The best way to improve business is simply to reclassify the "well" as "ill"
Des Spence, p 51

PERSONAL VIEW **Keith Hopcroft**

Men should stop routinely examining their testicles

Question: What do Robbie Williams and the Leicester Tigers rugby team have in common? Answer: testicles. Plenty of them. Enough cojones, in fact, to be leading lights in testicle cancer awareness.[1 2] And they're not alone. We are bombarded by celebrity exhortations to be "testicle aware," typically via some attention (and testicle) grabbing stunt.[3] The specific message that cancer charities and men's health tub thumpers ram home is that any self respecting bloke should regularly examine his testicles. Or grope his gonads. Or caress his crown jewels. Or whatever the prevailing vernacular might be—so long as it sounds non-threatening and wacky.

It's easy for the profession and the public to get carried away with earnest health promotion dressed up as fun and assume that routine testicular self examination is self evidently a good thing. The trouble is, it isn't. It's an activity based purely on well meaning whimsy, with the potential to do harm. There is no good evidence that routine testicular self examination is of any benefit.[4 5 6] Nor will there ever be: a study of adequate power would require millions of men, simply because testicular cancer is so rare.[4] This fact is distorted by all the well meaning evangelism—few consumers of men's health media would realise, for example, that the average general practitioner will see only one new case every 20 years.[7]

Another myth is that testicular cancer is a silent killer. In fact, nearly half of patients have testicular pain.[8] And, though a painless testicular swelling is described as the typical presentation, this is often symptomatic—through causing a heaviness, a mass effect, or other symptoms.[9 10] This may, understandably, prompt self examination, in which case the activity is typically misinterpreted as a life saving triumph. But this is simply a victory for common sense—for taking notice of symptoms and acting on them. The chances of discovering something significant from routine self examination of the testicles are minuscule—at least 50 000 men would need to examine themselves for 10 years to prevent one death.[11]

What will self examination elicit, though? Incidentalomas—because benign scrotal swellings such as varicoceles and epididymal cysts are relatively common.[7] These will provoke anything from mild concern to incapacitating anxiety.[4] And that anxiety can be infectious, worrying general practitioners into unnecessary ultrasound requests or referral, thereby lengthening the queue for patients who really do need further assessment.

KAADAA/GETTY IMAGES

The chances of discovering something significant from routine self examination of the testicles are minuscule—at least 50 000 men would need to examine themselves for 10 years to prevent one death

It seems odd that there hasn't been a more critical assessment of routine testicular self examination given that an analogous activity—routine breast self examination in women—has been discredited. There is no evidence that routine breast self examination is of benefit, but it is known to cause harm, through generating anxiety and unnecessary biopsies.[12] Medical professionals have been slow to implement this evidence—perhaps because it seems counterintuitive, or because the Department of Health's policy of so called self awareness is difficult to understand or convey. Or perhaps the real problem is the public's disbelieving reaction when the medical profession makes an about face. My previous attempts to debate routine testicular self examination have been met, by men's health groups and charities, with either disbelief or hostility—with the accusation, at one point, that I was "wishing cancer on men."

All of which impels the question: how was the idea of routine self examination dreamt up in the first place? The earliest ever mention in the literature appeared in 1977. An article entitled, "Various ways in which individuals can help detect cancers early" cites a film produced by the American Urological Association instructing men on how to examine their testicles.[13] This film was distributed to the armed forces, and the concept took off; a Google search on testicular self examination now generates a third of a million hits.

One of the three men behind the film, John Ravera, is still practising. Recalling how the idea for the testicle examination film first came about, he comments, "We were sat around with Beatles haircuts and striped trousers, thought how men were lagging behind women—who had breast self examination—and did it almost as a lark." And he has no regrets. After all, the concept of routine self examination was conceived in an era when evidence based medicine was unheard of. We may be accustomed to the sight of television doctors demonstrating testicular self examination on breakfast television but in the 1970s this must have been radical for both screen and screening movement. Besides, as Ravera points out, "Back then, testicular cancer was a lethal disease."

The context is now very different, with cure rates high,[14] and public health policy increasingly evidence based, which is why various authorities in the US recommend against routine self examination of the testicles.[6] Yet the Department of Health and UK charities continue to encourage the activity,[15 16] even when key UK authorities in cancer and prevention advise against it.[4 17]

Surely it's time for sense and science to put the brakes on the men's health bandwagon? Routine testicular self examination is an activity that is illogical and potentially harmful, and is based not on evidence but on something that, many years ago, simply seemed like a good idea at the time. In fact, such evidence as there is suggests that a key issue is not so much men failing to notice swellings but men failing to act on them,[4 18] with one study recording, in over a quarter of patients, a delay of at least three months before presentation.[19] This might be a useful message to convey to men, if there's one to convey at all. But at present it's drowned out by the noise from campaigns that succeed only in turning the nation's blokes into ball watching neurotics.

Keith Hopcroft is a general practitioner, Basildon, Essex
keithhopcroft@supanet.com

References are in the version on bmj.com.

Cite this as: *BMJ* 2012;344:e2120

BETWEEN THE LINES **Theodore Dalrymple**

The truth about Nightingale

We all love heroes and heroines, but even more so do we enjoy the exposure of their hidden faults. I will not speculate on why this should be so: perhaps it is that, our lives being mediocre, we fear to contemplate unmitigated the heights of human accomplishment. The greater is the reputation; the more guiltily delicious is the debunking. When I was a child, Florence Nightingale was an untouchable heroine, like Elizabeth Fry. Before her, nurses were Dickens' Mrs Gamp; after her, they were ministering angels. Soldiers were eternally kissing her shadow as she went by.

One of the great works of historical debunking is F B Smith's *Florence Nightingale: Reputation and Power*, published in 1982. Smith, an Australian historian, sometimes makes you laugh out loud (and not because of any witticism of Miss Nightingale's). You know what you are in for from the first sentence:

> *Florence Nightingale's first chance to deploy her talent for manipulation came in August 1853. Within a short space, one learns that the Lady with the Lamp was a consummate liar: Miss Nightingale's account of her good works at the Middlesex Hospital constitute a memorable example of her powers as a titillating fabulist.*

Reflecting on the fact that Nightingale dismissed most of the staff that she herself had chosen at the first institution that she ever ran, The Invalid Gentlewoman's Institution in Harley Street, Smith says, "The superintendent [does] not seem to have excelled in picking and training staff." Detailing her unfair criticisms of the committee of that institution, Smith does point out her superiority in one respect: "But none of them matched the force and ingenuity she brought to intrigue."

[Nightingale] never grasped that the germ theory of disease was actually compatible with sanitary reform

This is all good, clean, knockabout fun. Some of Smith's evidence does show his subject in a lurid light—for example, her taking to task of her great bureaucratic assistant, Sidney Herbert, during his final illness, for not trying hard enough to help her, while she at the time luxuriated in the role of invalid that she was successfully to play for a further 50 years.

As is well known, Miss Nightingale rejected the germ theory of disease, arguing that, if accepted, it would impair her sanitary work. She insisted to the end of her days on dirt and miasma as the cause of disease, rejecting contagion altogether; she opposed smallpox vaccination in India; and she never grasped that the germ theory of disease was actually compatible with sanitary reform.

She was what would now be called a brilliant spin doctor. When Agnes Jones sought admission to the Nightingale School, Florence wrote, "[Her] peculiar character is want of character." But when Jones died in harness in Liverpool Workhouse, having after all trained at the Nightingale School, Florence turned her for propaganda purposes into a paragon.

Smith chronicles her manipulations, deviousness, evasions, and lies, but he admits that, overall, she did an immense amount of good. His aim is to disabuse us of the romantic idea that people who do good must themselves be good, but let us hope that his readers do not take this as a licence actually to be bad. His explanation as to why Miss Nightingale did not destroy documentation that was unflattering to her memory is memorable:

> *Florence Nightingale, like Mr Richard Nixon and his tapes, was so possessed of the habit of deceit and the conviction that the full record would compel posterity to vindicate all her actions, that she could not bring herself to destroy material which had become part of her identity. Having brazened out lies in life she would brazen them out in death.*

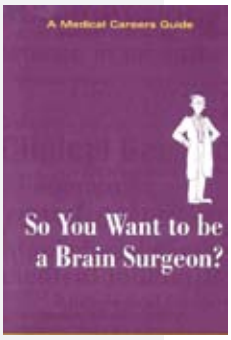
Theodore Dalrymple is a writer and retired doctor

Cite this as: *BMJ* 2012;344:e2317

MEDICAL CLASSICS

So You Want To Be A Brain Surgeon?

Edited by Chris Ward and Simon Eccles; first published 1997



Careers advice given at school is renowned for having a low positive predictive value and, being based on level five evidence (that is, expert opinion), often leads to the stifling of ambition, condemning teenagers to careers in which they have no interest. Careers advice at medical school was no different, at least until this book came along in the late 1990s. *So You Want To Be A Brain Surgeon?* is a humorous, factual, and well researched guide to careers in medicine for school leavers, medical students, and junior doctors. The book considers disciplines from sports medicine to surgery, and voluntary service overseas to virology, but it is not just about the nuts and bolts of each specialty. Interesting and useful points are dispersed throughout, such as the history of genitourinary medicine; what life is like working for Médecins Sans Frontières; and contact details or suggestions for further information.

The descriptions of various specialties are hilarious: intensivists are "over-cerebral gasmen"; cardiac surgeons are "balls of steel surgeons"; and dermatologists are "grease pushers." But this is mixed with thoughtfulness—for example, how geriatricians must balance thoroughness and curiosity with realism and compassion or risk being labelled as either aggressively interventionist or too *laissez-faire*.

Some of the book's advice applies more generally—for example, when considering a research post, "be sure that you are not being an extra pair of hands in clinic [for] a consultant who has no track record of supervising research." This is wisdom that extends to fellowships, audit, and publication in general. Ward and Eccles, the book's editors, predict that in palliative medicine "only the balanced will survive," which is relevant for all considering this vocation. And the editors say that "colleagues and public have increasingly unrealistic expectations of what intensive care medicine can achieve," which could increasingly pertain to all specialties.

The book was first published more than 14 years ago. Salaries have gone up and hours have gone down, but the one thing that hasn't changed is that, "in the first two years after graduation, you embark on the steepest learning curve imaginable"—because there is nothing that prepares you for that first day on the wards.

The final and most important section gives some of the best advice in the entire book, namely when deciding on a specialty, "talk to your friends at medical school who know your strengths and weaknesses" and if after everything you find yourself a "square peg (in a round hole) have the courage to admit it and start again." After all "the determined and good will always get to the top," and this book is an indispensable guide to how to get there.

David Warriner, specialist registrar in cardiology (orange_cyclist@hotmail.com); Vipul Ramjiani, house officer in cardiology, Northern General Hospital, Sheffield, South Yorkshire S5 7AU

Cite this as: *BMJ* 2012;344:e2320

FROM THE FRONTLINE **Des Spence**

Bad medicine: modern medicine

More medicine should never be conflated with better medicine, because today developed countries are suffering a contagion of iatrogenic harm. Why has this happened? Profit is the poison at the heart of the problem, spawning health anxiety and unnecessary intervention. This phenomenon is taking grip in emerging economies, like those of China and India, with the new middle classes subjected to unnecessary medical interventions.

Screening is presented as best practice. But regular general health screening "check ups" have no scientific basis, serving only to highlight unimportant minor abnormalities, leading to more investigations, anxiety, and profit. As for mammography, one in three breast cancers detected are non-progressive lesions. This overdiagnosis causes women to have needless disfiguring surgery and chemotherapy.[1] Similarly, the US Preventive Services Task Force recently called for an end to prostate screening after decades of overdiagnosis and unnecessary destructive surgery in men.[2]

The best way to improve business and increase customers is simply to reclassify the "well" as "ill"

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Overdiagnosis is everywhere. In mental health especially, the *Diagnostic and Statistical Manual of Mental Disorders* is ever loosening diagnostic criteria. Swathes of children are diagnosed with mental illnesses, ranging from attention deficit hyperactivity disorder to bipolar illness, depression, and oppositional defiant disorder. The prescribing of powerful antipsychotic and potentially addictive stimulant drugs to children is a societal norm. The new *DSM* seems intent on subsuming the notion of normality all together, and already a quarter of US women are taking mental health drugs.[3] I fear soon all those with even mild cognitive impairment will be labelled with dementia. This biochemical model of psychiatric disease is being exported and going global.

For diabetes, hypertension, and cholesterol even quantitative disease definitions have shifted downwards, because the best way to improve business and increase customers is simply to reclassify the "well" as "ill." Currently, half of US residents older than 65 take three or more medications,[4] yet adverse drug events cause more than 100 000 hospital admissions in the United States alone.[5] Direct to consumer advertising can magnify the medical harm from drugs: as many as 139 000 US residents had heart attacks and strokes as a result of taking rofecoxib.[6] The most glaring current example of iatrogenic harm is the prescription of opioid pain killers. Some 15 000 US residents die every year from unintentional opioid overdoses, and for every death there are 800 drug misusers.[7]

To question modern medicine is to be denounced as a heretical fool and to stigmatise sick people. Yet our duties are not only to the ill but also to protect the well. Medicine's challenge for this century is to fight the pandemic of iatrogenic harm.

Des Spence is a general practitioner, Glasgow
destwo@yahoo.co.uk

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Cite this as: *BMJ* 2012;344:e2346

THE BIGGER PICTURE **Mary E Black**

Our relationship with poo

I have moved back to live in east London and am gutting my Victorian terraced house in newly fashionable Bow, just a short bike ride from the stadium soon to be used for the Olympic games. I am getting acquainted with my Victorian lead water pipes, well preserved sewers, and the occasional coin left by the builders in 1858. That was the year of the "great stink," when the smell of raw sewage was so overpowering in central London that eventually parliament was suspended. Just four years earlier, in 1854, Filippo Pacini's discovery of *Vibrio cholerae* had been ignored, and John Snow had dismantled a water pump handle on Broad Street, simultaneously ending Soho's cholera outbreak and founding epidemiology.

Fast forward to today. Londoners take clean water for granted. Unused to catching more than a fleeting glimpse of human waste as it disappears round the U bend or gets rapidly bundled up in a disposable nappy, we get upset if our toilets overflow, and even more upset when we see the emergency plumber's bill. Having seen many places round the world where sewage still runs free and untreated, I have a particular interest in modern waste treatment facilities. Joseph Bazalgette's Victorian sewer network—318 million bricks and still standing—is my fantasy tour. It is just as fascinating as, but more affordable than, the Galapagos, that other wonder of the Victorian age.

The English famously love animals, although they used to send canaries (and children) down mines. Mudchute Park and Farm on the Isle of Dogs, built on the Thames mud excavated in 1860 during the construction of Millwall dock, allows urban children to encounter animals. It is wonderful to see how much toddlers love sheep and bunnies. Health and safety measures have evolved in statutes since Victorian streets were buried beneath hundreds of tons of horse and human manure a day. Mudchute has just been instructed to distance children from grazing sheep (and llamas) because the risks of picnicking on poo are deemed unacceptable. The day may come when the east end police horses that majestically patrol two by two, gladdening the populace and striking terror in the hearts of hoodlums, will be deemed too dangerous to trot (and plop). As megacities encircle the world, 2.6 billion people still lack access to decent sanitation. Shit happens. Like Bazalgette, we need to deal with it.

Mudchute [farm] has just been instructed to distance children from grazing sheep because the risks of picnicking on poo are deemed unacceptable

Mary E Black is a global health doctor, London
drmaryblack@gmail.com

Cite this as: *BMJ* 2012;344:e2354