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Newsletter 68 January 2008

HOMEOPATHY CONFERENCE SLATED

THE BBC NEWS has highlighted the concerns of HealthWatch experts over the promotion of homeopathy as a cure for AIDS. The reports centred on a controversial meeting on AIDS and homeopathy, organised by the Society of Homeopaths, which took place in South London on 1st December. Coverage on the BBC *Today* programme that day included several positive mentions of HealthWatch, and committee member James May was interviewed by BBC *News 24*.

Dr David Bender, chairman of HealthWatch, told BBC health correspondent Jane Dreaper, "The AIDS epidemic in Africa has been massively exacerbated by a refusal to accept the scientific knowledge about the disease." The workshop, which marked World Aids Day, was reportedly attended by about 80 homeopaths and workers from HIV projects. Its publicity had claimed it would offer "a fascinating insight into the role of homeopathy in treating HIV/AIDS" and discussed the work of homeopaths in AIDS clinics in Africa and included a presentation on remedies with which, the conference was told, "the AIDS epidemic can be called to a halt". However Dr Michael Brady, consultant in genitourinary medicine and HIV at Kings College Hospital and medical director of The Terrence Higgins Trust, supports HealthWatch's objections, saying, "There is no credible evidence that homeopathy is an effective treatment for HIV. Anti-retroviral therapy is the only treatment that has been clinically proven to improve immune function, delay disease progression and prevent death in patients with HIV. It is misleading, irresponsible and potentially dangerous to suggest otherwise." Dr. Ian Williams, Consultant in Genitourinary Medicine at University College London agrees, "There is no proven evidence that homeopathy will treat HIV infection effectively, nor is there a biological plausibility this may be the case."

But the people of SubSaharan Africa are desperate and vulnerable: the continent has 22.5million people infected with HIV, accounting for 68% of the global total. As few as one in ten of them

are being treated with retroviral drugs, and death rates are high amongst those who cannot get them".

Consultant clinical scientist and HealthWatch committee member Les Rose heard Society of Homeopath's vice chair Jayne Thomas, interviewed on the BBC *Today* programme on Saturday morning. "She said that the purpose of the conference was to evaluate the evidence," recalls Les. "But if that was the case, I would like to know if any specialists in clinical evidence attended? Will the proceedings be published in the open literature? Why use a conference to evaluate evidence, instead of submitting papers to rigorous review in the journals?"

Ben Goldacre, the *Guardian's* "Bad Science" commentator and last year's winner of the HealthWatch Award, discussed the conference in a column on "Aids quackery" where he quotes Society of Homeopaths conference speaker Peter Chappell as saying, "Right now, Aids in Africa could be significantly ameliorated by a simple tune played on the radio."

References

1. <http://news.bbc.co.uk/1/hi/uk/7122370.stm>
2. <http://www.homeopathy-soh.org/for-homeopaths/documents/Aidsflyer.pdf>
3. Quoted in HealthWatch press release, 30 November 2007.
4. UN Aids. 2007 AIDS epidemic update. View on http://www.unaids.org/en/HIV_data/2007EpiUpdate/default.asp
5. <http://www.guardian.co.uk/commentisfree/2007/dec/01/aids>

The WoW show fails to impress

A LEAFLET advertising the WoW show appeared in my post. It read, "The Women's health show that's serious fun." writes Gillian Robinson. At my place of work, a Sexual Health clinic, I noticed posters promoting the show to our patients.

WoW is the strap line for Wellbeing of Women, a UK charity that works in partnership with the Royal College of Obstetricians and Gynaecologists (RCOG) to solve health problems that affect women by funding medical research and training into all aspects of reproductive health (see <http://www.wellbeingofwomen.org.uk>). They're good: in the last 40 years they have invested over £27million to fund medical research and training. The charity was

formerly known as Birthright and in the 80's its patron was Diana, Princess of Wales.

The leaflet tells us that the show incorporates a "serious bit" which offers information on all areas of women's reproductive and gynaecological health. It offers a chance to speak candidly to experts about health problems that affect you. The "fun side" is about, "Physical & Wellbeing Health...this is your chance to hear and sample a variety of complementary therapies," and the list includes homeopathy, craniosacral therapy and Pilates. The show was held at the RCOG in September and is mentioned in the RCOG

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AGM news and pictures

Our 19th year

HEALTHWATCH'S 19th Annual General Meeting met on 18th October 2007 at the Medical Society of London, Chandos Street, London W1. The HealthWatch Award was presented to Professor Raymond Tallis for his thoughtful promotion of evidence-based medicine. He has been kind enough to supply us with the text of his presentation on the curse of the media anecdote. You can read this in full on pages 4 and 5.

The 2007 HealthWatch Student Prize for Evaluation of Clinical Research Protocols continues to generate interest in quality research amongst young medical and nursing students.



Raymond Tallis with award

This year's Medical Student winner was Alison Myers, of the Royal Free and University College Medical School, who received a cheque for £500. Alison has agreed to offer her services to the HealthWatch Committee as a student representative now that her predecessor, Elizabeth Fairfax, has qualified as a doctor. Runner-up medical students were Alexandros Georgiou of Liverpool UMS; Ruth Heseltine of Barts and the London; Philip Jones of Nottingham; Gillian Norrie of Aberdeen and George Peck of Imperial College London. Top prize from the Nursing Students category, with another £500 cheque, went to Sarah Linge of Edinburgh. Lisa Common was a runner-up.



Alison Myers

Urgent bulletins: be on the list

From time to time we would like to be able to contact members between Newsletters with alerts about new activities, important media reports, or to call for action. If you are willing to be contacted by e-mail, please send an e-mail to the membership secretary (kenneth.bodman@btinternet.com) so that he can add your address to the list. Important: this list will only be used to circulate matters believed to be of genuine interest to HealthWatch members. The list will be confidential to the Membership Secretary and will not be used for marketing activities of any description.

Minutes now available online

Minutes of the 2007 AGM are now available on-line at <http://www.healthwatch-uk.org/AGM07%20minutes.pdf>

New subscription rates

Membership subscriptions to HealthWatch simply do not cover the cost of producing, printing and distributing the Newsletter four times a year, and therefore with regret the meeting agreed that subscription rates should be increased as follows:

- a) Members in Europe, receiving newsletter by post£30
- b) Members outside Europe, receiving newsletter by post . . .£40
- c) Members worldwide, receiving newsletter by e-mail . . .£25
- d) Student membership, receiving newsletter by e-mail . . .free



Philip Jones, left, with Nick Ross and Lisa Common, right

WoW show fails to impress

news which is distributed to all fellows and members of the college.

To my mind the RCOG is supporting, promoting, and possibly endorsing aspects of complementary medicine for which there is no sound evidence of efficacy. Does this matter? Why have I become so concerned that I have bothered to write this article and made myself unpopular at work by suggesting the posters should not be displayed?

On one level I am annoyed that my hard earned cash, some of which I have to pay as a subscription, is being used to promote non-evidence-based techniques. But more seriously I am troubled. I spent three years in full time clinical research. I have experienced the triumphs of seeing my work published in peer reviewed journals and have presented to national/international conferences. I have also experienced the frustrations which anyone who has conducted research will know all too well and the disappointment when papers are rejected. Many colleagues and friends have dedicated years of their working lives to produce ethical and sound scientific research, which will further our knowledge and understanding. Yet this publicity appears to suggest that the RCOG gives as much credence to complementary medicine, where there is little or no evidence to support its claims, as it does to evidence-based conventional medicine.

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It is, however, of interest to note the Wellbeing of Women's and the RCOG's disclaimer at the end of the leaflet, stating that "...neither Wellbeing of Women nor the RCOG can be held responsible for the validity of clinical treatments or medical statements made."

HURT pride? Probably. Jealous I have been overlooked as an expert? Possibly. But perhaps my most important concern is over the response I received at my workplace. Receptionists reading the leaflets thought they should be given out to patients. My attempts to explain my concern were met with hostile stares, silence and were ultimately ignored. The posters remain on the walls and the leaflets are distributed. I was considered puritanical and out of touch. After all if it was being held at the RCOG it must be OK.

The attitude of my colleagues demonstrates the need for better education of healthcare professionals about critical appraisal of technical and publicity material relating to healthcare/new treatments; in this respect, the work of HealthWatch is more relevant than ever.

I remain disappointed in the RCOG.

*Dr Gillian Robinson
Associate Specialist in Sexual and Reproductive Health
St Giles' Hospital, London*

WE ARE SMALL, BUT WE ARE NOT INSIGNIFICANT



I WILL START with a quotation from an editorial in the *Journal of the American Medical Association* of November 15th 1913 entitled *Braughan's pellagra remedy: worthless nostrum sold under fraudulent claims*. "Nostrum fakers are damned. It is they who feed carrion-like on the fears of suffering humanity. To those stricken with a well-nigh incurable disease they hold out the hope of a sure cure." This remedy contained quinine and iron salts, which give a bitter taste, which would suggest to the pellagrins that it was good medicine. Little seems to have changed over the last century, and HealthWatch seems to be needed as much as ever.

What do we currently do? We publish this newsletter four times a year, and occasional position papers (with one revised paper and three new ones published this year), as well as maintaining a website with an archive of all past newsletters. In addition to this we have recently written to organisations such as the Medicines and Healthcare products Regulatory Agency and the Royal College of Obstetrics and Gynaecology concerning their promotion of unproven complementary and alternative therapies, with the aim of publishing our letters and their responses. We also hold the annual student prize for critical appraisal of clinical research protocols, generously supported by a grant from the Ajahma Trust, and make an annual award to an outstanding medical scientist, practitioner or journalist for his or her contribution to better understanding or practice of evidence-based medicine. We provide a source of information and informed comment for press, radio and TV.

"Our great strength is our independence...This does not stop vilification that we are 'in the pockets of big Pharma', despite the fact that we receive no money from industry at all."

The committee has spent much time over the last few months wondering what more we should do. Three areas have emerged:

Although we send the newsletter to several hundred journalists, perhaps we should excite them more with embargoed press releases; we should be prepared in advance to have press releases available *before* a story breaks; and we should encourage more participation of members in discussions of matters of interest. To this end we have recently set up a discussion forum linked to the HealthWatch website—see below. Anyone may join the discussions, but any inappropriate posting will be removed, and the offender will be barred from the forum.

Our great strength is our independence. Our only sources of income are membership subscriptions and occasional donations, as well as the grant from the Ajahma Trust for the student prize. This does not stop vilification that we are "in the pockets of big Pharma", despite the fact that we receive no money from industry at all. We maintain friendly relations with Sense About Science; we share many of their aims, but not their more political objectives and we

lack their financial and political resources.

We seem to have influence beyond what our small size might suggest. The website has received an average of 53,000 hits per month over the last year. About half of these are from addresses such as .com, .net or of unknown origin; of the half that can be traced to a country, only 16% are from UK addresses, and at least 50 hits in any one month have come from 50 different countries. One third of the hits come from people going directly to the HealthWatch website, and most of the rest come from Google, Yahoo and MSN searches, but a significant number come from Wikipedia—obviously we are considered to be an important, authoritative and independent source of information on health.

The Chairman is only as good as his committee, and I have to thank all members of the HealthWatch committee for their help. I must pay tribute to the late Michael Allen, who was a founder member of HealthWatch and over the years has done all the difficult jobs (treasurer, newsletter editor, secretary, mailing out the newsletter and, as his final gift to HealthWatch, reconciling the membership records held by the membership secretary and treasurer, which had diverged over the years). Anne Raikes now keeps the accounts in order; John Garrow is an indefatigable vice-Chairman and contributor to the newsletter; Malcolm and Diana Brahams are always ready to offer legal advice, and Malcolm has written a number of solicitor's letters on our behalf (we probably could not have afforded to pay a solicitor to do so); John Illman, Keith Isaacson, James May, Caroline Richmond and Les Rose are always ready to write for the newsletter; Gillian Robinson and Walli Bounds produced the protocols for the student competition and judged this year's record number of entries.

There are four other people we could not do without: Mandy Payne produces this excellent newsletter every quarter; Caroline Addy reads the draft newsletter to check it for libel, *pro bono*; Joan Gandy undertakes all the work associated with running the student prize, and consistently refuses to accept even a modest honorarium; and Kenneth Bodman who took over as membership secretary (with the added burden of distributing the newsletter each quarter) in January, in return for a modest honorarium.

David A Bender
Chairman, HealthWatch

Join the HealthWatch members' forum and have your say

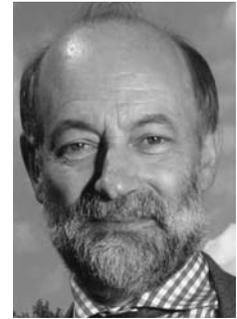
NOW MEMBERS can join the lively online discussions that are increasingly taking place between HealthWatch committee members and their colleagues. We have begun a forum site linked to the HealthWatch website. Anyone can view the discussions, but you have to go through the quick registration process in order to start or reply to posts in the forum.

It is expected that the HealthWatch Forum will grow to

become a useful resource for members, a significant source of information, views and links related to HealthWatch and its aims, and an interesting, thought-provoking browse.

From the home page of the HealthWatch website on www.healthwatch-uk.org read down the list of options on the left of the page, click the last one titled, "Member's Forum", then just follow the instructions and dive in.

ANECDOTES, DATA AND THE CURSE OF THE MEDIA CASE STUDY



Professor Raymond Tallis, gerontologist, philosopher, author and poet, was the worthy recipient of the 2007 HealthWatch Award at the October AGM at the Medical Society of London. Our members and committee were enthralled and provoked by his talk, which we are pleased to reproduce below

THE MEDIA LOVE anecdotes because those who work in them believe (usually correctly) that their customers do. Anecdotes—about a new miracle cure, a drug that is not being made available on the NHS, or the side effects of treatment, or some environmental hazard—sell product. Data, on the other hand, which take us towards the truth about these things, are less popular. Anecdotes, however multiplied, do not point the way to reliable knowledge. As the aphorism says, “The plural of anecdote is not data”. For an anecdote does not even count as a datum. It may prompt a search for data, as when a chance clinical observation makes someone wonder whether A causes B, or C may have therapeutic benefits in condition D.

These deficiencies count less than they should. For anecdotes, unlike data, have a human face: they are closer to gossip, which is a universal human pastime, and to the things that shape belief formation in everyday life. Scientific data—for all that science is one of the most human, as well as the greatest, of human achievements—lack this human face. Their very strength, in that they are unattached to persons and personalities, is a PR weakness. At best, data belong to “the science community”; worse, to “the scientific establishment”; or, worst of all, when they are adopted by, and guide, those who make policy on our behalf, “the authorities”.

Let me illustrate the accursed power of the anecdote with one of the most potent anecdotes of recent times: the story told by Jackie Fletcher, the founder of Justice, Awareness and Basic Support or JABS, a group devoted to campaigning on behalf of parents who believe that their children have been damaged by immunisation, most notably by the MMR triple vaccine. Her story is a tragic one. Nearly a decade after the MMR furore broke it is still news and still being used to influence opinion.

In 2007, the *Daily Mail* devoted yet another article to her terrible experience, accompanied by a poignant picture of her and her son, “who developed autism after being given the MMR jab as a toddler”:

The change in their bright, loving toddler was sudden. Ten days before his first fit, Robert had been vaccinated against measles, mumps and rubella (MMR). Unlike his older brothers, who had been given the jabs in single doses, Robert had been injected with three viruses at once. To the Fletchers, the connection seemed obvious...¹

The Fletchers’ experience is unimaginably terrible: the transformation of a perfectly normal toddler into a child with autism, severe epilepsy, and incontinence, confined to a wheelchair, speaking only the words he knew as a baby, and requiring to be washed and fed. In their case, grief is envenomed with (unjustified) guilt. Mrs Fletcher says, “Deep down, I feel that I have caused all Robert’s problems by taking him for the MMR jab and I’m trying to fix it for him and I can’t.”

One would have to have a heart of stone to challenge Mrs Fletcher’s interpretation of what happened; her attempt to make sense of a senseless catastrophe; and her endeavour, through campaigning to protect others’ children against what she sees as a threat, to come to terms with a guilt she feels which, though unwarranted, is real. Such anecdotes, when set among data, are like queen ants in the colony. They have a power that bears no relation to their number or validity. The very fact that those who invoke anecdotes in support of their theories are so convinced by them, adds to their cognitive lustre. Notwithstanding Nietzsche’s assertion that “Convictions are more dangerous enemies of truth than lies”, cer-

tainty, repeatedly asserted, and the anger and grief with which it is charged, increases the impact of the claim embedded in the story, on the reader or listener. When we are invited to assent to an empirical truth in an area in which we have no expertise, we are more inclined to do so if we identify with the person who is purveying it. It is a way of showing solidarity. The contrast between the media anecdote and the way data are presented in scientific meetings or papers—where there is no reference to the feelings (anger, grief, conviction) of the authors and much concern about sources of error and uncertainty—underlines how disadvantaged the latter are. Of course there are passions behind science—who otherwise could stand the utter tedium of data gathering and learning the techniques of doing so reliably?—but the passions of themselves cut no ice. Indeed, they would be grounds for suspicion from those who are used to “the elementary courtesy of proof”.

ANECDOTES also have the ability to attract other anecdotes: when the Fletchers took their stricken child to his many hospital appointments, “they encountered other parents who said things like ‘our child was fine until MMR’”. This “multiplier effect” is vastly scaled up when the anecdote comes from a celebrity in the media, or is endorsed by such a celebrity. A face that is everywhere is the vehicle for an opinion that is everywhere. The same story is replicated in a million places and has the impact of a million data. In a society where achievement in one area (for example, combining being a moderately competent actor with having an eye-popping figure) makes one an authority in many others, the views of celebrities are the equivalent of the union block vote.

From the point of view of the media, there are secondary benefits of the human story. When data falsifying the Anecdote Based Theory (ABT) start to look overwhelming other, secondary, anecdotes emerge that nurture the primary one. There is talk of conspiracies, cover-ups by the establishment, and the persecution of people (of genius and courageous) who have heretical views. The campaigners on behalf of ABT and their supporters look like plucky loners facing a mighty monolithic opposition. Powerful data are discredited simply because they originate from sources that are considered to be on the side of the Big Boys: the scientific establishment, the politicians (who have their own reasons for hiding the truth), and others, such as Big Pharma (who have vested interests). Even the sharing of these data with the public can be presented as an act of oppression. At the height of the MMR controversy, the Department of Health was accused of ‘bullying parents with facts’.

The power of the anecdote is enhanced by the fact that, once it is in circulation, it looks like an entire half of the overall picture. The media claim that they are required, by their commitment to balance, to give equal hearing to both ABT and science. So Jackie Fletcher

talking about her son Robert and giving her untrained critique of the data is allowed as much airtime as a scientist bearing news of millions of data obtained under carefully controlled conditions. Given that controversy sells product, maintaining the notion that there are two equal sides to the story is desirable in itself.

When it was obvious that the link between MMR and autism was unsustainable, and that it never had any basis, some of the media showed signs of contrition. The habit, however, of giving appealing individuals with their moving stories at least as much credence and coverage as unappealing data, of preferring faces to graphs, and *vox pops* to statistics, does not seem to have been kicked. The recent judgement by the National Institute of Clinical Excellence that certain drugs would not be cost-effective in the treatment of early Alzheimer's disease on the basis of the evidence so far was dominated by human interest stories.

I found this particularly exasperating because (to declare an interest) I was a member of one of the NICE appraisal committees for three years. This quite labour-intensive, unremunerated, role brought with it two rewards: the knowledge that one was contributing in some small way to ensuring that the finite resources of the NHS would be spent in such a way as to maximise health gain; and the satisfaction, indeed pleasure, in participating in a very high-level, supremely well-informed discussion about the costs and benefits of medicines that took into account basic science, clinical evidence, health economics and social value judgements. Very little of this appeared in the media coverage. The World at One gave extensive air-time to a woman whose father had been given the drugs early in his disease and was "convinced" that he would not have done so well had he been denied them⁷.

"Vox pop or even vox pop star is not vox dei."

This example illustrates something that is common to much anecdote-based discussion of matters of public interest such as the benefits or harms of medical treatments or the impact of some environmental factor on health: the domination of the visible over the invisible. In the case of MMR, the millions of children who had been saved from harm by the vaccine were given little foreground; in the case of Alzheimer's drugs, the impact on all other patients that would result from inappropriate allocation of resources to less cost-effective treatments, was hardly discussed.

This is the true curse of the media anecdote. And yet I assume that most journalists (and their sub-editors who write those lethal headlines) want to be able to look back on careers in which they have done more good than harm and advanced, rather than held back, the cause of truth. They are aware that anecdotes may be very effective at conveying the profundity of medical tragedies and the human importance of medical triumphs and disasters. But for making decisions about the absolute and relative values of medical treatments, and more broadly for determining policy, they are of no use whatsoever. And so I would like to offer a few thoughts, which could be accommodated on a flash card, to help them deal responsibly with those anecdotes they and their readers value so much.

- a) An anecdote is not a scientific datum, though it may justify a study to acquire data. Do not confuse experience—however intense and harrowing—with expertise.
- b) The journey from a single observation to reliable, generalisable truth is long and arduous and full of pitfalls. Here are some of those pitfalls (all illustrated by the MMR furore:
 - i) *Subscribing to the fallacy "Post hoc ergo propter hoc": Event B happened after Event A, therefore Event B is due to Event A.*
 - ii) *Noting an association between Event A and Event B*

and concluding that the entire class of A-type events and B-type events will be associated. The propensity for confirmation bias means that you will preferentially notice, remember or be inclined to report, only those occasions in which there is an association.

iii) Moving directly from observed association to imputation of causation. Both Event A and Event B may be the effects of some other event or factor.

iv) Assuming that, because there is a causal link between Event A and Event B, or a certain factor seems to be operating in one instance of Event B, that the cause or factor is operating in all cases, or that it is the only cause or factor relevant to Event B.

These are hard lessons that mankind has learned reluctantly on the road to useful general truths. Do not be proud of unlearning them out of solidarity with folk common sense. Science in many respects is a triumph over the limitations of interested observers and often over common sense⁸.

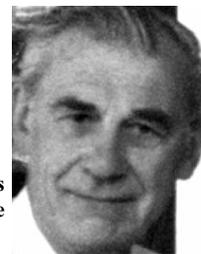
- c) When discussing the beneficial or adverse effects of therapies, or more broadly technologies, consider the whole picture and the whole population. For example, even a treatment that has an adverse effect in some recipients may overall have a beneficial effect in the population. The anger of those who feel the treatment has injured them or their loved ones should prompt review of the evidence of overall benefit but should not count as evidence in itself.
- d) When science fails to support ABT, do not assume that expert opinion:
 - i) *is blinkered, or hobbled by "orthodoxy". Science is in state of permanent reformation—that is how it advances so quickly;*
 - ii) *is simply part of a lump called "the establishment" that routinely conducts witch hunts against dissenters;*
 - iii) *is in hock to the government, to the pharmaceutical industry or to other vested interests*
- e) When 'balance' is sought, it is important that the two views given equal airing should have equal weight. One advocate of ABT, however impassioned, does not deserve as much of a hearing as one million data presented by someone who has acquired them in a way that has survived peer review by experts (who are in many cases professional competitors and on the lookout for errors). The 100% certainty of the anecdote-based theorist should not also be used to make the refusal to claim 100% certainty in science a weakness.

In short, media writers with a conscience should not collude with the cognitively primitive state in which we form most of our everyday beliefs. They should remember Bertrand Russell's observation that "popular induction depends upon the emotional interest of the instances, not upon their number"⁹ and that reliable induction depends on numbers not emotional interest. If journalists give excessive weight to individual anecdotes they will trigger unnecessary worry and suffering, and sometimes cause diversion of resource from places where it would be of more use. *Vox pop* or even *vox pop* star is not *vox dei*. Uncritical focus on "the human story" at the cost of ignoring or underplaying dull scientific facts may have inhuman consequences, as has been demonstrated by the recent return of measles and the first death from this disease for 14 years in the wake of the unfounded scare over MMR¹⁰.

*Richard Tallis
HealthWatch Awardwinner 2007*

See page 7 for full list of references

HALF OF TREATMENTS “OF UNKNOWN EFFECTIVENESS”. Can it be true?



IN THE DAYS of old, Eminent Professors (EPs) were the ultimate source of clinical wisdom. They wrote textbooks approving treatments that, in their experience, were effective. Usually this advice was repeated in successive editions of their textbooks, even if new data suggested that some of this advice was not optimal.

By 1990 the authority of EPs was being supplanted by Data Revolutionaries (DRs), disrespectful young people who dismissed the experience of EPs as “anecdote”, and instead worshipped a new DataGod. The new Holy Scripture was called “Meta-analysis”, and contained the collected wisdom arising from several clinical trials on each clinical condition. This movement to exterminate EPs and replace anecdote with Meta-analysis in textbooks was supported by HealthWatch, which has the charitable objective to promote valid clinical trials.

At first it appeared that DRs would dominate academic medicine. But now it is becoming clear that the Utopian ideal of totally evidence-based medicine will always be difficult to achieve for several reasons.

First, it is impractical to assemble data from clinical trials of good quality for every possible condition, and for every possible patient. Trials typically compare the effect of the treatment (versus non-treatment as a control group) in adults who are healthy except for the condition being studied. It is useful to show that the treatment being tested is best for this selected group of patients, but it does not mean the treatment is best for real-life patients who are older, or younger, than those in the group tested, or who may also have several other conditions.

“the figure of 46% makes no sense unless the criteria for selecting which treatments to include and which to leave out are clearly stated”

Second, good quality clinical trials may require massive resources in money and skilled investigators. The 2004 EU directive on clinical trials has so increased this burden that hardly anyone except pharmaceutical giants can afford to meet the new requirements. This means that there are fewer clinical trials for the DRs to meta-analyse, and they are biased in favour of a drug treatment. There may be a very good treatment involving lifestyle changes that never appears in a meta-analysis, because no non-profit sponsor could afford to finance the trial.

Third, editors of peer-reviewed journals want to fill their pages with information that subscribers want to read. It is generally more interesting to read that a treatment works than that it does not. Therefore trials with a negative outcome are less likely to be published either because the editor rejected them or, more often, because the researchers did not write them up and submit them.

Fourth, researchers and DRs (and perhaps even editors of journals!) are not always pure and impartial scientists—they may well have conflicts of interest. The solution to this problem is to have Eminent Editors (EE) who are pure, impartial and ever vigilant to present (as far as possible) a perfect unbiased summary of the evidence of efficacy for every treatment of every condition. So we can all have confidence in the purity of the EE he (or she) must be sponsored by an organisation of impeccable integrity, and the methods used to reach conclusions must be totally transparent, so that sceptical readers can replicate the process.

Perhaps the nearest we can get to an EE is Dr David I Tovey, editorial director for the *British Medical Journal*'s Knowledge department,

which produces evidence-based products for clinicians and the public. It is therefore worrying that on the *BMJ* Clinical Evidence website¹ a statement on the current knowledge about effectiveness of treatments suggests the meticulous rules for meta-analyses are not being obeyed:

“Of around 2500 treatments covered 13% are rated as beneficial, 23% likely to be beneficial, 8% as trade off between benefits and harms, 6% unlikely to be beneficial, 4% likely to be ineffective or harmful, and 46%, the largest proportion, of unknown effectiveness.”

Can it be true? The selection of 240 common conditions is arbitrary, but they are listed, so I can replicate that. But when I try to replicate the list of treatments I am baffled². To claim that “46% of around 2500 treatments are of unknown effectiveness” (my italics) makes no sense unless the criteria for selecting which treatments to include and which to leave out are clearly stated. Some people may treat their wrinkles by washing their faces in the dew on May mornings. If the treatment list included that, and all the other innumerable evidence-free folk remedies for every common condition, the treatment list would have thousands of entries of which the percentage “unknown” would approach 100%.

On the other hand the list of treatments analysed could have been limited to those which had been tested by good randomised trials, in which case the “unknown effectiveness” category would shrink to nearly 0%. Without the selection criteria specified, the figure of “46%” is meaningless. Worse, it is even snatched up with glee by the alternative health lobby, who have used it to claim that nearly half of orthodox treatments are of unknown effectiveness³, when in reality many of the treatments analysed are themselves alternative remedies (and are, not surprisingly, over-represented in the “unknown effectiveness” category).

So, is Dr Tovey really committed to the crucial value of evidence? In a letter to the *BMJ* he wrote: “A principle of evidence-based practice is that the evidence should be only one influence on clinical decision making, alongside the expertise and perspectives of both patients and clinicians. However uncomfortable for health system planners, an evidence based service should reflect expressed patient preference.”⁴

In other words, now the Eminent Professor suggests that “expertise and perspectives of both patients and clinicians” (what we used to call anecdote) should have a place on the rostrum along with meta-analyses of clinical trials. Maybe that will bring some benefits, but if it is a sign that he wishes to hark back to the days where anecdote supplanted evidence I think Dr Tovey should reconsider his position as editorial director of Clinical Knowledge.

John Garrow

Emeritus Professor of Human Nutrition, University of London

References

1. <http://clinicalevidence.bmj.com/ceweb/about/knowledge.jsp>
2. Garrow JS. How much of orthodox medicine is evidence based? *BMJ* 2007; **335**: 951 (10th November).
3. <http://www.newscientist.com/article/mg19125630.200-happy-homeopaths.html>
4. Tovey DI. Evidence should not be the only consideration. *BMJ* 2007; **335**: 952 (10th November).

HRT ATTACK UNJUSTIFIED AND ILL-JUDGED?

Consultant obstetrician Susan Bewley wrote to express her fury at an article which appeared in the last issue:

Dear Healthwatch Editor,

I NOTE the article entitled “HRT under fire—again” by Michael Henk (retired) in the latest *Healthwatch Newsletter* (issue 67, October 2007). He writes about a newspaper article by Margaret Cook (haematologist) in the *Daily Telegraph* that was based on an editorial² in a well respected international journal (the *Lancet*) written by a well respected author (Valerie Beral) about a potentially important topic (whether HRT causes ovarian cancer). I’m not going to get into the rights and wrongs of a complex topic except to say that I was appalled this was accepted for publication:

1. Dr Henk says that “many critical medical scientists would be unimpressed by a relative risk of 1.2 in such a study, whatever the significance level”. Why? Many of us would think that a relative risk of 1.2 of a nasty, though not very common, cancer associated with a medication that a significant minority of postmenopausal women are presently taking might be worthy of note, albeit not proof of causation.
2. Dr Henk notes that there may be confounding factors in an observational study, but is singularly unconvincing when he goes on to say that “some women could have been pre-

scribed HRT for menopausal-type symptoms that were actually caused by incipient ovarian carcinoma, something which *I have personally observed in one case*” (my emphasis). Oh really? An unpublished *n* of 1 anecdote is supposed to impress us, the evidence-seeking “critical medical scientists” who belong to Healthwatch (strapline “for treatment that works”)?

3. He describes Cook’s article as “vituperation”. With respect to concerns about HRT he dismisses these with “perhaps there is actually some *female prejudice* against it” (my emphasis). And lastly, he tells us authoritatively that “the claim that it (HRT) is being promoted by male doctors and the pharmaceutical industry in the interests of commerce is specious”. So that’s alright then! The critical medical scientist (Henk, *n* of 1) versus vituperative female prejudice (Cook & Beral) and the HRT debate is wiped away.

Surely HealthWatch readers deserve better?

SUSAN BEWLEY

References

1. HRT: kill or cure? Cook, M. *The Daily Telegraph*; 20 April 2007. (Article no longer available online).
2. Beral V. Ovarian cancer and hormone replacement therapy in the Million Women Study. *Lancet* 2007; **369**: 1703–10.

STOP PRESS: We have just welcomed Dr Susan Bewley onto the HealthWatch committee. More details in the next issue

Science is not arbitrary

Roger Fisken, consultant physician from Friarage Hospital, Northallerton, questions whether we should be so indulgent towards post-modernism:

Dear HealthWatch Editor,

JAMES MAY (*HealthWatch Newsletter* issue 67, October 2007) is rather too kind to post-modernist views on knowledge: the idea that no understanding of the material world can be relied upon more than any other is not merely “gullible and naive”—it is also, frankly, rather childish.

The reason why conventional science is preferable to what is taught in Hogwarts is that, by and large, science works and

Harry Potter-type magic doesn’t. Does James May’s interlocutor live in a house with electricity, water and mains drainage? Does she travel by any form of motorised transport? Does she use sun cream when lying out in the garden in the summer? If she does, she is using technologies derived from conventional science, because they work. The conventions, classifications and conclusions used in such science and technology are not arbitrary, like how you might classify pieces of flotsam and jetsam—they are derived from a long process of observation, experiment, prediction and further experiment.

ROGER FISKEN

Dr Fisken’s views are echoed by James May’s fellow HealthWatch committee member Les Rose, who answers in “last word” on page 8. But will it be the last word? If you want to join the debate, log onto www.healthwatch-uk.org and join the discussion forum by clicking “members forum” (last button on the left-hand panel)

ANECDOTES, DATA AND THE CURSE OF THE MEDIA CASE STUDY ...continued from page 5

References

1. Swain G http://www.dailymail.co.uk/pages/live/articles/health/healthmain.html?in_article_id=467323&in_page_id=1774
2. Friedrich Nietzsche. Human, All-Too-Human. “Man Alone With Himself,” aphorism 483, “Enemies of Truth,” (1878).
3. Friedrich Nietzsche. The Gay Science. Book 1, Section 2 (1982).
4. Swain G *op cit*
5. I give examples of this in relation to MMR in Hippocratic Oaths. Medicine and its Discontents (London: Atlantic, 2004.) See ‘Convictions’ pp 109–127.
6. See Tallis, ‘Convictions’ *ibid*. This chapter also covers the epidemiological evidence that demolished Andrew Wakefield’s claim of the link between MMR and autism.
7. BBC World at One: 13th August 2007 (not available online).
8. Lewis Wolpert. Unnatural Nature of Science (London: Faber, 1992).
9. Quoted in Wolpert *ibid* p 19.
10. First measles death for 14 years. BBC News 24: 3rd April 2006. <http://news.bbc.co.uk/1/hi/england/4871728.stm>

THOROUGHLY MODERN SILLINESS?



JAMES MAY is a bit too tolerant of post-modernism (see his article in the *HealthWatch Newsletter* issue 67, October 2007), although I do see what he is trying to explain. One of the main reasons that science is so often mistrusted is that it is in the business of reducing uncertainty, and less concerned with providing the “yes” or “no” answers that many non-scientists demand.

We have statistics so that we can assess this uncertainty surrounding a piece of evidence. Thus I really do not see the merit in failing to recognise the difference between a claim which lacks convincing evidence, because of high uncertainty, and one for which the uncertainty is low—as post-modernists seem to do. Neither do I see the utility of living one’s life like this. By accepting a claim which has good evidence to support it, I run a low risk of failure. By refusing all claims, however strong the evidence, none of my decisions will have any value.

“It is not a failure to strive for objective evidence, while accepting that there may be uncertainty as to its degree of objectivity. This is why scientists use controls in experiments.”

Science is also the business of the ‘crash testing of ideas’. Everything we claim is open to challenge, and it is good for the scientific method itself to be challenged. It is true that some modernist scientists have fallen into the trap of proclaiming absolute empirical truths (James’ “failed epistemology”), but this doesn’t justify the abandonment of the search for truth, or the denial of evidence.

Thus by explaining this continuum of uncertainty, scientists can very easily demolish the pretentious fantasies of the post-modernists. This is not to say that some facts do not approach the cer-

tainty that many non-scientists expect. To all intents and purposes the Earth’s orbit around the Sun is an absolute truth, and without assuming that it is, space exploration would be impossible. Things are rarely so certain in medicine.

Am I reinventing James May’s “critical realism” with this reliance on the role of uncertainty? Even if I am, I don’t see the concept as new, and I retain a modicum of sympathy for those modernist scientists who have nailed their colours to a mast of pragmatism (at least, those who didn’t get their empirical facts wrong!). It is not a failure to strive for objective evidence, while accepting that there may be uncertainty as to its degree of objectivity. This is why scientists use controls in experiments. It is a failure to deny the value of all evidence. Let’s be clear as to where the responsibility lies: the onus is on those who make claims, to provide supporting evidence. The role of sceptics is to challenge claims, and to evaluate the evidence. If it looks good enough, we’ll accept it, but always with the qualification that later evidence might overturn it. There is nothing noble or admirable about never accepting the evidence. Neither is it clever to denigrate those who devote their lives to the quest for knowledge. As Sokal and colleagues demonstrated, post-modernists can’t even recognise falsehood when it is thrust in front of them.

*Les Rose
Freelance consultant clinical scientist and
HealthWatch committee member*

And the very last word...

THE CONSERVATIVE Party may not have done their homework before launching their new committee. Plans for an Independent NHS board with responsibility for allocating the £90 billion a year health service budget and setting national standards of care were unveiled by Andrew Lansley, the shadow home secretary, in November.

Rather like HealthWatch, this board would seek to influence decisions in the NHS by promoting clinical trials and evidence-based

medicine, rooting out treatments (both orthodox and complementary) whose benefits are unproven, and therefore saving the country from unnecessary expenditure.

If patients felt the NHS failed to deliver care to the defined standard, they could complain to a completely new body which would gauge patients’ opinions and ensure their views were acted upon. This new body’s name? They propose calling it... Healthwatch.

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HealthWatch promotes:

1. The assessment and testing of treatments, whether “orthodox” or “alternative”;
2. Consumer protection of all forms of health care, both by thorough testing of all products and procedures, and better regulation of all practitioners;
3. Better understanding by the public and the media that valid clinical trials are the best way of ensuring protection.

HealthWatch welcomes membership enquiries from those who share its aims. Membership costs £30.00 per year, including hard copy newsletter sent by post (£40.00 for members outside Europe); or £25.00 for members anywhere in the world who agree to receive the newsletter by e-mail only. For students in full-time education membership, which includes the newsletter by e-mail only, is free. Questions about membership should be sent to Membership Secretary Kenneth Bodman, at kenneth.bodman@btinternet.com Extra newsletter copies are available at £5.00 each.



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