

Violence against doctors in China

Violence by patients against doctors is on the increase in China. **Therese Hesketh and colleagues** examine the reasons behind it and the policy changes needed to tackle the problem

On 23 March 2012 a 17 year old boy with ankylosing spondylitis and tuberculosis was refused infliximab by a senior rheumatologist at the First Affiliated Hospital of Harbin Medical University in northern China. He left the clinic, but quickly returned with a knife, and fatally stabbed Wang Hao, a junior doctor who was uninvolved in his case. Three other doctors were injured in the attack. This incident was not unique; there were three other reported stabbings of doctors by patients in China in March and April 2012 alone: one was fatal and two caused serious injury. The perpetrators were all male, poor, and paying for their medical treatment. None had a criminal record or a diagnosis of mental illness, but all seemed to have a grievance against the hospital for problems with their treatment. These murders are all the more surprising given that China has among the lowest murder rates in the world.¹

The murder of Wang Hao has particularly unnerved the medical profession and the authorities, partly because of the youth of the perpetrator and the apparent premeditation, but also because of the public's reaction to it. An online poll, set up by the *People's Daily*, the Communist Party mouthpiece, asked readers to express their feelings about the murder using emoticons. Although the 6161 who responded are unrepresentative of the general population (given the readership of the paper and the type of person likely to respond to such polls), the overwhelming majority (65%) selected happiness, with anger second at just 14%, and sadness at only 6.8%.² The survey was rapidly removed but had already been widely publicised, spearheading a debate about growing tensions between doctors and patients, and about the overall state of the health system in China.

Scale of the problem

Much of the debate around violence in Chinese healthcare is taking place on the internet, which allows for free and anonymous expression in a country where anti-establishment views can still lead to censure. Details of recent violent episodes have been collated for a website aimed at medical professionals.³ Because the website draws only on media reports, it is likely to underestimate the true magnitude of the problem, but, over the 10 years to the end of 2011, details of 124 incidents of serious violence in hospitals have been

Table 1 Healthcare provision in China

	No
Providers:	
Tertiary hospitals	1399 (1.2 million beds)
Secondary hospitals	6468 (1.7 million beds)
Primary care facilities	918 003
Doctors	2.08 million
Primary care (village, township, community health centre)*	1.38 million
Secondary and tertiary care	0.7 million
Nurses	2.1 million

*Primary care doctors generally have 2-3 years' medical training, secondary/tertiary at least five years'.

collated. The incidents included 29 murders and 52 serious injuries, most of which were caused by stabbing or head injury. Others included a doctor who had acid poured on his face, another who had her throat cut, and an explosion in a hospital that caused five deaths and many injuries. Seventy eight of these incidents took place at specialist hospitals. Although most of the reported victims were doctors, nurses and other hospital staff have also been harmed.

In most cases the reports attribute the violence to spontaneous outbursts of anger and frustration because of poor care, medical errors, or exorbitant costs, but over the past 10 years violence aimed at extorting compensation from

hospitals has increased. And in a worrying development, Yi Nao gangs are increasingly involved. Yi Nao translates literally as medical or hospital disturbance and refers to criminal gangs who are prepared to go to extreme lengths to obtain compensation from hospitals on behalf of families in dispute with hospitals, in return for a substantial cut of the payment (box). Hospitals are usually forced to give in to their demands, but often not before serious damage has been done to staff and facilities. Of the 124 cases of violence reported on the website, 37 involved Yi Nao, including many of the more serious attacks in the past five years.³

Other evidence also shows a problem. In a survey of 270 tertiary hospitals carried out in 2005 by the China Hospital Management Association, 73% of the hospitals reported that they had experienced Yi Nao incidents.⁴ The Ministry of Health reported that in 2006 there were 9831 "major disturbances" involving physical violence in Chinese health facilities, but by 2010 this number had increased to 17 243.⁵ However, these figures need to be viewed in the context of a country with around 8000 secondary and tertiary facilities and nearly a million primary care facilities (table 1).

The few published surveys of experiences of health workers provide further evidence on the



A security guard in a Beijing hospital stands watch over patients queuing to register

WHAT IS YI NAO?

- Yi Nao means medical or hospital disturbance (it can also refer to the gangs or individuals who create the disturbance)
- Use of Yi Nao to obtain compensation for perceived or actual medical malpractice has developed in many parts of China over the past 5-10 years
- Yi Nao receive a substantial cut of any compensation received
- Yi Nao gangs consist largely of unemployed people with a designated leader. They threaten and assault hospital personnel, damage facilities and equipment, and prevent the normal activities of the hospital
- Although some people approach Yi Nao to deal with medical disputes, Yi Nao also solicit business by wandering around hospitals, looking for potential "malpractice" cases and encouraging individuals to pursue them
- Yi Nao disturbances, many of which have been very serious with fatal consequences, have been widely reported in the Chinese press

Table 2 Violence against healthcare professions in China and other countries*

Country (professional group)	No of respondents	% of respondent reporting†	
		Non-physical violence	Physical violence
China (doctors/nurses) ⁷	1043	70/64	11/5
China (hospital staff) ⁸	4062	65	15
China (general hospital/psychiatric) ⁹	1044	70/67	7/49
UK (primary care doctors) ¹⁰	697	33	10
Italy (primary care doctors) ¹¹	445	30	10
Norway (out of hours primary care staff) ¹²	536	44	13
Saudi Arabia (healthworkers in public hospitals) ¹³	383	57	9
Kuwait (emergency medicine doctors) ¹⁴	101	86	28
Pakistan (emergency medicine doctors) ¹⁵	675	65	12
Japan (hospital doctors) ¹⁶	1148	38 (any type)	
Australia (primary care doctors) ¹⁷	804	58	6
US (emergency medicine doctors) ¹⁸	272	75	21

*The main causes of violence stated in the non-Chinese studies were systemic problems such as waiting times and staff shortages, unmet demand, poor quality of care, disagreements with doctors, intoxication, and psychological disorders.

†Percentages of respondents experiencing at least one episode of violence in past 12 months, except UK (2 years), Pakistan (2 months), and Kuwait (lifetime).

scale of the problem.⁶ Table 2 summarises the results of surveys from China⁷⁻⁹ together with recent studies from other countries.¹⁰⁻¹⁸ Comparisons between studies are difficult because they use widely varying definitions of violence—from rudeness, verbal abuse, threats, and stalking, to physical violence with or without injury—with the exact distinctions not always clear. Many of the studies have small sample sizes and low (or unstated) response rates, which could lead to bias. Nevertheless, the table does show that violence against health workers is common in all the countries studied, the specialties at most risk (and most studied) being emergency medicine, general practice, and psychiatry. Many of the studies, including those in China, note that aggression against health workers greatly exceeds that against other professional groups.

But the problem in China has some unique characteristics. In other countries violence is almost always perpetrated by the patient or relatives, and while isolated fatal attacks have been reported from Turkey, Pakistan, and the US, serious injury and murder are very rare. China stands apart because of the extreme nature of the violence and the use of Yi Nao vigilante groups.

In the past few months Chinese websites have been swamped with comments from doctors worried about their safety, and from medical students expressing concern about their choice of profession. A recent large survey showed that over 70% of doctors would not want their own children to go into the profession, and that 76% of doctors would not choose to be doctors, given a second chance.¹⁹ Such sentiments are leading to fears of a human resource crisis in the medical profession.

The causes

At the heart of the problem is a deteriorating doctor-patient relationship, caused by the shortcomings of the health system. Since the introduction

of market reforms in the early 1980s, healthcare in China has been commodified.²⁰ Even if people have health insurance, it only partially reimburses the high costs, so healthcare is hard to afford for many. The average inpatient stay will cost more than three to four months of a manual worker's salary (box). Substantial mark-ups are allowed on drugs and investigations, giving incentives for doctors to profit from tests and treatments that may be unnecessary²¹ and leaving patients feeling exploited.

Another problem is that Chinese people tend to seek high level care even for minor, self limiting conditions. Since they do not need to get referral from primary care, patients present at secondary and tertiary facilities with often unrealistic expectations. Expensive new drugs and technologies are expected to work and when treatment fails, doctors are deemed responsible.²¹ Sensationalist media reports about inci-

COST OF MEDICAL CARE

Around 90% of the Chinese population have some form of medical insurance, mostly as part of the government supported New Cooperative Medical System that operates at a local (county) level

Premiums vary widely across the country depending on local mean income and they are fixed at an affordable level

Copayment levels also vary widely across the country and by level of hospital. People have to pay 70-90% of outpatient cost themselves. Inpatient copayments are 20-30% in towns, 30-50% in county facilities, and 45-60% in city hospitals

Some specialised care is not covered by insurance

The average cost of an inpatient episode in a city hospital in 2011 was ¥9300 (£920; €1166; \$1465), of which around half was out-of-pocket expenditure. This compares with the salary of ¥2000 per month for a primary school teacher and ¥1000-1500 for a manual worker



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dents of poor medical practice and failings in the health system have succeeded in fuelling public distrust and anger against the medical profession.

Doctors are also unhappy. In a recent Ministry of Health report, about 80% of doctors in secondary and tertiary facilities describe themselves as overworked and underpaid, and morale is low.²² This not only leads to rushed, indifferent, and disrespectful treatment of patients, a major cause of doctor-patient tension, but also increases doctors' susceptibility to bribes. Many patients resent the perceived necessity to pay high under-the-counter payments to get better treatment.²⁰

Patients who feel aggrieved about treatment are often forced to take matters into their own hands. Existing legal channels for suing for malpractice, which operate through the local medical association are inefficient, ineffective, and perceived to be weighted in favour of the medical establishment.²³ In addition, because hospitals hold the malpractice insurance for their staff (it is not held by individual doctors through a medical defence organisation), hospitals are an easy target for threats and extortion.

A combination of all the above factors has led to levels of dissatisfaction with the health system that lead not only to violence but also to a culture where the murder of an innocent young doctor is not universally condemned. However, it is only a small vocal minority whose negative experiences cause disproportionate harm to the system. The few patient satisfaction surveys available for China suggest high overall levels of satisfaction with healthcare workers.²⁴ Our own recent survey showed that over 70% of patients still feel that individual doctors and nurses try their best



ANDY WONG/AP/PA

Hundreds of Chinese parents spending the night outdoors in order to see a doctor in the morning

Improvement is also needed in the system of health insurance. Since the re-introduction of rural health insurance in 2003, over 90% of the whole population has some form of health insurance coverage,²⁷ but reimbursement rates for hospital care are often low, and out-of-pocket costs remain a considerable burden. It is probably no coincidence that most of the serious acts of violence reported against doctors are committed by poor people paying out-of-pocket for health-care at higher level facilities. More comprehensive health insurance systems could help reduce these cost driven tensions.

A better system of legal redress would also help to reduce acts of retributive violence and reliance on Yi Nao to deal with disputes and obtain compensation. Malpractice insurance should be the responsibility of neutral organisations rather than of hospitals, and the processes must be made efficient, transparent, and fair for doctors and patients.

A more fundamental challenge is to increase the use of primary care, which is affordable and appropriate for most conditions. One of the aims of the current health system reforms is to encourage access to healthcare at an appropriate level, especially in rural areas, by making rural services more affordable and improving facilities and quality of staff. This should prevent the huge flows of patients to secondary and tertiary care, which put huge pressures on hospital staff in these hospitals, threatening quality of care and, in turn, the doctor-patient relationship. Early reports suggest a small shift in flows away from secondary and tertiary facilities,²⁸ but the solution may have to be more radical, with primary care being given a gate keeping role.

The level of violence in Chinese hospitals is increasing.²⁹ It seems likely that only systematic change can reverse this trend.

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BMJ BLOG Peter Bailey

Own up and ask for help, Jeremy Hunt

When I was 12, I had a splendid bicycle. I cleaned and oiled and polished it. I looked for ways to improve it. One day, I thought I would take the Sturmey Archer three speed gear hub apart to oil it and make it work better, faster, and more smoothly for less effort.

I knew it would be a complex job, so I studied diagrams first and read bike maintenance manuals. I carefully laid the parts out in a line as I dismantled the hub. My father looked over my shoulder and said "Are you sure you know what you're doing?" and my mother said "You'll need to clear those parts off the table in time for supper."

At supper time, I had more parts than you would have ever thought possible from one small mechanism and absolutely no idea how to reassemble the cogs, springs, washers, D-rings, sprockets, and ratchets.

It was time to admit to failure and ask for help. I kept the bag of parts for years to remind me.

Now Andrew Lansley has left. The NHS has been taken apart, and he has left the bag of bits in the office now occupied by Jeremy Hunt along with an act containing incomprehensible diagrams and notes indicating how it all used to work and how to get the private sector to put it back together—to work better, faster, and more smoothly for less effort.

You certainly can't fix the disassembled NHS with magical thinking. It will take years of dedication and courage from clinicians and managers, whose protests during the reckless deconstruction were haughtily ignored. It is they who must hold on to the founding principles of a comprehensive service, funded from central taxation and free at the point of use. And these benighted souls will have to do this under a hail of protests from patients experiencing rationing in a contracting, underfunded service. In righting a wrong, a good place to start is in owning up. The NHS was working well. The reforms began when the ratings were at their best ever, and were pushed through despite a collapse in Western economies and their banks. Just when we most needed the mechanism to work at its best to deal with the demographic time bombs of ageing and obesity, it was dismantled with arrogance and ignorance.

So, Mr Hunt, like me with my bike, you have to admit to failure and ask for help. We're listening.

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but are constrained by problems endemic in the system. For example, patients understand that low consultation fees encourage overprescription and overinvestigation and think that doctors and nurses, especially at secondary and tertiary level, are overworked, compromising standards of care.

Stopping the violence

The government is worried about the violence and is taking measures. In April the Ministry of Health and the Ministry of Public Security issued a directive about "effectively maintaining law and order at medical institutions." This criminalises any acts of disruption of the daily operation of hospitals, including carrying dangerous materials and threats or violence against medical staff. Tighter security has included a police presence in some bigger hospitals. In addition, the ministerial directive encourages hospitals to develop more effective and efficient procedures for resolving disputes, though precise mechanisms are not specified.

But it is more important to tackle the underlying systemic problems. Encouragingly some action has already been taken. As part of the government's health system reforms the mark-up on pharmaceuticals is to be prohibited. The zero profit policy for drugs is being gradually rolled-out, starting with rural hospitals but has already been introduced in Beijing and Shenzhen.²⁵ This will mean that doctors and hospitals can no longer profit from drug sales, removing the perverse incentive long associated with prescribing. Although it is presumed that the change will benefit doctor-patient relations, critics argue that this policy could have adverse consequences, by simply shifting incentives from overprescribing to overinvestigating (where profits can still be made).²⁶ Perhaps more seriously, if doctors' incomes fall as a result, problems of motivation, retention, and recruitment may emerge.