protection for people entering the room, and eye protection for all contacts) and contact precautions (gowns and gloves and hand hygiene).

By the third week in March several hundred probable cases of the syndrome had been reported worldwide, with epidemiologically linked clusters in Hanoi, Hong Kong, Singapore, and Toronto, and further linked cases in New Jersey, California, and Bangkok. There is press speculation about a link between the clusters to the ninth floor of a hotel in Hong Kong, where a doctor from Guangzhou, Guandong Province, China, who had been exposed to patients with the syndrome in Guandong, and nine other cases were staying. Thus the current global outbreak may have evolved from an outbreak of a similar respiratory condition in Guandong last November.[6] The means of transmission in the hotel is under investigation: droplet spread in the lift lobby is the most likely.

The search for the cause

The speed of travel favours intercontinental spread of disease. The rapid dissemination of sudden acute respiratory syndrome around the world should be considered a rehearsal for the next pandemic of influenza,[7] as it shows what will happen with a new human virus spread by the respiratory route, with no vaccines and antivirals in limited supply. However, the speed of communication in the virtual world is an advantage to the microbial detective. The tried and trusted forensic approaches of the classical virologist, the electron microscope and the tissue culture plate, become powerful investigative tools when the images of a suspect can be shared immediately between laboratories thousands of miles apart. When these approaches are combined with real time polymerase chain reactions, differential display technology, and generic molecular identity tests designed to catch all viruses in particular families, the rate of data development is exponential. It is possible to undertake a microbial identity parade and go from patient sample to microbial nucleic acid detection, sequence analysis, and phylogenetic tree characterisation, in less than 12 hours—if you know what to look for. Nevertheless, it may still take weeks or months to catch the culprit in a new disease. So far among the candidates a leading contender seems to be a paramyxovirus. However, there is no substitute for sifting scientific evidence carefully and slowly assembling fragmentary pieces of the puzzle to provide a complete picture and a testable theory of causality, which is all the more convincing when it can be tested simultaneously in several laboratories using material from many different patients.

The advantages of real time communication are also exploited by the media, who can track the progress of the disease and profile afflicted individuals, put the spotlight on affected institutions, and seek accountability from those trying to contain the impact of new diseases. The techniques of tracking a new disease parallel those of tracking a war and involve documenting death and detritus, progressing up blind alleys, reporting spectacular highlights, and asking unanswerable questions, emphasising that emerging infectious diseases and mortal combat may still have much in common. Our mastery of the microbial world is less complete than we might imagine and more subject to chance interactions in the environment than we might care to admit.

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Competing interests: None declared.

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Doctors, their wellbeing, and their stress

It's time to be proactive about stress—and prevent it

Countless studies of the levels and sources of stress in doctors have taken place in the UK over the past 20 years. My own longitudinal study, begun with students in 1983,[1] was in response to two registrars asking me if someone could do something on the stress and depression that they saw around them. Two of their house officers had killed themselves in the last month, and no one had discussed or mentioned it within the teams. It was unmentionable. Over the years some things have changed, and some have stayed the same. This week's theme issue in Career Focus concentrates on ill and stressed doctors.

The proportion of doctors and other health professionals showing above threshold levels of stress has stayed remarkably constant at around 28%, whether the studies are cross sectional or longitudinal, compared with around 18% in the general working population.[1 2] What has changed over the years is that, contrary to the experience of the two registrars, doctors have become used to discussing the topic of stress and even to admitting to it in themselves. Theyare more aware of their colleagues' symptoms than they were, which means that they may be more likely to help colleagues through a difficult time or suggest they get help when they need it.

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BMJ 2003;326:670–1

Interest in stress has broadened as organisations have finally accepted that stress costs them vast amounts of money—through absence, litigation, and the fact that unhappy, tense, tired, or anxious doctors do not produce quality care.[3] Indeed, stressed doctors may make considerably more errors than those whose sense of well being is high.[4] This is particularly true if they have insufficient hours of sleep;[5] however, we now know that working long hours in itself is not the cause of problems provided a doctor feels well supported. Stress and all its related problems come both from the workplace and from the individual. Individual causes may be to do with personality or with ways of thinking, such as being particularly self critical, or having certain types of unsupportive early family relationships; or they may come from job related factors such as lack of sleep, poor communication, and poor teamwork.[3] Better teams have less stressed staff,[6] probably because they support each other, notice when one person is performing below par, and step in to help.

Making mistakes is a major stressor—not a new one, but one which is escalating alongside the price of error and the raucous publicity that surrounds it. The misery that can follow, unless such errors are turned into genuine learning opportunities, can stay with doctors throughout their lives.[7] Handling error sensibly and sensitively for patients and doctors alike has become a critical requirement of management.

So what is being done to lower the stress levels of our medical staff and thus raise the well being of their colleagues and their patients? What is now being done that was not done 20 years ago when stress was a forbidden word? Well, soon after the first reports of high levels of stress and depression in doctors became apparent, the National Sick Doctors scheme began, the BMA set up a telephone helpline, and most regions began to provide a free counselling or psychotherapy service for doctors. Initiatives from the Department of Health come and go. Hours have reduced and sleep patterns improved, largely due to pressure from Europe. However, I am not aware that a truly proactive means of attending to the health of NHS staff, including doctors, has been planned.

What we need is a systematic approach to the problem.[3] We need to accept (rather than constantly rediscovering) that we know enough about the main causes of high stress levels in doctors to address the principal organisational stressors using primary preventive interventions. Providing teamwork and leadership training to clinicians would be an excellent beginning, and making quite simple changes to the way work is organised—such as having a 12 month house officer rotation in one hospital rather than two—appears to affect stress levels dramatically.[8]

There can be primary prevention for individuals too through training, career counselling, and educating about error. When these strategies are not enough, there need to be secondary services providing coaching, counselling and psychotherapy, or alcohol and drug treatment that are available rapidly for staff, showing the acceptance that things do go wrong for most people at some time or other.

Stress is here to stay and the sooner we accept that tackling it is a normal part of management, and an essential part of patient safety, the sooner the lives of doctors and their patients will improve.

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Competing interests: JFC provided expert opinion in some legal cases where the plaintiff sued for damages caused by work stress.

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Ethnic and sex bias in discretionary awards

Eliminating bias is part of modernising any new consultants' contract

See Papers p 687

George Bernard Shaw, in his preface to *The Doctor's Dilemma*, summarised his conclusions as follows: "Nothing is more dangerous than a poor doctor." His solutions included making doctors into "civil servants with a dignified wage paid out of public funds" and "municipalise Harley St."[1] Shaw's reaction to the NHS, which arguably made hospital doctors into civil servants, is not recorded. Although he was aged 92 in 1948, he would probably have pointed to the implications of failing to municipalise Harley St.

The United Kingdom is unusual in the extent to which the state employs hospital consultants in state owned hospitals. International trends towards greater autonomy for local organisations have been partly reflected in the United Kingdom with the development of NHS hospital trusts from 1991 and, more recently, the plans for foundation hospitals.

Any economist reviewing how hospital doctors in the United Kingdom are paid would be struck by the following. Firstly, NHS national pay scales, which have survived the shift of consultants' contracts from regions to hospital trusts, make up 71% of consultants' income (table). These pay scales take no account of performance, let alone regional differences in the

BMJ 2003;326:671–2