

Medicine under fire

Even in war there are moral boundaries—they must be strengthened

After the gunship had gone, Lajos Joltan Zecs fought his way back into the burning hospital. In what remained of the intensive care unit, six patients were burning in their beds. Zecs is a nurse. He was working at the Médecins Sans Frontières (MSF) trauma facility in Kunduz, Afghanistan. These were his patients. Colleagues were also killed. “Our pharmacist—I was just talking to him last night and planning stocks, and then he died there in our office.”^{1,2}

An internal investigation by the US described the targeting of the Kunduz facility as the result of “human error.” But for anyone involved in humanitarian medicine, two things stand out from the conflicts that have disfigured the world in recent years: the casting aside of moral boundaries; and its subsequent normalisation.

There is a shorthand for the moral boundaries that restrict indiscriminate force: international humanitarian law, principally the Geneva conventions.³ They describe a protected space: “Fixed establishments and mobile medical units of the medical service may in no circumstances be attacked,”⁴ “Persons taking no active part in hostilities . . . shall in all circumstances be treated humanely.”⁵

Moral judgment

As the philosopher Michael Walzer writes, for as long as we have been talking about war, we have talked about it in terms of right and wrong.⁶ And among those voices have always been those who scoff at such talk, who tell us that “war lies beyond (or beneath) moral judgment.”⁷ Force, so the argument runs, creates its own realm.

We reject those voices. Nobody expects war to be civilised. War is confusion and chaos. War is hell. But war is waged by human beings. And because human beings make choices, the decisions they make in war are

Doctors, nurses, support staff, aid workers, and others quietly make heroic, moral choices every day

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open to moral judgment. Intuitively we all know this: if there is no such thing as wrongdoing in war, then there can be no heroism. And not just the heroism of combatants. We are also thinking of the heroism of health workers who have taken hospitals underground; of those still working in Aleppo⁸; of those doctors, nurses, and support staff, MSF and others, who refuse to leave combat zones in spite of the risks they confront. They quietly make heroic, moral choices every day.

The Geneva conventions, like all moral boundaries, are not visible to the naked eye. They are informed by consensus, they can be upheld only by the rule of law and the institutions that support it. We strongly welcome the United Nations Security Council’s resolution 2286, that condemns attacks on medical facilities and personnel, and calls for an end to the impunity of the attackers.⁷

By itself, a resolution is not enough. Member states need to commit to its implementation. To this end, in the coming year, both MSF and the BMA will be looking for ways to raise the resolution’s profile among the international medical community.

But the casting aside of the Geneva conventions and international humanitarian law are only one dimension of the problem. The second is its normalisation. The assassination of health workers; the targeting of medical facilities; the use of bunker bombs on civilian targets; the deployment of chemical and biological weapons: we are

increasingly inured to extremity. We shrug our shoulders. We sigh. What do you expect . . . ? We move on.

Compassion fatigue

This could be our biggest threat—compassion fatigue, acclimatisation to moral horror. If ordinary people do not find motive in seeking to relieve the sufferings of others, who will turn to medicine as a profession? MSF relies on the moral choices of its donors and of the medical staff who volunteer. If donors did not see injustice they would not donate. Doctors and nurses would not travel thousands of miles to provide care. Many thousands more people would die. Similarly, the immunities provided by international humanitarian law will only ever be as effective as the political will that supports them. And if citizens do not recoil at moral horror, do not translate their feelings into political claims, then the will to enforce humanitarian law will slacken.

It has been a turbulent year. We have seen political and military decisions with outcomes more than usually unpredictable. “Nobody knows what happens next” might be the year’s epitaph. But medicine has always drawn on values widely believed to be more durable than political whim. Perhaps we are as fatigued by exhortation as we are by outrage.

As we go into the next year we need to find a way to reinforce medicine’s core message: that lives matter, that human suffering calls for a response, that even war has limits.

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In defence of evidence, expertise, and facts

Post-truth may have been made word of the year, but the events of 2016 were not a rejection of knowledge

Are we now living in a post-truth, post-factual society? Is 2016 set to become known as the year when experts, and the evidence they wield, were sent packing?

Admittedly it looks that way. The UK's former justice secretary Michael Gove attempted to play the crowd in the last days of June's EU referendum campaign, with the assertion that "people in this country have had enough of experts." His contention was widely challenged, as were the misleading claims about an extra £350m a week for the NHS that would be saved by exiting the EU, and the wave of immigration that would be prompted by Turkey's fictitious EU membership plan. Then the proponents of these statements triumphed in the referendum.

Lies and damned lies

In December 2015, Donald Trump won the US fact-checking organisation Politifact's Lie of the Year, cited among other things for claiming "whites killed by blacks—81%" (it's 16%)¹; less than a year later he was elected president.

Cue much handwringing and demoralisation among people who advocate better use of evidence in public life. They fear we've entered a world where everyone has their own reality, the truth has little purchase, and demagogues and soundbites rule.

But horrifying as it may be to witness the appeal of people who trade in prejudices and make things up, to see lies and misinformation exposed but still seemingly embraced, it is wrong to conclude that the public doesn't care for truth. We should not rush to this diagnosis for three reasons.

First, the place of expertise and evidence in recent events was limited—too small a part of the picture to conclude that people have

rejected them. Voting is just one way people interact with evidence, and a politically loaded one. (And could it be argued that the campaigning US fact checkers and the economists offering post-Brexit income predictions were extending the definition of evidence to its weakest edge?)

Poll position

A recent poll by the Institute for Government found plenty of support for the idea, in principle, that the government should consult experts (85%) and use objective evidence when making difficult decisions (83%).² But this does not mean that the decisions we take, for ourselves and in public life, are reducible to setting out the facts. Many people in public life have learnt this year what clinicians have long appreciated: that facts can be close to useless if you don't engage with context and lived experiences, whether to challenge them or to appreciate them, or both.

Which brings us to the second reason why evidence advocates should not be packing their bags. In so far as experts and evidence have played a role in these debates, it has looked like an alternative to engaging with people. It seemed in the UK, for example, that pro-Europe politicians, fearing they couldn't manage a sensible discussion about the realities of immigration and the best ways to handle it, instead produced expert statements about trade.

Certainly, we need public discussion to account for the facts, for evidence, even for expert opinion when it's not over-reaching, and we should insist on it. If tax breaks won't deliver benefits as promised, call that out.

But we should respect the space for contrary experiences and work out how facts and evidence interact with them. Instead, that space has looked like a place of ridicule rather



Facts can be close to useless if you don't engage with context and lived experiences

than argument. Come with my facts or go with stupid. Small wonder that some people have chosen to reassert themselves in the privacy of the polling booth. Don't think, however, that this is a rejection of truthfulness.

So here is the third and vital reason. Evidence, expertise, truthfulness, facts, knowledge... these are public goods. We should not forget that other events this year have been defined by the public's quest for truth and a hearing for evidence. These include the inquests into the 96 deaths of Liverpool fans at Hillsborough stadium after a 27 year campaign,³ the Scottish inquiry into the abuse of children in care,⁴ thousands of patients joining the international campaign to see clinical trial evidence reported,⁵ and the amassing of evidence of Baltimore Police Department's racial abuses.⁶

The danger of accepting a post-truth characterisation is that we abandon this empowering side of the evidence movement just as it's winning through. Evidence and expertise have too often looked like counsel to the knowing, rather than what we could be making them: the means by which the less powerful can call the world to account.

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A universal basic income: the answer to poverty, insecurity, and health inequality?

Early evidence suggests substantial health dividends of a regular government payment to every citizen

For four years in the mid-1970s an experiment took place in the small Canadian town of Dauphin. Statistically significant benefits for those who took part included fewer physician contacts related to mental health and fewer hospital admissions for “accident and injury.” Mental health diagnoses also fell. Once the experiment ended, these public health benefits evaporated.¹

What was the treatment being tested? It was what has become known as a basic income—a regular, unconditional payment made to each and every citizen. This ground breaking experiment, an early randomised trial in the social policy sphere, ran out of money before full statistical analysis after a loss of political interest.

The link between inequality and poor health outcomes is long established.² The actual mechanisms behind that link are less understood. The data from the Dauphin study, re-examined by a team from the University of Manitoba in the 2000s, suggest there might be an association between income insecurity and poorer health.¹ All adults in Dauphin earning below \$13 800 (£11 000) were eligible for the grant of \$4800 a year. The researchers compared Dauphin with other similar towns and looked for relative improvements in outcomes using public health and schooling data from the time.

Recently, there have been increasing calls for dialogue on a universal basic income (UBI) from political parties, think tanks (including the Royal Society for the Encouragement of Arts, Manufactures, and Commerce, RSA), civic activists, trade unions, and leading entrepreneurs such as Tesla chief executive Elon Musk. These calls are a response to growing income insecurity, some sense that welfare systems may be failing, and as a preparation for the potential effects of automation and artificial

Financial insecurity could be a key vector through which inequality worsens health outcomes

intelligence on employment prospects in industries that might be better served by machines.³ UBI-style pilots are planned in Finland, the Netherlands, and Canada as a potential answer to these questions and concerns.⁴

Causal link

While the Dauphin study included just the poorest residents of one small town, if we assume that it indicates a causal link between extra cash and better health then three effects could have been in play. First, the cash sum itself would have reduced economic inequality directly. Second, the unconditional nature of the payment could have reduced income insecurity. Third, there is a positive social multiplier whereby positive behaviours associated with greater financial security tend to reinforce one another—for example, more teenagers staying on in school because they see their peers doing likewise.

Taken together, these effects could mean that financial insecurity is a key vector through which inequality worsens health outcomes for the least advantaged. It is certainly a serviceable hypothesis.

Dauphin was not an isolated study. A little known, unintentional, basic income pilot took place in North Carolina during the 1990s. Four years into a longitudinal comparative mental health study of Cherokee American Indian and non-American Indian

children from ages 9 to 16, a casino was built on Cherokee land. As part of the deal, all Cherokee Indian adults received a share of the profits—roughly \$4000 per year each.

The results were again striking. Children whose families received the payments showed significantly better emotional and behavioural health by age 16 relative to their non-tribal peers, who did not receive payments. Parents also reported that the drug and alcohol intake of their partners decreased after the payments began.⁵ These reported changes among adults were uncontrolled observations, but the researchers noted no other major policy changes during the study.

Mullainathan and Shafir describe a process of cognitive “bandwidth scarcity” whereby scarcity of resources impedes sound decision making with clear potential for negative health outcomes.⁶ The Canadian and North Carolina case studies suggest that bandwidth scarcity could be confronted through an unconditional universal basic income. Complex systems of tax credits and social security, such as currently used in the UK, send confusing signals, not least through poorly understood and sometimes arbitrary conditions and welfare sanctions that create new hardships for recipients.

Health professionals should be concerned. The evidence suggests that a universal basic income could help improve recipients’ mental and physical health. The RSA has already called for a trial of a universal basic income in the UK.⁷ It would give people a better foundation and greater control over their lives in and out of work. Failure to test this promising intervention in a rigorous way would be a failure of government and a missed opportunity to invest in the health and wellbeing of an increasingly insecure and unequal society.

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Dauphin, Canada, experimented with a universal basic income in the 1970s

When we are sick, injured, or facing a life crisis, our greatest human need is loving

kindness and compassion in response to our vulnerability and suffering. One of us (MB) has previously described her first hand experience of the difference such care can make¹:

In shock, I am admitted to a cancer hospital. Treatment must necessarily be aggressive. I am terrified. Will I die? I am so alone, but trying to be brave. A doctor in a white coat sits down and asks why I am there. When I tell him he encloses my hand with both of his. Instantly, I am encased in warmth, comfort, compassion.

Unconvincingly I say, "I'm not nervous."

"That's all right," he replies, "I'm enjoying it!"

We both laugh. And I leave my hand there. The encounter stays with me; I revisit it whenever I need the healing touch of a human hand.

Years later I am overjoyed to tell him what his kindness meant to me. But he can never really know how much, or the depth of my gratitude.

Too often, what patients actually receive is rushed, clinical, and detached care. Physicians have many evidence based guidelines for disease management but little evidence based medicine for care of the whole person.²

Sometimes, the inhumanity is failure of the wider system. RY's daughter spent three months in spinal traction with a broken neck. Many days she went hungry. She could not see a television or read a book. But the hospital prioritised clinical care, not her needs as a human being.³

The system is also dehumanising to those who work within it; witness the emotional exhaustion, depersonalisation, and cynicism now so widespread among health professionals.

Randomised controlled trials have provided good evidence that compassionate care also improves clinical outcomes. Empathetic and supportive preoperative consultation improves wound healing and surgical outcomes, halves opiate requirements, and reduces length of stay.^{4,5} Patients in emergency departments are 30%

EDITORIAL

Humanising healthcare

We have to start by building a more compassionate society



Human centred care is good for patients, professionals, and funders

less likely to return if treated with compassion.⁶ Early access to palliative care reduces costly interventions, improves quality of life, and prolongs survival in cancer patients.⁷ Meta-analysis suggests that having a caring doctor reduces five year mortality in men more than stopping smoking.⁸

Compassionate caring also gives meaning, joy, and satisfaction to health professionals, aligns with their ideals, and protects against burnout.

Human centred care is therefore good for patients, professionals, and funders. Why isn't it spreading like wildfire? After decades of campaigning for a more humane health system, we conclude that the underlying values of the healthcare system are incompatible with compassion, caring, and healing.

Societal failings

Although health professionals care deeply about patients, the values of the wider system are competition, rationalism, productivity, efficiency, and profit. There is no room for healing. We call this the "industrialisation of healthcare."

As campaigners, our mistake was to assume that these values were somehow intrinsic to healthcare and that the system could be fixed. However, these values are adopted

from society; if we want to re-humanise healthcare we have to build a more compassionate society.

Heroic models of leadership—always battling to "win the war" against cancer or drugs—sabotage our efforts. We need our leaders to be healers more than heroes; it begins with self compassion and self care.

We call for a new breed of physician leader-activist; people who are "internal activists" in the workplace, role modelling the best of human centred care, and also social activists, leading the movement for compassionate communities. The charterforcompassion.org is a good starting place.

Time to stand together

In the 1980s, the International Physicians for the Prevention of Nuclear War rose up to address the global threat. It is now time for physicians to stand together and address the societal values that are driving us to social breakdown, epidemics of chronic disease, and ecological collapse.

Our work in humanising healthcare became much more successful when we gave up battling the system and changed our leadership style⁹:

- Being non-judgmental and compassionate, not moral crusaders
- Showing humility and vulnerability, not persuading and evangelistic
- Seeking the wisdom of individuals and communities we serve, not casting ourselves as the experts
- Giving away our materials, offering our time for free, and asking for donations, not seeking transactional business relationships
- Using appreciative inquiry to seek stories of what works best, not to focus on problems.

These same ways of being are also a powerful foundation for patient centred medical practice and fulfil the promise in the Declaration of Geneva: "I solemnly pledge to consecrate my life to the service of humanity."

This festive season, will you reflect on how your compassionate care of patients might be extended to our communities and the broader healthcare system?

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THE BMJ CHRISTMAS APPEAL 2016-17

The eye surgery changing children's lives

The charity Orbis seeks an end to avoidable blindness worldwide by training local eye care teams, which is why we chose it for our Christmas appeal this year, explains **Jane Feinmann**. Please give generously

In rich countries cataract surgery is one of the most common, and most successful, operations. But it's a different matter in sub-Saharan Africa, where congenital cataracts cause one in three cases of childhood blindness. Racheal (pictured), born with congenital bilateral cataracts in a remote village in Zambia in December 2014, is one of 82 000 African children whose vision is affected by cataracts. Africa has an estimated 19 000 new cases every year.

Turning around such high numbers is a huge challenge in a continent where children's eye surgery is far from routine. "Unlike adult cataract surgery, paediatric cataract surgery needs to be carried out as soon after diagnosis as possible. It's also more complex: it's the kind of operation that becomes simple once you've done your first 10 000 procedures," says Larry Benjamin, consultant ophthalmic surgeon at Buckinghamshire Healthcare NHS Trust and a trustee of Orbis, the sight saving charity and the subject of *The*

BMJ's Christmas appeal this year.

Benjamin is one of the charity's leading trainers, devoted to its ethos of building competence, confidence, and self sufficiency in local eye care teams in poor countries.

The key to successful paediatric cataract surgery, says Benjamin, is one to one training. "As a specialist in cataract surgery in the UK, I've done my fair share of cataract operations, and this helps to impart the tricks of the trade," he explains.

Over the past three years Benjamin, as a member of the Orbis volunteer network, has visited Kitwe, spending up to a week carrying out surgery alongside Zambia's first paediatric ophthalmologist, Chileshe Mboni.

"We'll operate on 20 children or so," Benjamin says. "He'll do some, I'll do some, and he gradually learns correct techniques as well as the principles of screening and follow-up. The aim is to initiate a cascade process. As Dr Mboni feels more confident, he will pass on his skills to other local doctors. It's a slow process, but it means that



surgery will be carried out to the highest standards."

So far this year Kitwe Eye Annexe has treated more than 200 children with cataracts, saving many from lifelong blindness, including Racheal.

Already Zambia has a second paediatric ophthalmologist in the making: Lillian Musonda, being trained by Mboni. Orbis is also supporting Ethiopia's first paediatric ophthalmology clinics and has increased the number of the country's ophthalmologists from 76 to 120, with the help of local partners. This collaboration has helped to provide 4000 operations on children and 150 000 on adults to treat conditions such as cataract.

"There's still huge unmet need, but this is a charity that is making a real difference to people's lives now and in the future," says Benjamin. Please give generously.

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"Unlike adult cataract surgery, paediatric cataract surgery needs to be carried out as soon after diagnosis as possible. It's also more complex: it's the kind of operation that becomes simple once you've done your first 10 000 procedures"

Post this to: Orbis, Freepost RTLK-HLXZ-LKHU, 124-128 City Road, London EC1V 2NJ

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