. Medical Education, 43(7), pp.645–53.

Here is another quote from a junior doctor interviewed for a study into calling for help

So why is it so hard for junior doctors to ask for help?
To me, this is the most concerning theme of all; the reluctance to speak up...to ask for clarification...to ask for help...to question a decision that they know to be flawed. How have we created an environment in which junior docs feel that their professional role or concern about appearing foolish is more important than the safety of the patient in front of them? Indeed, if you put this to these doctors in this way, they identify the extraordinarily dysfunctional thought process that this involves, yet in practice we all do it! We need to recognise this as it affects the feedback that we get from our trainees. They will assume that our decision to ask them to prescribe warfarin to the patient on aspirin and clopidogrel was made for a good reason...not that we had simply forgotten about the anti-platelet therapy. Most frighteningly, they may not ask.
If you leave this talk with the intention of reading one reference I strongly recommend that you make it this one by Tara Kennedy. The very powerful argument, well-supported by qualitative data, that she makes is that it is the failure of the medical profession to model uncertainty and help-seeking behaviours that prevents junior doctors from speaking up. In the eyes of our juniors asking for help is not a part of the competent doctor’s role and identity, therefore, as they strive to become competent they feel pressure to avoid speaking up in order to show that they are developing into competent doctors.

So; conditions for junior doctors are challenging, what can we do to improve them? What changes can we make on tomorrow morning’s ward round that will improve the safety of our patients?
I have shown you that prescribing errors cannot be taken out of the context in which they occur, unless we address the safety culture within the NHS and beyond we cannot hope to reduce the number of errors. This means we need to teach prescribing in that context.

A recurring theme is that many junior doctors see their mistakes as ‘not mattering’, because they think someone else will spot it before it reaches the patient. We need to raise the profile of prescribing and teach FY docs to be ‘error-aware’.

In order to do these things we need to fix the feedback loop, the EU WTD has broken the traditional firm and with it a lot of the feedback that junior docs used to get (some of it admittedly poor and inappropriate) so we need to find novel and challenging ways of doing this. I will discuss one cheap and easy way to do this in the next slides.

As discussed on the previous slide, we need to address a culture where senior doctors are seen as independent/omnipotent forces, not relying on others to perform their tasks. That involves examining our own practice and function as role models. This can be as simple as pausing a ward round to check the antibiotic guidelines or the senior doctor writing an important prescription themselves. Research has shown that one of the best ways to get junior doctors to use the BNF is if they have seen their consultant use it.
Wouldn’t it be amazing if we could all achieve these results from a paediatric ward near Bradford?
What led to them?
This didn’t involve a teaching intervention, a change in ward policy, more staff or any financial outlay...it simply involved feedback.
A fortnightly review of a sample of medication charts and after each review the anonymous feedback was made available, to all doctors, in this format.
After 3 months the results you saw earlier were achieved.
There have been quite a few similar studies, all necessarily small scale and context specific, but this is a cheap and simple method that seems to be highly acceptable to staff and, most importantly, it is effective.
It emphasises that more knowledge is not necessarily the solution, but that heightened awareness can lead to changes in behaviour with substantial impact.
Take-home message

• Knowledge is only one of many factors in the prescribing errors made by junior doctors.
• Junior doctors’ prescribing is context specific and strongly influenced by workplace culture.
• Focussing on a safety culture, feedback and creating positive role-models may help reduce error rates.

Thank you very much for listening.
Questions?
References


• Dornan, T. et al., 2009. An in depth investigation into causes of prescribing errors by foundation trainees in relation to their medical education. EQUIP study., London.


• Kennedy, T.J.T. et al., 2009. ‘It’s a cultural expectation...’ The pressure on medical trainees to work independently in clinical practice. Medical Education, 43(7), pp.645–53.
