Reducing the stress in medicine

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It's time to stress which elements of medicine are responsible

There is certainly some good evidence that doctors suffer an increased prevalence of mental health problems compared with the general population,¹⁻³ the early postgraduate years being possibly the most stressful of all.⁴⁻⁶

However, there have also been recent papers that throw doubt on the conventional belief that the medical profession has any particularly unusual psychological difficulty.⁷ Other studies of health workers reveal there are groups, such as nurses and managers, who show equally high stress levels.⁸ The fact that it's not just doctors but also others who work in the health services who suffer from high levels of psychological problems would naturally point the finger of suspicion for all this stress in medicine, to the workplace.

Work pressure can be considered as consisting partly of the strain embodied in the intrinsic practice of medicine wherever it is executed, but there are also specific working conditions to consider—the particular context in which clinicians practise. Levels of strain might vary from hospital to hospital or clinic to clinic.

Yet given the high levels of stress that are repeatedly documented in such large numbers of doctors, there surely needs now be a new move away from the previous individualist focus on particular doctors and clinics who are feeling the strain. We now require a novel more global examination of where and how doctors' work is so pathogenic.

It may well be that traditional medical training does not adequately prepare doctors for the stress of their actual professional lives, and indeed could even directly contribute to the problem. For example it is sobering to note that a strong personality predictor of which medical student will suffer future psychological problems is the attribute of perfectionism.⁹ This is a trait that is encouraged during medical school and may be necessary for survival while training, and yet this characteristic could be counterproductive when encountering the messy and chaotic real world of clinical practice.

But also perhaps the modern unease in medicine arises because times have changed. Historically, the public viewed physicians as powerful professionals it

was safer to collaborate with in order to improve your health. Doctors previously enjoyed substantial autonomy, and had received significant prestige and reward for performing a respected, complex, socially useful job.

Yet the recent growth of managerial interference,¹⁰ rising accountability and requirements for documentation,¹¹ burgeoning malpractice claims,¹² a developing "consumerist" approach by patients,^{13 14} and an erosion of trust¹⁵ have all altered the modern practice of medicine beyond recognition.

This has led to deteriorating relationships between patients and physicians and poor affiliations are often at the heart of stress, in that positive affiliations can be a powerful protective buffer against even the most severe strain.

These changes can be firstly attributed to the way doctors have become regulated, with the administration of medicine now driven by the attempt to detect medical errors, or the failing doctor. Complaints are rising, and much of medicine is now practised in a defensive atmosphere where decisions are made more to ensure staff are "covered" should an investigation be launched than because the doctor really wants to work this way.

The stress of receiving a complaint is well known, and despite the assistance of defence organisations and medical associations the local focus is on the negative aspects of complaints. Most doctors will have a complaint made about them during their professional life as even the most punctilious and competent clinicians make mistakes. Yet where are the new compensating positive rewards to practising medicine today, to balance these new negatives?

For if doctors now work in an atmosphere where the focus is on detecting and eliminating bad or dangerous practice, then this menacing ambience is hugely stressful, unproductive, and uncreative. Managers and politicians are devoting ever more energy to stop doctors supposedly killing or maiming people, yet there is no momentum in the other direction, how to identify good practice and encourage it. Instead all the focus is in finding bad doctors and illuminating them. The sense now is that under every white coat lurks a potential catastrophe.

Obviously establishing independent meticulous complaint mechanisms ensures that accusations will be investigated scrupulously, but this emphasis has forgotten that the public interest is really best served by the practice of good medicine. In fact patients usually sue doctors because they are concerned to prevent a similar incident happening to another patient.¹⁶

So while complaints and regulation are necessary, so also is the encouragement of exemplary practice. But how much support does the current system in which physicians work offer, to find the best within themselves, and express that in their endeavours? Before, when doctors were more autonomous they could pursue their interests uninhibited by the current web of regulations that now seek to produce conformity in medicine rather than nourish individual flair.

This issue of individuality and autonomy is linked to a major assumption besetting medicine: that work related knowledge lies within individual doctors. This presumption is now being threatened by research from the field of "organisational epistemology", proposing an alternative view, that much knowledge relevant to the workplace is instead collective. It is owned by working groups, not by individuals at all.¹⁷

The basic concept for representing collective activity is the network, as this captures the notion that fundamentally what really happens at work is that individuals interact, and it is through such interaction that complex organisations like hospitals and clinics function. Medical training tends instead to neglect the notion of decisions and practice arising after interaction, and instead assumes work outcomes occur after an individual doctor's introspection—looking for knowledge and decisions internally.¹⁸

Different people in an organisation contribute contrasting kinds of knowledge and the network itself develops a kind of awareness that guides collaborative activity. This alertness is collective rather than belonging to any one individual. For example a doctor's understanding of how an outpatient clinic works is probably different to the receptionist or the nurses—they all appreciate contrasting aspects of the organisation, and this collective awareness is expressed in how the clinic operates. There are things the nurse knows about how the clinic runs that the doctor doesn't and vice versa, yet it is the ability of these perspectives to interact productively that ensures the clinic runs smoothly.

One of the studies that piloted this new perspective was an investigation of the work of flight deck crew on aircraft carriers.¹⁹ A vital part of the crew's knowledge was discovered as embedded in the patterns of aware inter-relating that characterised their collective activity. In a very real sense, this knowledge

ceased to exist as soon as the crew scattered at the end of their service.

Similar work into the teams of fire fighters who gather to tackle forest conflagrations in the south of France uncovered that they shared ways of strategic thinking, which enabled them to anticipate each others' behaviour and interpret communications.²⁰ This collective wisdom was incisive for combining the specialist information that each team member added.

Yet medicine and medical training stresses individualism rather than collective activity, and in this culture it would seem bizarre to ascribe knowledge to a group rather than to individuals. None the less, many Western corporations are now adopting Japanese work methods, such as "quality groups", which presuppose that useful work knowledge is collective not individual.²¹

I recently visited the world famous Rolls Royce and Bentley factory in Crewe on a consultation exercise, where these psychosocial approaches are being introduced to improve quality control. Oddly enough for such a well known, hand built and individualist carmaker, these new approaches which dramatically improved standards, were imported in from the mass produced car factories of Japan. If Rolls Royce were not too haughty to be willing to learn from less prestigious brands to stave off extinction, then medicine could learn a lesson or two from their situation.

Doctors might still regard medicine as the Rolls Royce of professions in terms of the preservation of the autonomy of doctors, yet while much medical work is carried out independently, doctors also work in multidisciplinary teams. They construct their professional practice out of relationships with patients and members of other professions, so the question naturally arises whether a vital component of the professional knowledge base should be regarded as collective.

Several issues around work stress follow from the recognition that knowledge can be possessed by groups as well as by individuals. When a doctor is working collaboratively, what needs to be expounded to non-medical co-workers are not just the medic's conclusions, but the understanding arising from the doctor's own specialist knowledge that justified the judgment. So persuasion becomes a key technique.

These perceptions are combined with those of others, and only then developed collectively into a resolution by the whole group—the essential implication is that what organisations do arises out of how its members understand the world and interact with each other. No matter how good a doctor is and how much they know, this knowledge will be rendered ineffective if the organisation has no mechanism of properly introduc-

ing and weighting this medical knowledge in the way it makes decisions. This is increasingly likely as medical science becomes more elaborate while also suffering from accelerated change.

Another key point is that if the collective actually have widely differing goals, then doctors will find themselves stressed by their inability to interact in an effective way to achieve their own objectives within the organisation.

For example, a recent study of hazardous incidents in a sample of hospital accident and emergency departments by Professor Boreham and colleagues of Manchester University found dangerous situations such as delays in beginning treatment were caused not in fact by deficits in individual knowledge.²² Instead, Professor Boreham argues there was a lack of a collective staff understanding of how to interact with each other. As a result Boreham is among those advocating a radical overhaul in the way medical trainers think about bridging the gap between scientific and professional knowledge.

For, as Boreham points out when professional activity is collective, the amount of wisdom available in a clinical unit cannot be measured by the sum total of the information possessed by its individual members. A more appropriate measure would be the enlightenment generated by the richness of the connections between the individuals.

For decades now the new vogue has been for a wide range of institutions to seek training for their staff in collective competence rather than at an individual level. So questions should be asked about whether the British National Health Service, as well as other health systems around the world, when thinking about training, still tend give an undue and old fashioned emphasis to individual rather than aggregated knowledge.

This may arise naturally out of a tension over the hierarchies that exist in hospitals and clinics and the competitiveness that then arises. It may also be that medicine has become so expensive and complex an enterprise now that the organisations that have been thrown up to handle it have become too unwieldy for doctors to maintain their personal influence.

But building a collective professional knowledge base demands new approaches to understanding how hospitals and clinics actually work. Now in industry the term "work process knowledge" refers to the appreciation of an organisation's overall work process by its members. "Work process knowledge" when added to the specialist learning of individual employees, helps them to work flexibly and collaboratively.^{23 24}

This new perspective of collective knowledge suggests that clinics and even whole health services are not con-

structed with an adequate emphasis on the goals that doctors understand and pursue. Instead other priorities set by the other members of the team and reflecting their alternative view of what the clinic is actually there for, interferes with the objectives of doctors.

This is not to say that doctors' views of what hospitals are for should dominate—more that conflict has been developing for some years now between healthcare workers about how their jobs interrelate with each other. The lack of recognition of this conflict has ensured not much is being done to reduce the stress that naturally arises.

During the average day a doctor will need to relate to others in order to get their job done, but these interactions have been gradually becoming less productive, from a doctor's standpoint, over many years now. Because healthcare workers and administrators do not share the same sense of priorities this lack of a shared goal naturally impedes the work of the clinic. There has also been a deteriorating respect for doctors' knowledge and the rise of regard for other knowledge bases, like those of alternative or complimentary medicine and also patients' anecdotal or personal experiences.

Doctors are used to providing leadership and being at the top of the hierarchy historically made sense as they are also held largely accountable when things go wrong in health care. Perhaps a major cause of stress in medicine today is that we retain the accountability, but none of the authority. This is precisely the kind of "double bind" that family therapists hypothesise underpins the most stressful and pathogenic relationships.

Postgrad Med J 2002;**78**:1–3

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