KING'S College LONDON

THE KING'S LECTURES
2018

Psychiatry, Science & Society

LECTURE 1

THE STRANGE CASE OF DR SACKS

LECTURE 2

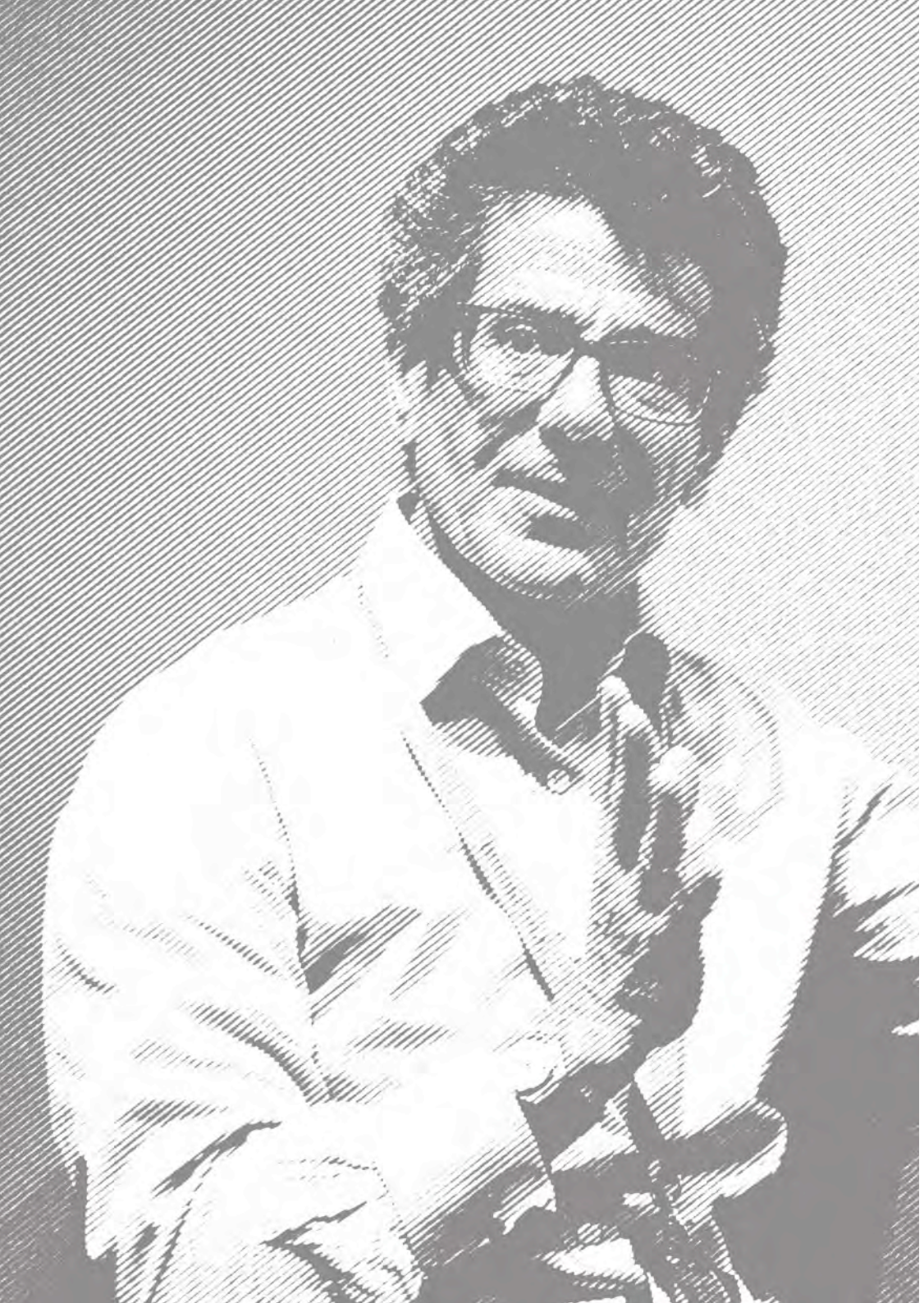
KNOWING ME KNOWING YOU: INSIGHT IN PSYCHIATRY AND MEDICINE

LECTURE 3

FIGHTING STIGMA IN MENTAL HEALTH– AND LOSING

THE TRANSCRIPTS

ANTHONY S DAVID
PROFESSOR OF COGNITIVE NEUROPSYCHIATRY



THE KING'S LECTURES

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2018

Three lectures delivered by
Professor Anthony S David

The Strange Case of Dr Sacks

Knowing Me Knowing You:
Insight in Psychiatry and Medicine

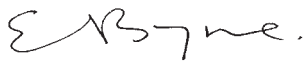
Fighting Stigma in Mental
Health – and Losing

King's College London

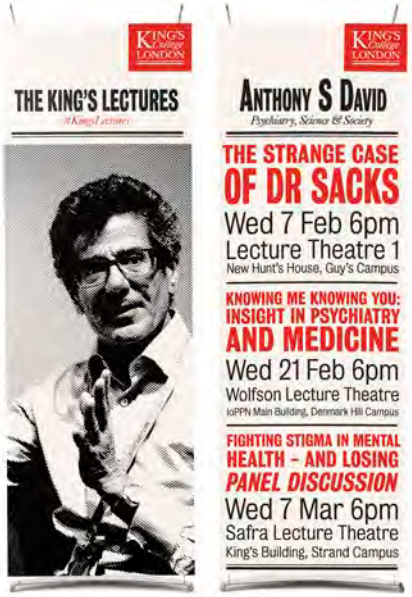
Contents

Preface from the President & Principal Professor Edward Byrne AC

It is not always possible to fully develop an argument or present a perspective on a complex issue in a single public lecture. This is exemplified by the *Reith Lectures* which have been so influential over the years. King's prides itself in having a wonderful academic faculty who are leading thinkers across many disciplines. I conceived the *King's Lecture Series* as an opportunity for some of our world-leading academics to present a story in depth over three lectures, about an issue of public interest close to their hearts. My expectation was that they would develop some new material for the series, that it would be open to the general public and would embrace the King's community. Preparation of lectures suitable for publication was also part of our thinking in devising this series. Professor Tony David has proved a splendid initial lecturer. He has developed a theme of the interaction between psychiatric illness, psychiatrists and society in a subtle and measured way through three brilliant complementary lectures that build on each other. His words speak for themselves and I commend this publication to all who are interested in topical issues related to mental health in this country. Professor David has set a high bar for others to follow, and this lecture series will undoubtedly carry high prestige at King's College London for many years to come.



Professor Edward Byrne AC FTSE FRACP FRCPE FRCP


KING'S College LONDON
THE KING'S LECTURES
#kingslectures
KING'S College LONDON
ANTHONY S DAVID
Psychiatry, Science & Society
THE STRANGE CASE OF DR SACKS
Wed 7 Feb 6pm
Lecture Theatre 1
New Hunt's House, Guy's Campus
KNOWING ME KNOWING YOU: INSIGHT IN PSYCHIATRY AND MEDICINE
Wed 21 Feb 6pm
Wolfson Lecture Theatre
IoPPN Main Building, Denmark Hill Campus
FIGHTING STIGMA IN MENTAL HEALTH – AND LOSING
PANEL DISCUSSION
Wed 7 Mar 6pm
Safra Lecture Theatre
King's Building, Strand Campus

Lecture I

The Strange Case of Dr Sacks

Wednesday 7 February 2018
New Hunt's House, London

Oliver Wolf Sacks was born 9 July 1933 in London, the youngest of four gifted children born into a Jewish medical family. Father, Samuel, was a general practitioner and mother, Muriel, was a paediatric surgeon; his brother also became a doctor. Sacks was sent away to boarding school at the age of six when World War II began. When he returned home he attended St Paul's School and developed an interest in both chemistry and medicine, at times assisting his mother with dissections during her research. Like his siblings before him, Sacks exhibited a keen intellect and excelled in his studies, earning a scholarship to Queen's College, Oxford, which he attended from 1951. In 1954 he gained his bachelor's degree in physiology and biology, and in 1958 received his medical degree.

In 1960, Sacks took a trip to Canada. Hitchhiking his way south he eventually landed in San Francisco, where he immersed himself in the local scene, experimenting with drugs and befriending some of the city's poets. Sacks remained committed to science, however, and took an internship at Mount Zion Hospital, followed by a residency in neurology at UCLA. In 1965,Sacks' career took him across the country to New York City, where he began teaching at the Albert Einstein College of Medicine in the Bronx. Around this time, he started working as a consulting neurologist at Beth Abraham Hospital. While there, he became involved with an unusual group of patients suspended in a speechless, frozen state. Sacks recognised their condition as a consequence of encephalitis lethargica, which had been a pandemic from 1916-27. He treated them with the then-experimental drug L-DOPA, and was able to revive them. Their recovery proved temporary and the patients soon fell back into their

previous state or else developed other similarly immobilising conditions. In 1973 Sacks published a book about these experiences: *Awakenings*, which led to a related documentary the following year.

Once dubbed by the *New York Times* as the 'poet laureate of medicine', from the 1970s Sacks continued as both scientist and author, documenting his unique medical encounters with a deeply philosophical approach and literary flair. In 1985 he published *The Man Who Mistook His Wife for a Hat*, collected essays on disorders ranging from Tourette's to autism to phantom limb syndrome and face blindness. It has since been published in more than 20 languages. Other notable works by Sacks include *Seeing Voices* (1989), in which he describes sign language; *An Anthropologist on Mars* (1995), which tells the story of seven patients who have learned to adapt to their disabilities; and *Musicophilia* (2007), in which he discusses cases involving neurological disorders with a musical component.

In 2007, Sacks left his position at Beth Abraham Hospital to become Professor of Neurology and Psychiatry at the Columbia University Medical Center. While continuing to teach and publish, Sacks also received numerous honours; in 2008, he was awarded the CBE. An autobiography entitled *On the Move* was published in April 2015.[Fig A] He continued to write during the final stages of his terminal cancer. Sacks died at his home in New York City on August 30 2015. He was 82.

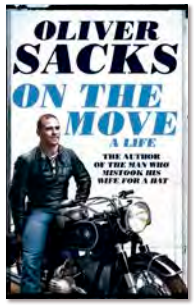


Fig A Cover of Sacks' autobiography *On the Move*, published in 2015 (Picador).

Why did Sacks choose Neurology instead of Psychiatry?

I will attempt to answer this question, drawing on his autobiography (*On the Move*) and other writings. Unfortunately, I never had the privilege of meeting Oliver Sacks, although I did have a sort of encounter with him a few years ago through the pages of a medical journal – to which I will return later.

Like any decent psychiatrist, I will start with family history. And I quote:[1]

> ... my brother Michael had... been the 'odd' son from his earliest years. There seemed something different about him; he found it difficult to make contact, he had no friends, he seemed very much to live in a world of his own.
>
> ... when he was 15, Michael became psychotic. He felt a magical and malignant world was closing about him. He came to believe that he was 'the darling of a flagella-maniac God'... subject to the special attentions of 'a sadistic Providence'. Messianic fantasies or delusions appeared at the same time...
>
> The effect of this on my parents was devastating... They had a word for it – 'schizophrenia' – but why should it have singled out Michael and at such an early age? Was it the terrible bullying... something in his genes?
>
> Whatever it was – nature or nurture, bad chemistry or bad bringing up – medicine could surely come to his aid. At 16, Michael was admitted to a psychiatric hospital and given 12 'treatments' of insulin shock therapy... This was the first line of treatment for schizophrenia in 1944, to be followed, if need be, by electroconvulsive treatment... The discovery of tranquilizers was still eight years in the future.
>
> For the next 10 years, Michael led a relatively stable (although one could scarcely call it happy) existence. A level of tranquilizer was found which kept his psychoses at bay but did not have too many adverse effects.

1 Sacks, OW. (2015). *On the Move: a Life*. London: Picador.

Next comes the personal history:

> By 1966, I was taking very heavy doses of amphetamines, and I became – psychotic? manic? disinhibited? enhanced? I hardly know what term to use, but it went with an extraordinary heightening of the sense of smell and of my normally unremarkable powers of imagery and memory.
>
> I was still half-psychotic at times from the amphetamines I had not yet kicked. Thinking of my schizophrenic brother, Michael, I asked Shengold [Sacks' psychoanalyst] if I too was schizophrenic.
>
> 'No,' he answered. Was I then, I asked, 'merely neurotic'?
>
> 'No,' he answered. I left it there, we left it there, and there it has been left for the last 49 years.

In sum, we have a positive family and personal history of psychiatric illness.

What makes a Doctor choose Psychiatry as a Career?

Using data from the Women Physicians' Health Study (relevant as a large, national, questionnaire-based survey even if conducted in 1993-94) to compare characteristics of female psychiatrists (N=570) with those of other female physicians (N=3,875), Erica Frank et al[2] found that in relation to other doctors, female psychiatrists are: older, in poorer physical health, more likely to be smokers/ex-smokers. They are also likely to be more politically liberal, unmarried, and to have a personal or family history of mental illness.

2 Frank, E., Boswell, L., Dickstein, LJ., Chapman, DP. (2001). Characteristics of female psychiatrists. *Am J Psychiatry*, 158, pp.205-12.

Here are some more data on general attitudes among doctors towards psychiatry and other specialities – from the time when Sacks was early in his career, the 1960s.[3] Surgeons: domineering, aggressive. Psychiatrists: intellectual, but confused and emotionally unstable. Note GPs: basically nice but dim.[Fig B]

3 McGuire, FL. (1966). Psycho-social studies of medical students: a critical review. *J Med Educ*, 41, pp.424-45.

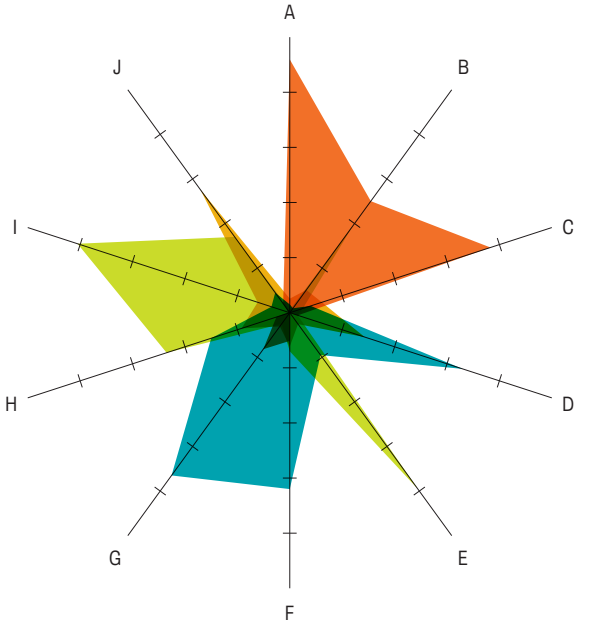
This is my favourite, a review of the literature on the factors influencing medical students' choice of psychiatry as a speciality, also from the US.[4] The results indicated that students who: are single, from large metropolitan areas, uninterested in religion, politically liberal, interested in humanitarian ideas, who score low in authoritarianism, have a high capacity to tolerate ambiguity (so far so good); have a high level of anxiety and fear of death, and have low self-esteem (not so good)... are likely to choose psychiatry.

4 Eagle, PF., Marcos, LR. (1980). Factors in medical students' choice of psychiatry. *Am J Psychiatry*, 37, pp.423-7.

Up-to-date and sophisticated multivariate analyses have been undertaken which look at predictors of medical career choice, mediators and outcomes.[5] Medical students bring with them certain attributes; these are shaped by experiences, and lead to career

5 McParland, M., Noble, LM., Livingston, G., McManus, C. (2003). The effect of a psychiatric attachment on students' attitudes to and intention to pursue psychiatry as a career. *Med Educ*, 37, pp.447-54.

Medical student characterisations of four medical specialties



	Traits	Surgeon	Internist	Psychiatrist	GP
A	Domineering and arrogant	90	5	3	1
B	Aggressive and full of energy	49	10	2	39
C	Mainly concerned with own prestige	75	12	8	5
D	Deeply interested in intellectual problems	3	28	66	3
E	Deeply interested in people	0	5	19	79
F	Confused thinker	10	12	64	14
G	Emotionally unstable	16	6	73	5
H	Extremely patient	5	18	30	47
I	Friendly, pleasing personality	0.5	12	7	81
J	Sensitive to a wide range of factors when evaluating a medical problem	4	54	9	34
	Image score	-1	9	-1	23

Fig B Star plot showing clustering of attributes according to medical speciality.

N = 343

McGuire, FL. (1966). Psycho-social studies of medical students: a critical review. *J Med Educ*, 41, pp.424-445.

Heterosexual attitudes towards homosexuality (HATH)

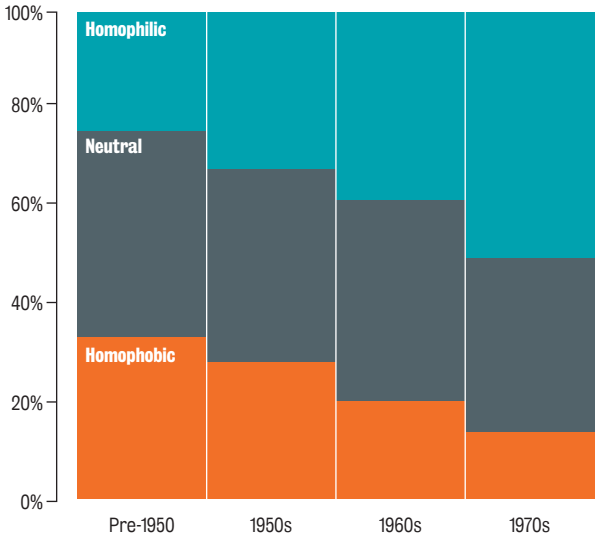


Fig C Chart showing increasingly accepting attitudes towards homosexuality among doctors from pre-1950 to the 1970s.

x2 = 42.64
P< .001

Mathews, WC., Booth, MW., Turner, JD., Kessler L. (1986). Physicians' attitudes toward homosexuality – survey of a California county medical society. *West J Med*, 144, pp.106-110.

HATH scale results, stratified by respondents' speciality

Speciality	Homophilic	Neutral	Homophobic	*N*
General/family practice	33.5	35.5	31.0	(155)
Internal medicine	47.6	39.3	13.1	(206)
Obstetrics/gynaecology	35.7	32.9	31.4	(70)
Paediatrics	56.4	33.3	10.3	(39)
Psychiatry	62.3	36.1	1.6	(61)
Pathology and radiology	28.3	45.6	26.1	(46)
Surgery (ex orthopaedics)	20.4	49.1	30.5	(167)
Orthopaedic surgery	22.0	46.0	32.0	(50)
Other	37.5	39.0	23.5	(136)
Totals	37.0	40.1	22.9	100
N	(344)	(373)	(213)	(930)

Fig D Overall data on doctors' attitudes to homosexuality from those graduating from the 1950s to 1970s, broken down by medical speciality, showing psychiatrists to have the most accepting attitudes.

x2 = 94.65
P< .001

Mathews, WC., Booth, MW., Turner, JD., Kessler L. (1986). Physicians' attitudes toward homosexuality – survey of a California county medical society. *West J Med*, 144, pp.106-110.

choices. In Sacks' case we can add some fundamental attributes: being a son of doctors; being Jewish; and being gay.

The number of Jewish doctors in the US is way out of proportion to the population, 14 percent vs 2 percent. Looking at data[6] contemporaneous to Sacks' early career linking religion to medical specialities, it is recorded that, out of 120 doctors, Protestants and Catholics were spread evenly across specialities. Jews chose either internal medicine or psychiatry (there were no surgeons); in fact, those with no religion were the group most drawn to psychiatry.

So what about being gay? According to his autobiography, when Sacks came out to his mother she called him an 'abomination'. Clearly upset by this, he nevertheless had a few intense homosexual relationships as a young man, but then spent decades in celibacy until, late in life, he met writer Billy Hayes and they formed an enduring and loving relationship. Attitudes to homosexuality within psychiatry have been carefully studied; Dinesh Bhugra and Mike King carried out a survey in the early 1980s in the UK and found that homosexual doctors and the general homosexual population had more liberal attitudes than psychiatrists, who were more liberal than GPs.[7] Pertinently, a study which covers the period Sacks first moved to California shows that attitudes were becoming increasingly enlightened.[Fig C] The psychiatrists of that era were the most 'homophilic', to use the terminology of the study, and least 'homophobic' of all specialities[Fig D] – although there are no separate data on neurologists as distinct from physicians.[8]

We need to remember that homosexuality was a criminal offence in the UK up until 1967 under the

6 Kritzer, H., Zimet CN. (1967). A retrospective view of medical speciality choice. *J Med Educ*, 42, pp.47-53.

7 Bhugra, D., King, M. (1989). Controlled comparison of attitudes of psychiatrists, general practitioners, homosexual doctors and homosexual men to male homosexuality. *J Roy Soc Med*, 82, pp.603-5.

8 Mathews, WC., Booth, MW., Turner, JD., Kessler L. (1986). Physicians' attitudes toward homosexuality – survey ofa California county medical society. *West J Med*, 144, pp.106-10.

Sexual Offences Act, and that 'sodomy laws' were not repealed in many US states, including California, until the mid-1970s. But not only that, homosexuality was regarded as a psychiatric disorder – at least until 1973 when it was downgraded in the DSM-II, and again in the 1980 DSM-III, and finally removed in 1987. Whether all this affected Oliver Sacks' career choice we can only speculate.

What did Sacks think of Psychiatry?

From *On the Move*:

> When I was a resident at UCLA, neurology and psychiatry were presented as almost unrelated disciplines, but when I emerged from residency to encounter the full reality of patients, I often found I had to be as much a psychiatrist as a neurologist...
>
> I encountered it overwhelmingly with the postencephalitics, for they had a myriad of disorders both 'neurologic' and 'psychiatric': parkinsonism, myoclonus, chorea, tics, strange compulsions, urges, obsessions, sudden 'crises' and gusts of passion. A purely neurological or a purely psychiatric approach with such patients would lead nowhere; the neurological and the psychiatric had to be conjoined.

This is a view I would strongly endorse. Later in his autobiography Sacks is more critical:

> ... But Ward 23 had a so-called behaviour modification policy, using rewards and punishments, and in particular 'therapeutic punishment'. I hated to see the way in which the patients were treated, sometimes locked in seclusion rooms or starved or

> restrained. Among other things, it reminded me of the way I had been treated at boarding school.

From the online archive called *Web of Stories*, in a post entitled 'Over-investment in medical models of schizophrenia',[9] he says:

> As a neuroscientist I am very well aware of what may be going on in the schizophrenic brain but I am equally aware of the power of community, of work, of friendship and of love – combined with the right medication and perhaps the right sort of psychotherapy.

In other words, Sacks was at best ambivalent and at worst critical of psychiatric practice.

What did Psychiatry think of Sacks?

Not everyone was a fan of Oliver Sacks. In a review of *An Anthropologist on Mars: Seven Paradoxical Tales* for the *Baltimore Sun*, Dr Paul McHugh[10] (Chairman of Psychiatry at Johns Hopkins) wrote:

> I have a visceral antipathy towards psychiatric romantics... They have done much harm to patients and to my profession... He [Sacks] is a big grizzly bear of a man with the brain of a neurologist and the heart of a romantic poet – a Wordsworth wannabe in the district of the sick... He must hold to some of the empirical facts of the brain when he is bringing forth his narratives... However, his passionate nature (with its inclination towards long-winded melodrama...), his blindness to empirical results (as when he equates pharmacological treatments of schizophrenia with psychosurgery) and his silly

9 Web of Stories. (Unknown). *Over-investment in medical models of schizophrenia*. [Video] Available at: https://www.webofstories.com/play/oliver.sacks/352

10 McHugh, P. (1995). The Man Who Mistook His Stories for Psychiatry, *Baltimore Sun*, 19 Feb.

attitudes... as when he says, 'All of us need to take little holidays from our frontal lobes', tug at these moorings and make him a poor guide to these patients for all that he may be their great friend.

What do today's doctors think of psychiatry? Here is a recent study conducted by, among others, the former head of psychiatry at the World Health Organisation, Norman Sartorius, of a survey of 1,057 medical faculty members from 15 teaching centres around the world.[11] Ninety percent said psychiatrists were not good role models; 73 percent thought psychiatric patients were emotionally draining; 10 percent that psychiatry was not intellectually challenging; 25 percent that psychiatrists have too much power over their patients; 22 percent that treatment is not as effective as other branches of medicine, which we know is not true; 24 percent that psychiatrists make less money than other specialities (perhaps that is true).

This article caused quite a stir, and a robust response. Most psychiatrists took the article to be evidence of stigma against psychiatry – both patients and practitioners – and of the need to improve the image of the discipline. However, clinical psychologist and critic John Read took a different view:[12] that it's not about enhancing the perception of psychiatry but that not a single psychiatrist thinks to ask – to what extent is the bad image deserved?

Back to Oliver Sacks, and his book *A Leg to Stand On* (1984)[Fig E] which curiously, he found extremely difficult to write. Neurologist Jon Stone and colleagues from Edinburgh published an excellent re-evaluation of the book.[13] The abstract summarises this as follows:

11 Stuart, H., Sartorius, N., Liinamaa, T. (2015). Images of psychiatry and psychiatrists. *Acta Psychiatr Scand*, 131, pp.21-8.

12 Read, J., Runciman, O., Dillon, J. (2016). In search of an evidence-based role for psychiatry. *Future Science OA*, [Online] 2(1) Available at: https://doi.org/10.4155/fsoa-2015-0011.

13 Stone, J., Perthen, J., Carson, A.J. (2012). *A Leg to Stand On* by Oliver Sacks: a unique autobiographical account of functional paralysis. *J Neurol Neurosurg Psychiatry*, 83, pp.864-7.

> The book described his recovery after a fall in a remote region of Norway in which he injured his leg. Following surgery to reattach his quadriceps muscle, he experienced an emotional period in which his leg no longer felt a part of his body, and he struggled to regain his ability to walk. Sacks attributed the experience to a neurologically determined disorder of body-image and body ego induced by peripheral injury. In the first edition of his book Sacks explicitly rejected the diagnosis of 'hysterical paralysis' as it was then understood, although he approached this diagnosis more closely in subsequent revisions. In this article we propose that, in the light of better understanding of functional neurological symptoms, Sacks' experiences deserve to be reappraised as a unique insight in to a genuinely experienced functional/psychogenic leg paralysis following injury.

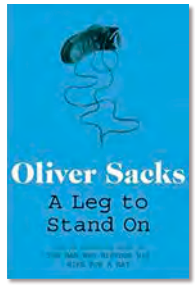


Fig E Front cover *A Leg to Stand On* (1984, Summit).

In his autobiography Sacks wrote:

> My first thought was that I had suffered a stroke while under anesthesia. My second thought was that this was a hysterical paralysis. I found myself unable to communicate my experience to the surgeon who operated on me; all he could say was, 'Sacks, you're unique!'

And in a commentary in the *Journal of Neurology, Neurosurgery & Psychiatry* he wrote:[14]

> Taking so robust a neurological basis into consideration, there is no need to postulate a dissociative or functional disorder, although, of course, it is possible. I would be the last to deny this, and I think that there may have been elements

14 Sacks, O. (2012). The central effects of peripheral injury. *J Neurol Neurosurg Psychiatry*, 83, pp.868.

of functional overlay superimposed on a very real neurological condition...

The *Journal's* editors kindly asked me to respond to the article as well, from a neuropsychiatric point of view, and this is what I said:[15]

> [Sacks'] final explanation is of a disruption in body image or schema precipitated by the injury, not caused by a parietal stroke... but a functional (in the clean, physiological, non-hysterical sense) and (as it turned out) temporary reorganisation of cortical representations.
>
> The biopsychosocial approach excludes neither cortical schema nor discourse on motivation... deception, self and other. Pertinent to conversion disorder is the notion of illness behaviour, and... the sick role. Is it not one of the mechanisms whereby a minor injury can lead to major disability that it sows the seeds of what it might be like to be disabled and hence to be looked after...?
>
> Is talk of 'cortical representations' and the rest just the latest in a series of neuro-euphemisms? The aim to de-stigmatise functional disorders [in the dirty, non-physiological, psychiatric sense]... is of course noble, but I fear perhaps doomed.

15 David, AS. (2012). Functional disorders, Cartesian dualism and stigma: where does the dualism really lie? *J Neurol Neurosurg* Psychiatry, 83, pp.869.

I went on to say that the dualism is not actually between brain and mind, as was the case in the 19th century, but the extent to which disorders are involuntary or voluntary:

> Try taking the stigma out of that – you might as well take the person out of medicine.

As you can imagine – I was really excited thinking

about how Sacks, my great hero, would react to my comments, how insightful he would have found them and so on. Alas, he did not respond. What I was trying to convey in my commentary and why I reproduce it here, is that Sacks' discomfort with functional disorder might be taken as evidence of a wider discomfort with psychological models of illness which do not implicate brain damage directly.

Conclusions

Some people are attracted to psychiatry and neurology for obvious reasons – these specialities offer us the best opportunities for getting close to understanding the human condition. But some turn away from psychiatry for good reasons: the notion that some of our patients may not want to get better, their motives are perverse, they don't confide in us honestly, they *are* emotionally draining... Others are put off by the fact that disorders can come and go on the basis of public consensus (look at homosexuality). Then there is the need (I believe) to occasionally use coercion – because we want to do what's best for someone, but you could say we 'have too much power'.

In my view, the essence of psychiatry as opposed to other branches of medicine is not about science, intellectual rigour or therapeutic potency – it is ultimately about ethics and morality. Let's not avoid it; let's grapple with it together with a good heart and a questioning mind. Sacks did not choose psychiatry, perhaps because of his unease with some of these aspects, perhaps because of who he was and where he came from, and yet his work has magically illuminated it for the rest of us.[Fig F]

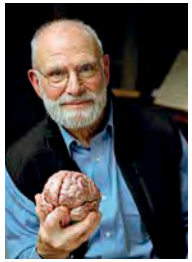


Fig F Oliver Sacks holding a model of a brain.

As Oliver Sacks wrote: 'In examining disease, we gain wisdom about anatomy and physiology and biology. In examining the person with disease, we gain wisdom about life.'[16]

Choose life, choose a career, choose psychiatry.

16 Sacks, O. (1985). *The Man Who Mistook His Wife For a Hat*. London: Summit.

Postscript

After delivering the lecture on 7 February 2018, I was at a function and spoke to an eminent retired professor of psychiatry who remembered Sacks from his early days in London. He said: 'Ah yes Sacks, he applied to the Maudsley... didn't get in.'

Lecture II

Knowing Me Knowing You: Insight in Psychiatry and Medicine

Wednesday 21 February 2018
Institute of Psychology, Psychiatry
& Neuroscience, London

When we talk about insight in psychiatry, we usually refer to the notion of whether a person suffering from probably a severe mental illness sees their predicament in the same way as professionals. That is – do they see themselves as suffering from an illness requiring some kind of biomedical restitution, as well as seeing themselves in the same way that non-professional people see them.[1]

Often a degree of behavioural disturbance or a set of unusual beliefs readily evokes concern among a person's peers, and it is only when certain rules and conventions are applied to this that the professional psychiatrist makes a diagnosis. However, starting from these obvious cases where there is at least a consensus (if not unanimity) about what constitutes a mental disorder, insight and self-awareness spreads into other areas of medicine and indeed beyond medicine and into the worlds of work and human relationships generally. So, the questions that any person might ask themselves include:

- Am I healthy or am I ill? And if the latter, is this a physical or a mental problem?
- What sort of person am I?
- What am I like physically?
- What am I like psychologically?
- What are my strengths and weaknesses?
- Who knows me best, me or somebody else?

Mirror Self-Recognition in Primates

Self-reflection is of course a metaphor. But literally being able to recognise oneself in the mirror can be studied quite objectively across the life-span and across species.

1 David, AS. (2004). 'The clinical importance of insight: an overview' in Amador, XF. and David AS. (eds.) *Insight and Psychosis*. (2nd Ed), New York: Oxford University Press.

Fig A Mirror self-recognition in infants. Top: the little boy (15 months) fails to recognise that the spot on his nose is his reflection and so points instead to the mirror. Bottom: the older girl correctly understands that the spot on her nose belongs to her and so brings her forefinger to her nose. Although this represents a developmental milestone, there may also be cultural influences at play.

TheJohnnyBadger, 2011. *Self-recognition test, aka the 'Rouge Test': Johnny and Eden at 15 months*. [Online video] Available at: youtube.com/watch?v=k-_Lgg2D4kM.

Hood, B. (2012). *Mirror, Mirror... Who's the Fairest of Them All?*. [Image] Available at: huffingtonpost.com/bruce-hood/mirror-mirror-whos-the-fa_b_1637534.html.

It was believed for many years that mirror self-recognition was confined only to the highest primates. However, subsequent work with other mammals, such as dolphins and most recently macaques, has shown that with some training and experience, even these animals are able to realise that what they see in the mirror is not an animal similar to themselves – but is actually themselves. The first thing chimpanzees do in front of a mirror is make faces and examine their genitals – much like humans.[2]

In our own species, infants quickly learn the self/other distinction – studied objectively, for example, by placing a mark on the child's or indeed an animal's face and seeing if they reach into the mirror to touch it or up to themselves.[Fig A] This literal self-recognition seems an important seed for future metaphorical or psychological self-recognition.[3]

Anorexia Nervosa

Eating disorders and other similar body image disorders exemplify how the psychological self and the physical self spring one from another. It is something of a cliché that the person with anorexia nervosa looks in the mirror and sees a fat person – while an over-simplification, it has been demonstrated in several studies. Probing this further, it appears that any distortion of the perception of body image is only in the horizontal plane and not the vertical plane; that is, people do not under- or overestimate their height in the way they do their width; and, similarly, it is not purely self-centred – in that people with eating disorders tend to overestimate the size of others as well. The question is whether perception is fuelling the belief, or beliefs are shaping perception – a so-called 'top-down' effect.

2 Anderson, JR., Gallup, GG. (2015). Mirror self-recognition: a review and critique of attempts to promote and engineer self-recognition in primates. *Primates*, 56, pp.317-26.

3 David, AS. (2017). Self-reflection in illness and health: literal and metaphorical? *Palgrave Communications*. [Online] Available at: DOI: 10.1057/palcomms.2017.91

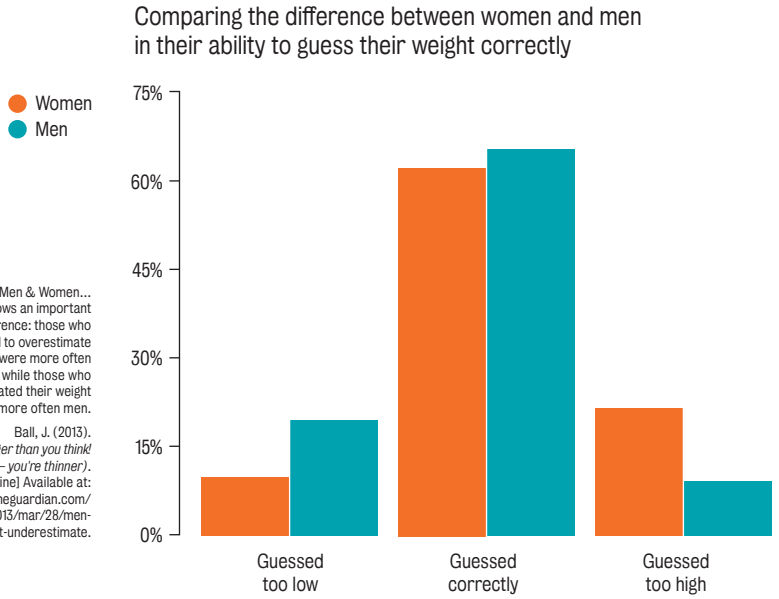


Fig B 300,000 Men & Women... The graph shows an important gender difference: those who were inclined to overestimate their weight were more often women, while those who underestimated their weight were more often men.

Ball, J. (2013). *Men, you're bigger than you think! (But women – you're thinner)*. [Online] Available at: https://www.theguardian.com/society/blog/2013/mar/28/men-women-weight-underestimate.

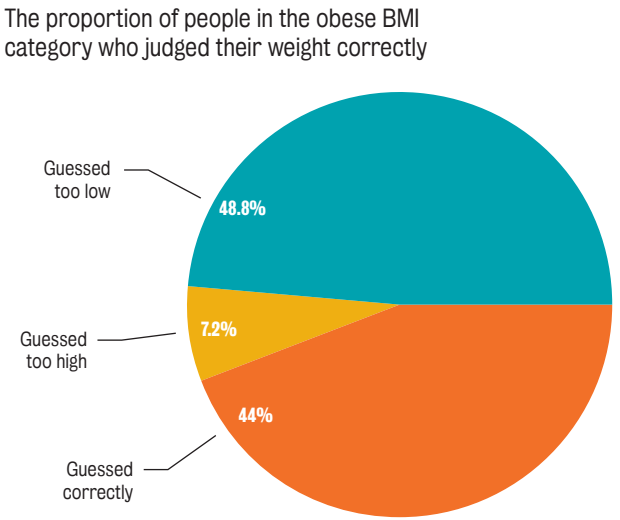


Fig C Nearly half of the people who were in the obese Body Mass Index (BMI) category underestimated their weight.

Ball, J. (2013). *Men, you're bigger than you think! (But women – you're thinner)*. [Online] Available at: https://www.theguardian.com/society/blog/2013/mar/28/men-women-weight-underestimate.

This does not just apply to people with psychiatric or other health disorders. A very large survey carried out by the *Guardian* newspaper in 2013[4] of 300,000 men and women showed an important gender difference. While most people were reasonably accurate in estimating their weight, women tended to overestimate while men tended to underestimate.[Fig B] In mental health we are rather too obsessed with anorexia nervosa;[Fig D] taking a broader public health perspective, obesity is the major concern. The survey showed that in the obese category the majority of people underestimated their weight, presumably counteracting any desire or pressure to lose weight.[Fig C]

4 Ball, J. (2013). *Men, you're bigger than you think! (But women – you're thinner)*. [Online] Available at: https://www.theguardian.com/society/blog/2013/mar/28/men-women-weight-underestimate

Fig D Illustration of the body image distortion thought to affect some people with anorexia nervosa.
© Peter Dazeley, Getty Images

Social Science Perspectives: Who knows us best – ourselves or our friends?

Given that individuals are inaccurate and biased in their self-assessment, where can we turn? Do other people know us better than we ourselves? A study from the social psychology literature, with the same title as this lecture,[5] showed that most people believe that only they themselves can really assess their strengths and weaknesses, while a few concede that others might also have a valuable perspective. When this was put to the test through a process of very careful monitoring of the person's behaviour – using experience sampling methods and conversations over a period of time – it turned out that others were as least as accurate at attributing behaviour and traits to individuals as the person was themselves, sometimes better.

This is very evident in the world of work; social psychologists David Dunning and Justin Kruger have

5 Vazire, S., Mehl, MR. (2008). Knowing me, knowing you: the accuracy and unique predictive validity of self-ratings and other ratings of daily behaviour. *J Pers and Soc Psychol*, 95, pp.1202-16.

written about why people have failed to recognise their own incompetence in estimating exam performance or more general performance in the work-place.[6] Bad performers seem particularly to overestimate their actual performance, whereas in fact, good performers slightly underestimate; in the authors' words, people are doubly cursed. This is particularly worrying when one considers professions such as the armed forces. A famous study of US naval officers showed that many overestimated their leadership qualities, their charisma and other desirable attributes, compared to how subordinates saw them.[7] Interestingly, those officers who were generally rated to be of higher calibre were least prone to these biases and rated themselves more accurately against the gold standard of their subordinates.

One reason might be that we don't get enough honest feedback from our peers – hence we do not accurately rate our performance. This is particularly so when it comes to undesirable information and our reluctance to communicate this to each other. In a classic experiment by Rosen and Tesser,[8] a scenario was set up where a person turning up to participate in an experiment is, unbeknown to them, subject to an altogether different study. The experimenter tells them that if a particular member of staff comes by (Glenn or Gwen), they should tell him or her that there is some either very good or very bad news about their family that the person needs to get right away. The person then enters the room and it was found, perhaps predictably, that if the job was to give good news this was easily and quickly imparted. However, if the experimental subject had been told that the individual was about to receive some bad news, this was not imparted to the individual – even after various

6 Dunning, D., Johnson, K., Ehrlinger, J., Kruger, J. (2003). Why people fail to recognise their own incompetence. *Curr Dir Psychol Sci*, 12, pp.83-7.

7 Bass, BM., Yammarino, FJ. (1991). Congruence of self and others' leadership ratings of naval officers for understanding successful performance. *App Psychol*, 40, pp.437-454.

8 Rosen, S., Tesser, A. (1970). On reluctance to communicate undesirable information: The MUM effect. *Sociometry*, 33, pp.253-63.

prompts. Perhaps it is others who are to blame for our inflated view of ourselves?

While we live in a culture that always seeks our feedback and claims to value it and act upon it, our nature is that we often reject feedback or ignore it, particularly if it is negative. We go to extraordinary lengths to interpret negative feedback as being more positive – that is, to give it a positive spin.

Insight – Not too Much and not too Little

Lack of insight risks causing us to stray into an unshared world of unreality; but too much insight – thinking that we are ill when in fact we are perfectly well – is not good either and leads to hypochondriasis, depression and worse. It seems that it is natural to hope for the best; in fact a general sense of optimism leads us to make judgements, for example, of probability that are not strictly accurate. That is to say – we are all slightly unrealistic and see the world through rose-tinted spectacles. Being more accurate or realistic in our judgements seems somewhat pessimistic – indeed rather depressed – and is called 'depressive realism'.

Moving away from personality and behaviour and into cognitive ability, how good are we at detecting our cognitive failings? Are we likely to be aware that our memory is failing, or that we are making poor judgements? The Cognitive Failures Questionnaire (Broadbent and others, 1982) was designed to cover things like forgetting where you put your keys and not being able to find the car in the car park or remember a person's name. The idea was to see what led people to make such failures and to find ways of detecting it early.

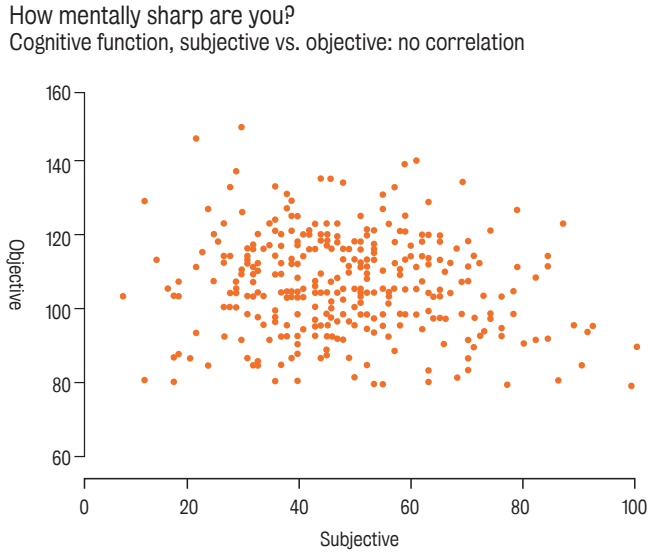


Fig E Scatter plot showing the correlation between subjective cognitive ability (CFQ) and objective cognitive ability (the Wechsler Adult Intelligence Scale Revised performance IQ score). The correlation coefficient is -.084 which is not significant.

David, AS., et al. (2002). *Psychol Med*, 32, pp.1357-70.

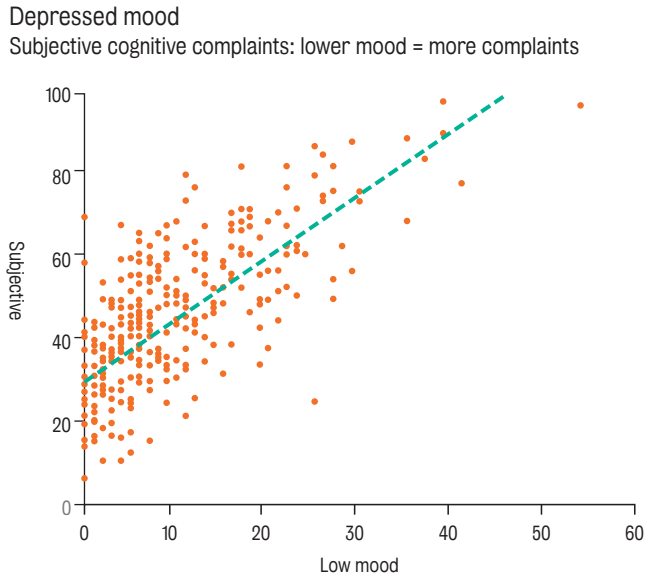


Fig F Scatter plot showing the correlation between low mood (Beck Depression Inventory score) and subjective cognitive ability (CFQ). The correlation coefficient is .66 which is highly significant.

David, AS., et al. (2002). *Psychol Med*, 32, pp.1357-70.

In a study I conducted with colleagues on military service personnel returning from the Gulf War,[9] many of whom believed that their physical heath had been affected, including their brains, we had some very surprising results. First of all, there was a complete lack of any correlation between scores on the Cognitive Failures Questionnaire and actual scores of IQ.[Fig E] However, the correlation between the CFQ scores and scores on a depression scale (the Beck Depression Inventory) was extraordinarily high.[Fig F] The lower a person's mood, the more they complained about their memory and attention letting them down. In other words, it was not a test of cognitive ability at all, it was simply another test of low mood where the person feels they are a bit of a failure, they're underperforming generally and evaluating themselves negatively.

9 David AS., Farrin L., Hull L., Unwin C., Wessely S., Wykes T. (2002). Cognitive functioning and disturbances of mood in UK veterans of the Persian Gulf War: a comparative study. *Psychol Med*, 32: 1357-70.

Insight in Neurology versus Psychiatry

It is useful to contrast neurological and psychiatric problems and the degree of self-awareness that pertains, since most psychiatric problems are subjective and not objectively verifiable; therefore, assessing a person's insight is problematic. Whereas in hard-core neurological disorders such as hemiplegia, this would not seem to be a problem since there is an objective deficit which the person should be aware of – they should be able to see it with their own eyes. However, we know that certain lesions, especially to the right parietal lobe, usually following a stroke, can lead to the strange syndrome of anosognosia – failure to be aware of disease – where the person may flatly deny any problem with the paralysed limb, and this may even take the form of denying the presence of the limb altogether. Work has shown that

where a person has hemiplegia, without any lack of awareness, the lesion tends to be rather deep in the sub-cortical regions of the brain, while the same neurological deficit accompanied by lack of awareness tends to involve a larger area of the accompanying cortex. It is as though each functioning part of the brain has a system superimposed which monitors the activity within that part.[10]

10 Berti, A., Bottini, G., Gandola, M., Pia, L., Smania, N., Stracciari, A., Castiglioni, I., Vallar, G., Paulesu, E. (2005). Shared cortical anatomy for motor awareness and motor control. *Science*, 309, pp.488-91.

The extent to which lack of awareness or anosognosia in the neurology setting is comparable to that in psychiatry settings is something that we have tried to study in conditions such as Alzheimer's disease, schizophrenia and following brain injury. All such patients suffer from a loss of cognitive abilities such as memory. There is also sometimes an alteration in behaviour and personality and all these deficits can apply to people with schizophrenia – who on top of this suffer from delusions and hallucinations.

Comparing the three groups, it is interesting that when it comes to memory impairment, people with Alzheimer's disease will generally start off by predicting good performance on a forthcoming memory test. When given the test they may do very badly and when asked afterwards to reflect on their performance, usually the initial optimism is tempered – they have some on-line awareness – but not quite to the point when they are truly appraising their performance. However, before we rush to judgement we should note that even the person's closest relatives and carers tend to overestimate their ability. People with schizophrenia who have similar levels of deficits nevertheless are rather good at judging and anticipating their cognitive or memory impairments.[Fig G] However, this does not spread to their awareness of other symptoms such as delusions and

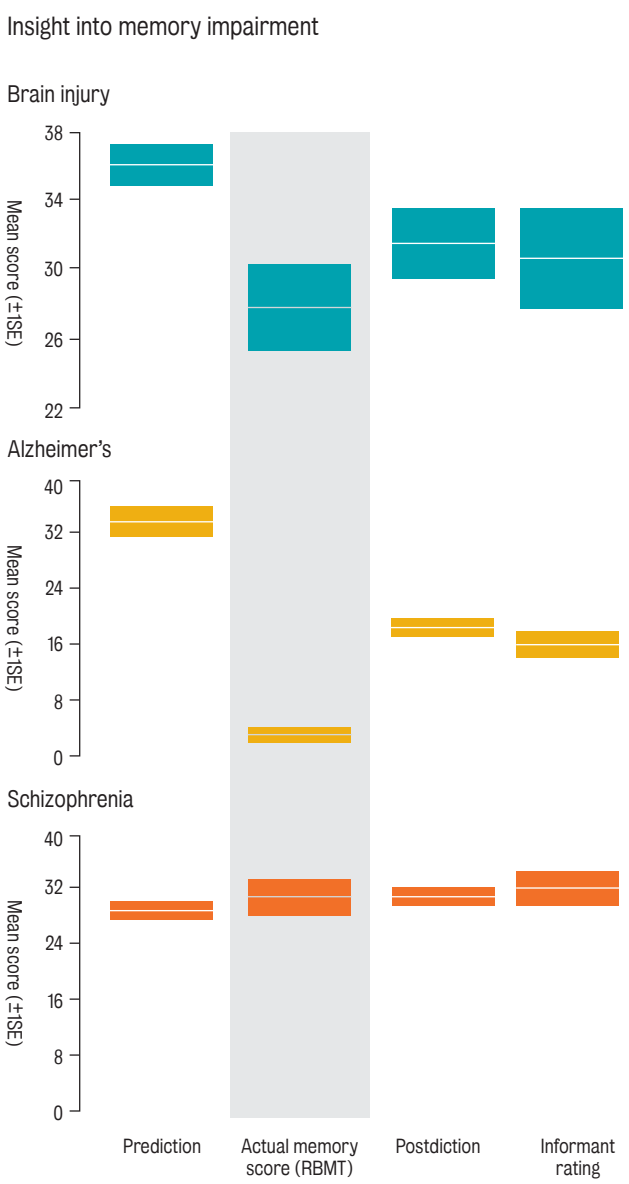


Fig G Patients with brain injury (blue; n=28), Alzheimer's disease (yellow; n=27) and schizophrenia (orange; n=31) were given the same memory battery: the Rivermead Behavioural Memory Test (RBMT) as part of neuropsychologist Linda Clare's Memory Awareness Rating Scale (MARS). Those with brain injury and Alzheimer's predicted they would perform much better than they actually did. Post-test they adjusted their ratings downwards but remained over-generous. Informants also overestimated performance to some extent. People with schizophrenia in this study were accurate in their assessments of memory despite lack of insight in other domains.

Gilleen, J., Greenwood, K., David, AS. (2010). Lack of insight and awareness in schizophrenia and neuropsychiatric disorders. *Neuropsychiatric Disorders*. Springer.

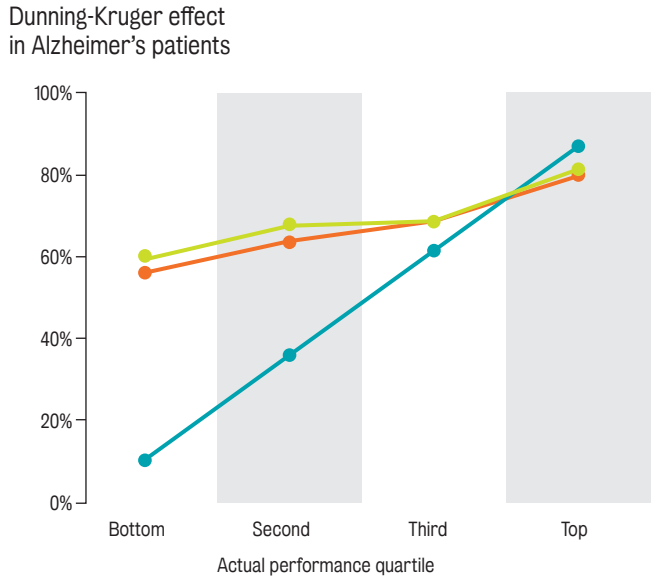


Fig H Perceived percentile rankings for mastery of course material and test performance as a function of actual performance rank. Participants in the lower quartiles of performance were over-confident in their estimation of their mastery of the material. Those in the top quartile tended to underestimate their mastery.

Dunning, D., Johnson, K., Ehrlinger, J., Kruger, J. (2003). Why people fail to recognise their own incompetence. *Curr Dir Psychol Sci*, 12, pp.83-7

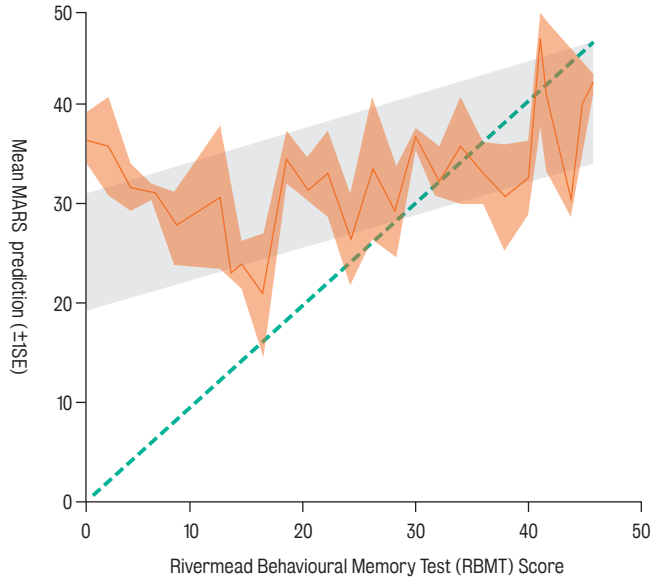


Fig I Mean predicted memory performance (red line) plotted against actual memory performance (dotted blue line) in patients with Alzheimer's disease showing the same pattern as the Dunning-Kruger effect: those with the worst performance overestimating the most while those with the best tending to underestimate their memory.

Gilleen, J., Greenwood, K., David, AS. (2014). The role of memory in awareness of memory deficits in Alzheimer's disease, schizophrenia, and brain injury. *J Clin Exp Neuropsychol*, 36(1), pp.43-57

hallucinations.[11] The pattern of memory awareness in Alzheimer patients is very similar to that seen in the Dunning-Kruger effect in healthy people. Figs H, I

Sticking with schizophrenia for a moment; Eugen Bleuler, the Swiss psychiatrist who coined the term schizophrenia in 1911, described autistic thinking as one of its hallmarks – meaning a state in which a person's beliefs were impenetrable to reason or experience in the outside world. This was seen as a defining feature of the disorder. Aubrey Lewis, who became Professor of Psychiatry at the Institute of Psychiatry in the post-war period, took a much more nuanced view; defining insight and noting the resemblance between this and certain kinds of brain damage. He said it was asking a lot of an individual to use the very processes of their thinking, which were abnormal, to make a judgement about their own normality, and that in fact this could be a painful struggle.[12]

This can be assessed using the vignette method.[13] A little story is constructed of a person with symptoms of psychosis, and:

- the doctor is asked whether the person in the vignette resembles the patient under them (answer: yes);
- the patient is asked whether the person in the vignette seems to suffer from a mental illness (answer: yes);
- and then finally, the patient is asked if the person in the vignette is anything like him - or herself (answer: no).

The results are somewhat predictable, proving that it is not that the patients misunderstand the rules about what constitutes mental illness, it is just that turning the

11 Gilleen, J., Greenwood, K., David, AS. (2014). The role of memory in awareness of memory deficitsin Alzheimer's disease, schizophrenia, and brain injury. *J Clin Exp Neuropsychol*, 36, pp.43-57

12 David, AS. (1999). 'To see oursels as others see us', Aubrey Lewis's Insight. *Br J Psychiatry*, 174, pp.210-6.

13 McEvoy, JP., Schooler, NRJ., Friedman, E., Steingard, S., Allen, M. (1993). Use of psychopathology vignettes by patients with schizophrenia or schizoaffective disorder and by mental health professionals to judge patients' insight. *Am J Psychiatry*, 150, pp.1649-53.

spotlight of attention on themselves is interrupted in some way. Again, before we become too complacent, in a study of prescribing habits and influence by gifts from the pharmaceutical industry, physicians acknowledge a significant influence in other people's prescribing when they had received gifts, but they see themselves as unaffected.[14]

14 Steinman, MA., Shlipak, MG., McPhee, SJ. (2001). Of principles and pens: Attitudes and practices of medicine housestaff toward pharmaceutical industry promotions. *Am J Med*, 110, pp.551-7.

How can we achieve a truer, more realistic understanding of ourselves?

Presumably we need to view ourselves objectively from a third-person perspective. My colleague Ben Wiffen and others carried out a different vignette study where people were asked to make judgements on stories about people with psychosis.[15] First of all, to decide whether the person in the vignette suffered from an illness. Then the questions were asked in a different way: 'If these events were happening to me, would I think there was something wrong with me like a mental illness?' That is, the statements were rephrased in the first person.

15 Wiffen, BD., O'Connor, JA., Gayer Anderson, C., Marques, TR., McQueen, G., Happé, F., Murray, RM., David, AS. (2013). 'I am sane but he is mad': Insight and illness attributions to self and others in psychosis. *Psychiatry Res*, 207, pp.173-178.

It appears that healthy people are much more likely to attribute mental illness to someone else suffering from various symptoms rather than themselves, if described as suffering from exactly the same symptoms. The experiment shows that patients with psychosis are in fact much more even-handed. True, they tended to avoid the attribution of mental illness, but at least this was spread evenly amongst themselves and other people. They were more consistent – it is the supposedly healthy people that showed the most bias or a barrier towards applying rules that they apply to other people to themselves.

Neuroscience Perspectives

It is possible to get a handle on self-reflective processes in the brain using the latest technology, such as functional magnetic resonance imaging. It seems that when individuals are asked to reflect on their own attributes (am I shy, weak, intelligent etc) a certain system in the midline of the cortex – the cortical midline system – is activated. There have been several studies of this kind which we meta-analysed and it seems that it is the frontal medial part of the system that is most consistently engaged.[16] Curiously, this is precisely the area that, when damaged, leads to a profound loss of self-reflectiveness and perhaps, as a consequence, behaviour that is deemed anti-social and out-of-character, such as in the famous case of Phineas Gage.[17] In a separate study of 72 people with the first onset of psychosis,[18] my colleague Kevin Morgan divided the group into those who scored highly on an insight interview versus those who scored low – the patients being comparable in all other respects. When he fed the brain scan information into the computer to carry out voxel based morphometry, the areas that were picked out as having lower grey matter density (shown in yellow overleaf Fig L) coincided with this cortical midline system. In fact, it was a large system spreading from the anterior to the posterior regions of the brain. It would be wrong to think of this as the 'insight centre' of the brain, however.

16 van der Meer, L., Costafreda, SC., Aleman, A., David, AS. (2010). Self-reflection and the brain: a theoretical review and meta-analysis of neuroimaging studies with implications for schizophrenia. *Neurosci & Biobehav Rev*, 34, pp.935-46.

17 Gage was a railway construction worker who in 1848 suffered an accident in which a tamping rod penetrated his cheek and burst through his skull. He changed from a person of temperate habits to one who was fitful, irreverent and profane.

Damasio, H., Grabowski, T., Frank, R., et al. (1994). The return of Phineas Gage: clues about the brain from the skull of a famous patient. *Science*, 264, pp.1102-5.

18 Morgan, KD., Dazzan, P., Morgan, C., Lappin, J., Hutchinson, G., Sucking, J., Fearon, P., Jones, PB., Leff, J., Murray, RM., David, AS. (2010). Insight, grey matter and cognitive function in first-onset psychosis. *Br J Psychiatry*, 197, pp.141-8.

Other work has shown that another area of the brain, the insular cortex, which is critical for the way we monitor our internal bodily states, is thicker in terms of grey matter in patients with good insight. This suggests that some of the signals about our state of mind come from our body, such as our ability to put a label on our

emotions and feelings.[19] Overall, such work suggests that it is wrong to expect patients with psychosis to show a high degree of insight when the machinery necessary for this has perhaps not developed fully, or has been damaged as the illness progresses.

Nick Bedford carried out research with schizophrenia patients as part of his PhD to see whether they activated the same areas of the brain as healthy controls when reflecting on their character as well as symptoms of mental illness.[20] As a comparison, we asked participants to apply the same judgements not to themselves, but to another person they all knew – Tony Blair. When we did so, we found that the region of the brain which distinguished the groups was an area in the medial frontal lobe.[Fig J] The controls were able to activate this region more strongly when turning the spotlight onto themselves, while the patients seemed to be unable to find this extra bit of processing power.[Fig K]

The region was certainly in the vicinity of the central midline system and, further, overlapped with the area of reduced grey matter density we showed in patients with low insight scores.[Fig L] This is a pleasing functional-structural convergence.

This may well be theoretically interesting, but does it have any practical value? I would like to take you back 150 years to the old asylums like Bedlam, to see the same question being asked by a physician, Dr Hugh Diamond, who was exploring the cutting-edge technology of his day – photography – and photographed many of his patients both as a record and as a therapeutic tool. What he would do is show the patients the photographs at some later date to see whether it would help them understand their journey from illness to – hopefully – recovery. In one case, a patient believed that she was

19 Emami, S., Guimond, S., Chakravarty, M., Lepage, M. (2016). Cortical thickness and low insight into symptoms in enduring schizophrenia. *Schizophr Res*, 170, pp.66-72.

20 Bedford, N., Surguladze, S., Giampietro, V., Brammer, MJ., David AS. (2012). Self-evaluation in schizophrenia: an fMRI study with implications for the understanding of insight. *BMC Psychiatry*, [Online] Available at: doi:10.1186/1471-244X-12-106.

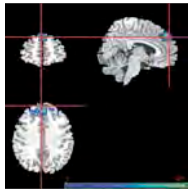


Fig J Functional magnetic resonance imaging (fMRI) scans in the coronal, sagittal and axial planes, showing an area in the superior medial frontal cortex with a significant difference in activation between patients with schizophrenia and healthy volunteers when a contrast was made between their judgements of whether they (Self) or someone else (Other) possessed a personality or illness trait.

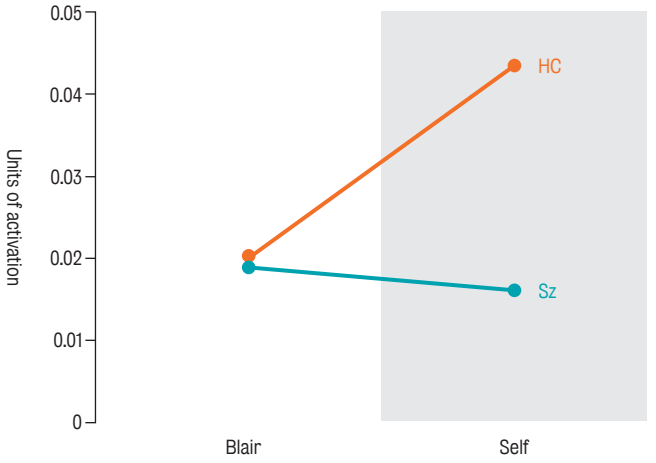


Fig K fMRI activation in superior medial frontal cortex was lower in the patients (Sz) versus healthy controls (HC) during trait ownership judgement in the Self versus the Other condition, eg 'Are you (versus Tony Blair) paranoid?'

Bedford, NJ,. et al. (2012). *BMC Psychiatry,* 12(106) [Online] Available at: doi:10.1186/1471-244X-12-106

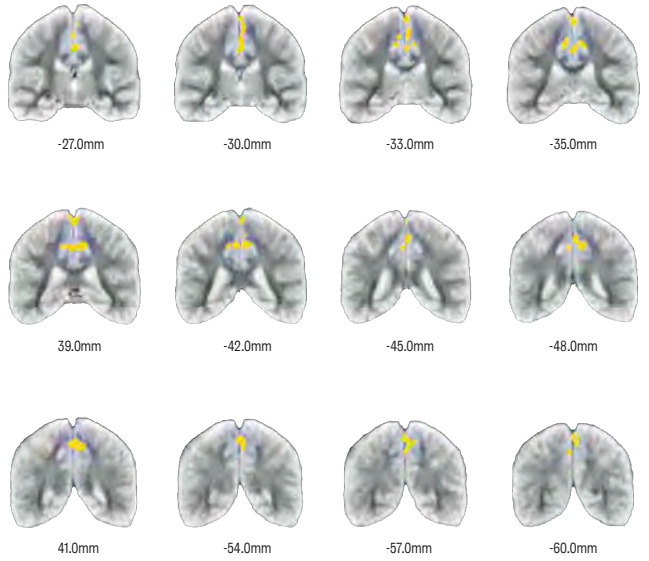


Fig L Voxel based morphometry of structural MRI scans showing reduction in total grey matter (yellow voxels) in medial frontal and anterior cingulate regions [Brodmann Area (BA) 9/32] and posterior cingulate gyrus [BA 31], coinciding with the Cortical Midline System (CMS) in 15 low versus 57 high insight patientswith psychosis. Data from Morgan et al, 2010.

a queen and fashioned a crown of twigs and plants. When looking back on this portrait, Dr Diamond said: 'This led to frequent useful conversations and was the first decided step in her gradual improvement so that she was eventually discharged perfectly cured and laughed heartily at her former imaginations.'[21]

Updating this slightly, a group in Boston used video self-observation in an attempt to improve insight in psychotic patients.[22] The experiment was controlled and involved patients either watching a video of comedy pianist Victor Borge, or a video of themselves when admitted to the hospital. It seems that viewing the latter video tended to lead to an improvement in their insights into illness (the control video might have cheered them up but beyond that had no effect).

We recently attempted to replicate this study but with further controls, so that we were trying to distinguish whether watching a video of any person, whilst ill, might have the same effect, or whether it was specific to watching a video of oneself.[23] We found that on some measures the self video did produce greater benefit than watching a video of an actor apparently showing signs of psychosis, but overall there was no significant difference between watching the two kinds of video.

21 Gilman, SL. (ed), Diamond, HW. (1976). *The face of madness.* New York: Brunner Mazel.

22 Davidoff, SA., Forester, BP., Ghaemi, SN., Bodkin, JA. (1998). Effect of video self-observation on development of insight in psychotic disorders. *J Nerv Ment Dis*, 186, pp.697-700.

23 David, AS., Ster, C., Zavarei, H. (2012). Effect of video self-observation vs. observations of others on insight in psychotic disorders. *J Nerv Ment Dis*, 200, pp.358-361.

Conclusions

Self-reflection/self-evaluation can be used as a normative construct; it allows us to link awareness of illness (insight) to the broader question of self-awareness. Self-reflection at the literal, visual level is important developmentally and through the life-span – and is distorted in disorders of body image. Insight and self-reflection involve

appraising oneself against stored representations of health and illness and against other people's perspectives – but is hampered by difficulties in interpreting self-reports, which are prone to all sorts of biases and distortions. When it comes to the brain, there is a functional Cortical Midline System (CMS) which is associated with self-awareness. In schizophrenia patients, the group regarded as having most difficulty with insight into their condition, the difficulty does not appear to occur because of exaggerated self-serving biases, but they do show evidence of structural and functional MRI changes in this critical brain system, potentially leading to altered self-appraisal. Finally, it seems that literal self-reflection may aid psychological self-reflection.

Lecture III

Fighting Stigma in Mental Health – and Losing

Wednesday 7 March 2018
King's Building, London

Discussion panel

Professor Sir Simon Wessely (Chair)
Professor Anthony David
Professor Sir Graham Thornicroft
Sue Baker OBE, director of the anti-stigma charity, Time to Change
Alastair Campbell, former political adviser and author
Hussain Manawer, poet
Hannah Jane Parkinson, journalist

Fig A Front page of the *Sun* newspaper running the story of boxer Frank Bruno's admission to a psychiatric hospital in 2003. © The Sun / News Licensing

Perhaps the most dramatic example of the stigma against mental illness in recent years was in September 2003, with the front page of the *Sun* newspaper reporting on boxer Frank Bruno. The initial headline, 'Bonkers Bruno Locked Up', produced an outcry which led to a change in later editions to the marginally more acceptable 'Sad Bruno in Mental Home'.[Fig A] This represented a turning point for tabloid newspapers like the *Sun* and its readers, demonstrating the acceptable limits of how people with psychiatric disorders can be referred to in public. Indeed, the *Sun* refused to give us permission to reproduce the original front page here, but it is easily found on the internet. Mental health and mental illness is now a major topic for discussion across the media, in the tabloids and quality papers, while many highlight a new spirit of openness in the way mental health problems are disclosed and discussed. However, does this represent any real change? Is it in some way a response to campaigns specifically designed to improve the image of mental disorders, particularly in the media, and in the campaigns that seek to fight stigma?

Stigma is defined in the Oxford Dictionary as 'a mark of disgrace associated with a particular circumstance, quality or person'. In the introduction to his classic book *Stigma*, Erving Goffman set the stage with a particularly vivid quote:[1]

> The Greeks, who were apparently strong on visual aids, originated the term stigma to refer to bodily signs designed to expose something unusual and bad about the moral status of the signifier. The signs were cut or burnt into the body and advertised that the bearer was a slave, a criminal, or a traitor – a blemished person, ritually polluted, to be avoided, especially in public places.

1 Goffman, E. (1963). *Stigma: Notes on the Management of Spoiled Identity*. New York: Prentice Hall.

Stigma should be considered a somewhat catch-all term to include prejudice and discrimination against people with mental illness. Psychiatrist Michael Smith wrote in 2013:[2]

> Stigma occurs in a complex mesh of relationships involving labelling, stereotyping, separation, status loss, discrimination and power imbalances... [stigma] is a dynamic, relational process.

2 Smith, M. (2013). Anti-stigma campaigns: Time to change. *Brit J Psychiatry*, 202, pp.s49-50.

There have been many attempts and approaches to try to combat stigma in mental illness. Drawing from a recent review by psychologist Patrick Corrigan,[3] these can probably be divided into three main areas:

- providing education and information;
- promoting contact or proximity;
- activism.

3 Corrigan, PW., Morris, SB., Michaels, PJ., Rafacz, JD., Rüsch ,N. (2012). Challenging the public stigma of mental illness: a meta-analysis of outcome studies. *Psychiatr Serv*, 63, pp.963-73.

In terms of education and information, this involves both the sharing of 'facts' as well as a certain amount of rhetoric. The aim is to challenge stereotypes and myths around mental illness, particularly that people with such problems are violent, unpredictable, incurable, immoral etc. Part of the rhetoric involves a 'rebranding exercise', changing some of the more lurid vocabulary to words that are more acceptable, softer and less pejorative. Another strand to this rhetoric is to emphasise the ubiquity of mental health problems in the population. An example of this is the 1 in 4 campaign; another is the idea that mental illness lies on a continuum with normality, the implication being 'we are all a bit mad'. Finally, another theme in the education and information

approach is the idea that mental illness is 'a disease like any other', that is, promotion of what some people call the medical model, which aims to take away judgmental attitudes that seem to blame victims for their illness, replacing them with a neutral biomedical set of explanations.

In terms of vocabulary, it has been argued that replacing a disease name with that of the individual who discovered it (as in Down syndrome and Alzheimer's disease) has had a major beneficial impact, when one thinks about the alternatives of 'mongolism' and 'dementia'. Schizophrenia has also been proposed as ripe for such change.[4] In the first place, it is now almost unheard of to talk about 'schizophrenics' but rather to use the less limiting phraseology, 'people with schizophrenia' or 'a person with schizophrenia'. In other languages the terminology has undergone a more radical shift; for example, in Japanese the term for schizophrenia has been replaced by one meaning 'integration disorder'. Another proposed change would be to call schizophrenia Bleuler syndrome (after the Swiss psychiatrist who coined the term) or 'dopamine dysregulation syndrome' – a judgment-free, mechanistic phrase.

The term 'mental health' as opposed to mental illness or psychiatric illness might be seen as an example of improved terminology, although to some extent it could equally be argued that this is an example of stigma winning, in that the more powerful and direct terms, though perfectly acceptable, are avoided and softened with the use of emphasisms like 'mental health issue' or 'problem'.

As noted, there have been several concerted attempts to tackle stigma in mental illness and to evaluate this

4 Lasalvia, A. (2018). Words matter: after more than a century 'schizophrenia' needs rebranding. *Br J Psychiatry, Advances*, 24, pp.33-36.

scientifically. To take one excellent example, the Time to Change anti-stigma campaign, assessed by Graham Thornicroft at the Institute of Psychiatry, Psychology and Neuroscience (IoPPN), which published its major findings in 2013.[5] This campaign was funded by the Department of Health, Comic Relief and the National Lottery to the tune of £20 million. It was essentially a large social marketing campaign with many facets, and an earnest attempt to evaluate its effectiveness. As a general conclusion, the evaluating authors said that attitudes and intended behaviour improved – but not knowledge, and that promoting contact between individuals with and without mental health problems was an important variable. They noted that fewer users of mental health services experienced discrimination, a reduction from 91 percent to 88 percent, and that employers showed improved attitudes in a telephone survey. Looking at newspaper coverage, this showed more anti-stigmatising articles, at least at that point, but no reduction in stigmatising articles Fig B (which were the more common of the two).[6]

More detailed analysis has since shown a significant reduction in articles purporting to show that the mentally ill are 'dangerous'.[7] The campaign also included a project on medical students, called 'education not discrimination', which showed a short-term – but no lasting – benefit. One could conclude that the campaign had an overall positive effect, but it could also be argued that the impact was quite small, given the resources put into it.

The 1 in 4 campaign mentioned above has attracted a lot of discussion and controversy.[8] To begin with, it wasn't made clear where this statistic had come from, although it was mostly derived from data from the Adult Psychiatric Morbidity Survey, which entails

5 Henderson, C., Thornicroft, G. (2013). Evaluation of the Time to Change programme in England 2008-2011. *Br J Psychiatry*, 202 (suppl 55), pp.45-s48.

6 Thornicroft, A., Goulden, R., Shefer, G., Rhydderch, D., Rose, D., Williams, P., Thornicroft, G., Henderson, C. (2013). Newspaper coverage of mental illness in England 2008-2011. *Br J Psychiatry*; 202 (suppl 55), pp.s64-9.

7 Rhydderch, D., Krooupa, A-M., Shefer G., Goulden, R., Williams, P., Thornicroft, A., Rose, D., Thornicroft, G., Henderson, C. (2016). Changes in newspaper coverage of mental illness from 2008 to 2014 in England. *Acta Psychiatr Scand*, 134 (suppl 446), pp.45-52.

8 Full Fact Team. (2017). *One in four? How many people suffer from a mental health problem*. [Online] Available at: https://fullfact.org/health/one-in-four-people-suffer-mental-health-problem.

Newspaper coverage of mental illness recorded by the Time to Change campaign, 2008-11

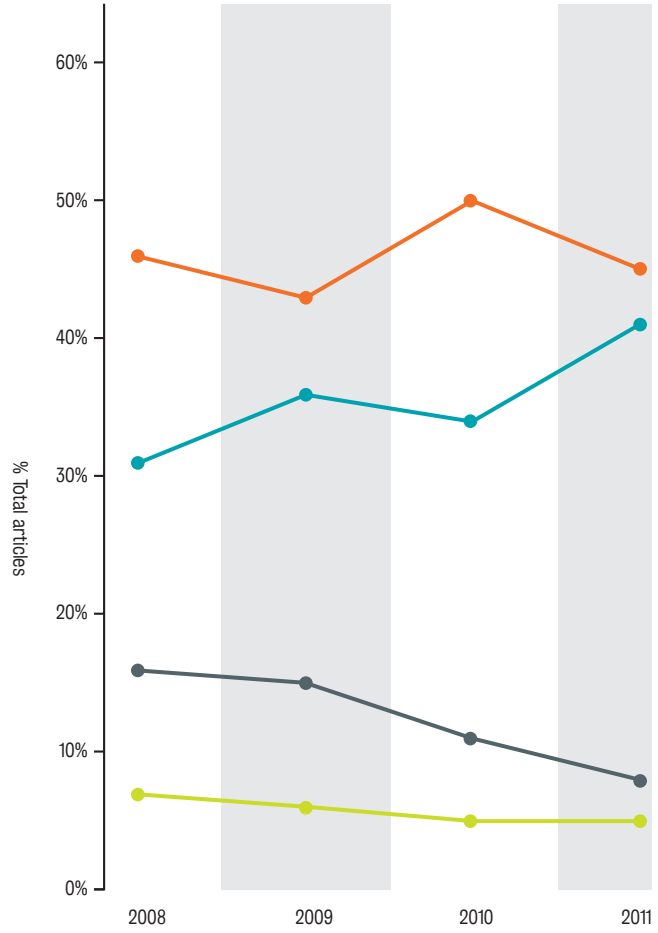


Fig B Chart showing the proportion of articles on mental illness judged to be stigmatising (orange) anti-stigmatising (blue), neutral (grey) or mixed (green) from 2008 to 2011. The chart shows a modest rise in anti-stigmatising articles but no reduction in stigmatising articles over the same period.

Thornicroft, A., et al. (2013). Evaluation of the Time to Change programme in England 2008-11. *Br J Psychiatry*, 202, pp.s64-s69.

Percentage of people in study groups with various mental health disorders in England in 2014

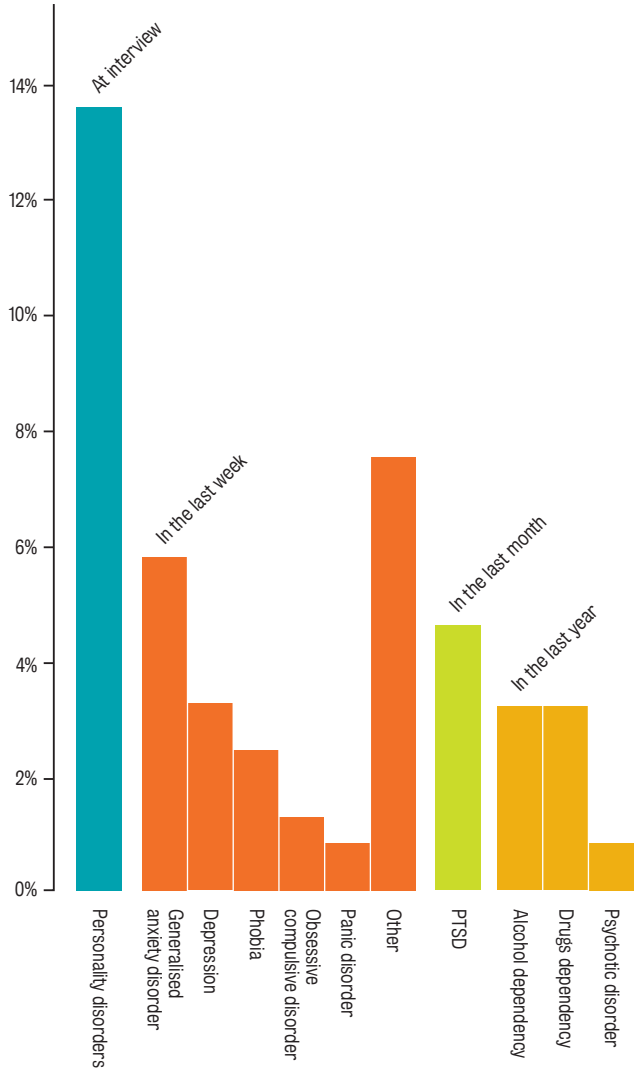


Fig C Bar chart showing estimations of the prevalence and incidence of various mental disorders taken from the UK NHS Adult Psychiatric Morbidity Survey carried out in 2014. This shows the 1 in 4 slogan over-simplifies a range of data which varies according to the time-frame and the nature of the disorders in question.
See Full Fact Team. (2017). *One in four? How many people suffer from a mental health problem*. [Online] Available at: https://fullfact.org/health/one-in-four-people-suffer-mental-health-problem.

recurrent surveys of the UK population and most recently reported in 2014.[9] The one-in-four statistic was not directly linked to any of the reported outcomes, since some of these pertain to different time-frames such as symptoms in the last week, the last month or over the last year. It also matters whether symptoms or disorders are counted from self-reports, from structured interviews or from questionnaires. A slightly more accurate figure would be that one in six has suffered from a mental health problem in the last year, but even this is rather too broad to be particularly meaningful.[Fig C]

The aim of the campaign and the figure is to make mental illness seem to be directly relevant in most people's lives, and not something strange and hidden. On the other hand, another take on the message is that if mental illness is supposedly so common and present amongst so many of us, our families and our peers, perhaps it is not so very serious – or even that it is trivial.

Next is the notion that symptoms lie on a continuum between abnormal and normal. Though this is a perfectly sound way of considering psychological problems and difficulties, even when one considers psychotic symptoms once thought to be the most removed from normal experiences, it turns out that several large population surveys find that, for example, many otherwise healthy people do report 'hearing voices' and other psychotic symptoms. However, taking hearing voices in particular, when one drills down to the actual experience, it remains a fact that patients who complain of these phenomena describe something subtly but importantly different from those unusual (but seemingly healthy) people who claim to have heard voices from a very early age, for whom these are a kind of spiritual guide. People with schizophrenia, on the other hand, may attribute

9 McManus, S., Bebbington, P., Jenkins, R., Brugha, T. (eds) (2016). *Mental health and wellbeing in England: Adult Psychiatric Morbidity Survey 2014*. Leeds: NHS Digital.

the voice to another person or even an object implanted in their brain, which is an experience virtually never reported by a healthy voice-hearer.[10] It does seem that what is implicit in the continuum model is a form of argument that proposes that if we all have a bit of mental illness, it will make us more sympathetic to our peers with more severe forms of the disorder.[11]

A rare attempt to test the de-stigmatising effects of the continuum versus categorical model of mental illness using an experimental design sheds some light on this question. In a new study carried out by Patrick Corrigan and colleagues,[12] they presented participants with two vignettes – one describing a mental disorder on a continuum and the other taking a categorical approach. Participants were then tested to see whether they had absorbed the different models – which indeed they had – and later how it had affected their attitudes in terms of stigmatising beliefs. It turned out that without any other efforts to improve contact between the participants and the genuine sufferers of mental illness, the categorical versus the continuum vignettes had no real effect. However, the vignettes did interact with contact such that the continuum vignette seemed to have a more beneficial effect than the categorical view, although the difference was not statistically significant.

Moving on to the notion that mental illness is 'an illness like any other'. One slogan runs: 'You'd never say, "It's just cancer, get over it." So why do some say that about depression?' The proponents of the medical view would say that the most stigmatising aspect of a mental disorder is the attitude that it is the person's fault and that they are choosing to behave in whatever inappropriate or anti-social manner, while the medical illness metaphor absolves the individual of blame and

10 Daalman, K., Boks, MPM., Diederen, KMJ., de Weijer, AD., Blom, JD., Kahn, RS., Sommer, IEC. (2011). The same or different? A phenomenological comparison of auditory verbal hallucinations in healthy and psychotic individuals. *J Clin Psychiatry*, 72, pp.320-5.

11 David AS. (2010). Why we need more debate on whether psychotic symptoms lie on a continuum with normality. *Psychol Med*, 40, pp.1935-42.

12 Corrigan, PW., Schmidt, A., Bink, AB., Nieweglowski, K., Al-Khouja, MA., Qin, S., Discont, S. (2017). Changing public stigma with continuum beliefs. *J Mental Health*, 26, pp.411-8.

makes them, rightly, the subject of sympathy and care. On the other hand, others argue that it is a simplifying model of mental illness to consider that it is precisely like having a physical illness and, secondly, that it renders the sufferer a passive victim of the illness, which therefore implies that they are not in control of their behaviour and so are 'unpredictable'. Social scientist Bruce Link and colleagues[13] in the US tried to study this by comparing the results of a general social survey taken in the years 1996 and 2006; in the intervening period there was much in the way of 'a disease like any other' campaigning.

They found that between 1996 and 2006, the 600 or so members of the public they studied did tend to see mental conditions as illnesses or as chemical imbalances with genetic and neurobiological underpinnings, although there was still some suggestion that they were due to 'bad character', especially in the case of alcohol dependence. Similarly, disorders like schizophrenia, major depression and alcohol dependence were deemed to be the appropriate concern of physicians, and that schizophrenia, at least, was best treated in a mental hospital. During the decade in question, the respondents shifted slightly more in favour of seeing medication as a relevant therapeutic tool. However, when questions tapping into stigma were asked again in 2006, there was no discernible improvement. For example, people were equally liable to shy away from having a person with mental illness working or living near them. Furthermore, they would be no more likely to socialise or make friends with them or to see them as less potentially violent to themselves or others.[Fig D]

The second main plank of anti-stigma campaigns is promoting contact and proximity. This arises out of the so-called 'human relations movement' of the 1930s

13 Pescosolido, BA., Martin, JK., Long, JS., Medina, TR., Phelan, JC., Link, BG. (2010). 'A disease like any other'? A decade of change in public reactions to schizophrenia, depression, and alcohol dependence. *Am J Psychiatry*, 167, pp.1321–30.

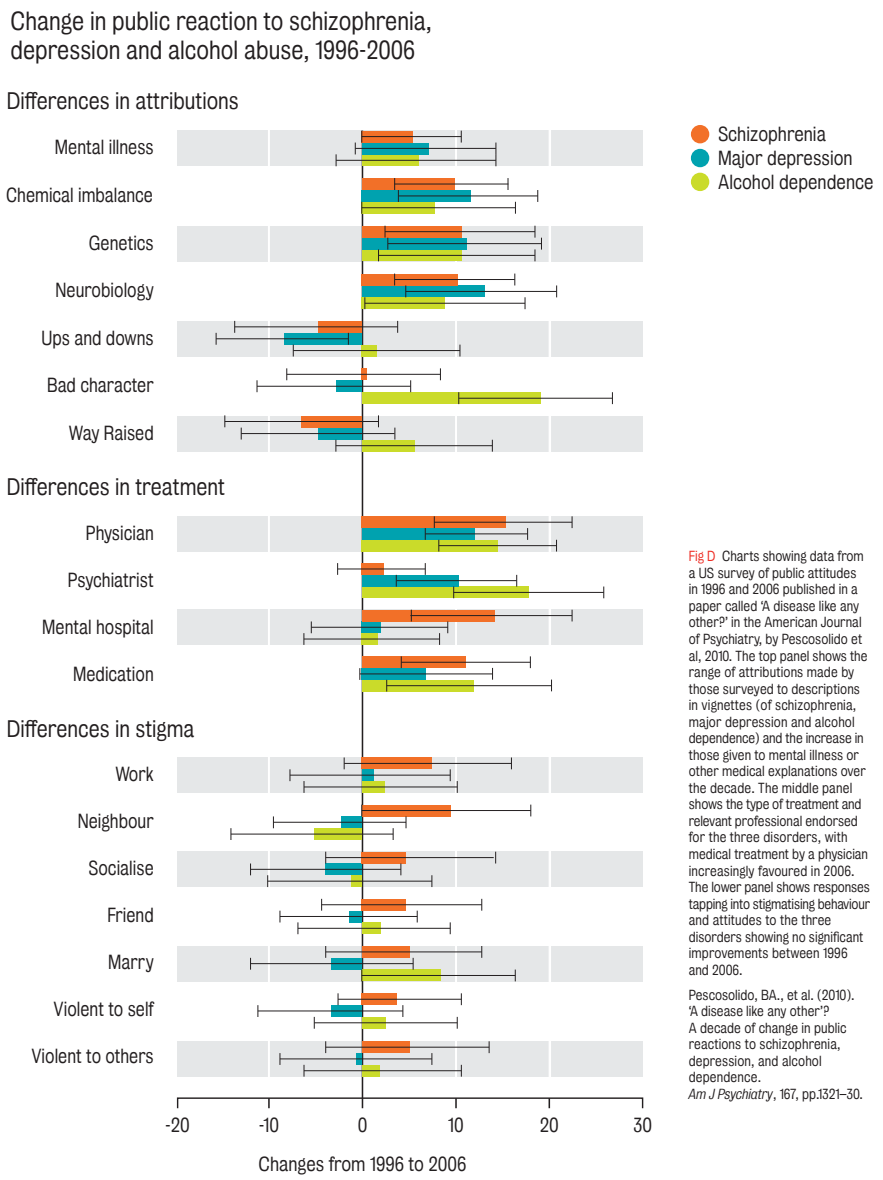


Fig D Charts showing data from a US survey of public attitudes in 1996 and 2006 published in a paper called 'A disease like any other?' in the American Journal of Psychiatry, by Pescosolido et al, 2010. The top panel shows the range of attributions made by those surveyed to descriptions in vignettes (of schizophrenia, major depression and alcohol dependence) and the increase in those given to mental illness or other medical explanations over the decade. The middle panel shows the type of treatment and relevant professional endorsed for the three disorders, with medical treatment by a physician increasingly favoured in 2006. The lower panel shows responses tapping into stigmatising behaviour and attitudes to the three disorders showing no significant improvements between 1996 and 2006.

Pescosolido, BA., et al. (2010). 'A disease like any other'? A decade of change in public reactions to schizophrenia, depression, and alcohol dependence. *Am J Psychiatry*, 167, pp.1321–30.

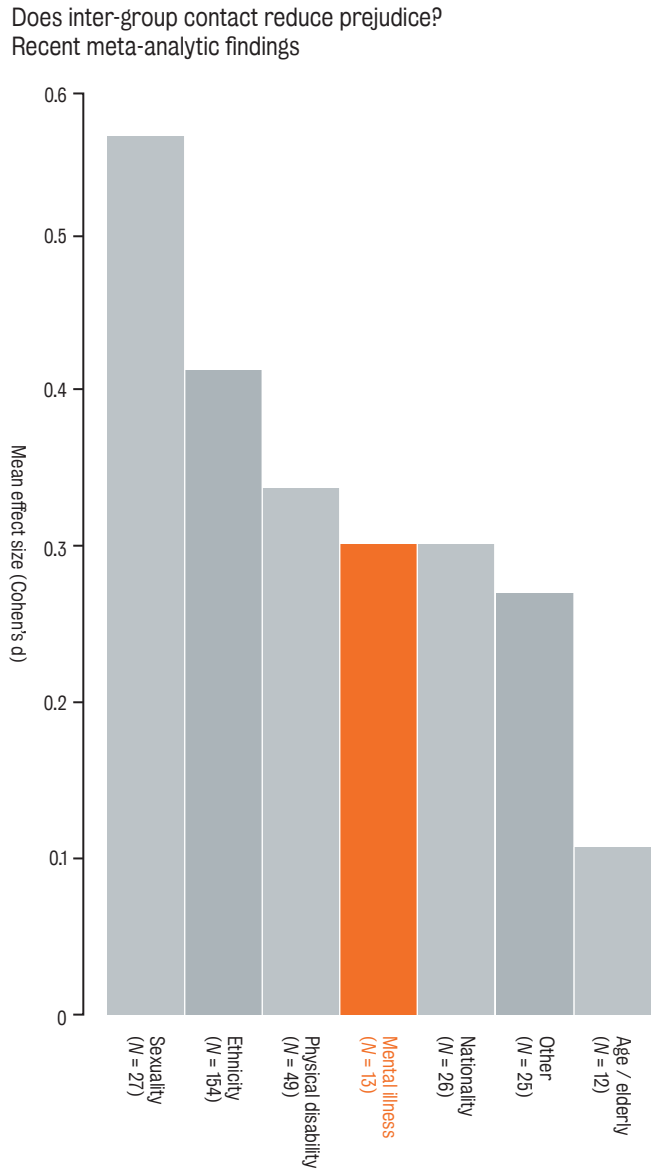


Fig E Bar chart showing the mean effect size for interventions promoting inter-group contact on prejudice reduction. Interventions to reduce prejudice against mental illness lie in the middle in terms of their effectiveness.

Pettigrew, TF., Tropp, LR. (2000). 'Does intergroup contact reduce prejudice? Recent meta analytic findings', in Oskamp, S. (ed) *Reducing Prejudice and Discrimination*. Mahwah, NJ: Erlbaum.

– the idea that it was only through getting to know each other and mutual self-knowledge that respect could be built up between people and prejudices between groups could be broken down. This does seem to be a general truth; in a comprehensive review and meta-analysis by Pettigrew and Tropp published in 2000[14] looking at inter-group contact and the reduction of prejudice in groups (including those with different sexual orientations, racial and ethnic background, physical disability, mental illness, nationality and age) they found overall that promoting inter-group contact (for example, through community living projects) did indeed reduce measures of stigma across the board. For mental illness the effect was somewhat in the middle of the other groups with an effect size of 0.3, which would generally be regarded as the upper end of a small effect.[Fig E]

A classic example of proximity reducing stigma comes from the town of Geel in Belgium. There is a very interesting myth behind this: the story of Saint Dymphna traditionally revered as the patron saint of mental illness. Following her martyrdom (at the hands of her father), a church was built in Geel in 1349;[Fig F] by 1480 so many pilgrims were coming from all over Europe seeking treatment for mental illness that the church had to be expanded, with the townspeople eventually resorting to taking them into their own homes. This has since become a model of community care, with patients called 'boarders' rather than patients, and seen as useful and contributory members of the community.

Finally, the third main approach to combating stigma in mental illness could be called 'activism'. By this I mean taking a more pro-active approach to assert the rights and positive qualities of people with mental illness. Indeed, Perlin and Weinstein[15] used the term 'saneism'

14 Pettigrew, TF., Tropp, LR. (2000). 'Does intergroup contact reduce prejudice? Recent meta analytic findings', in Oskamp, S. (ed) *Reducing Prejudice and Discrimination*. Mahwah, NJ: Erlbaum.

Fig F *The Beheading of Saint Dymphna* by Godfried Maes (1688). In the Church of Saint Dymphna, Geel.

15 Perlin, ML., Weinstein, N. (2018). 'There's Voices in the Night Trying to Be Heard': The potential impact of the convention on the Rights of Persons with Disabilities on domestic mental disability law. *SSRN*, [Online] Available at: https://ssrn.com/abstract=3104784. Also available at: http://dx.doi.org/10.2139/.ssrn.3104784

(cf racism) to describe the – in their view regrettable – attitude that the sane are in some way superior to the insane. In this context, there is the UN Convention on the Rights of Persons with Disabilities, which asserts that no group should endure treatment imposed upon them against their expressed wishes, and that no one should be able to make decisions about people with disabilities on their behalf (substitute decision-making).

While this, if enacted, would make it much more difficult for the mentally ill to be victims of institutional abuse, which unfortunately has occurred under the guise of psychiatric treatment over the years and across cultures, many authorities are concerned that it will, in fact, have more impact by denying genuine treatment to those in most need, including indeed those with dementia, intellectual disability, severe psychosis or other medical conditions precluding consent.[16] This is an area of very intense debate and conceptual analysis.

Other activism campaigns have made use of important slogans such as 'Nothing about us without us', arising from the UN Convention. In the UK there has been a call for 'parity of esteem' to encompass the drive to improve funding into the care of mental illness, proportionate to its impact and proportionate to that spent on physical illness. There is, of course, much legislation concerning employment and housing benefits which is aimed at outlawing discrimination on the grounds of health.

Finally though, there is the notion of pride, the assertion of people themselves, what they expect from the rest of the community and what they demand. This is much more a bottom-up or grass-roots approach than one that is made, as it were, 'on behalf' of the mentally ill. The 'coming out' of famous people as having personal

16 Freeman MC., Kolappa K., Caldas de Almeida JM., Kleinman A., Makhashvili N., Phakathi S., Saraceno B., Thornicroft G. (2015). Reversing hard won victories in the name of human rights: a critique of the General Comment on Article 12 of the UN Convention on the Rights of Persons with Disabilities. *Lancet Psychiatry*, 2: 844-50.

experience of mental illness may be viewed under this rubric and its impact is likely to be broad. An objective view of its overall effects – both positive and negative – is however awaited.

Conclusions

So what can we conclude? First, evidence of stigma against mental illness is widespread. It is now a topic attracting considerable critical thought and there is a large and growing body of research examining its causes, its consequences and the methods of overcoming it. So far, the evidence of lasting positive benefit for all this effort, including anti-stigma campaigns is, arguably, modest. Education and information is perhaps the most obvious initial step, but the use of 'facts and figures' – such as the prevalence of mental disorders – is far from neutral and may be interpreted positively or negatively.

The same is true of campaigns that frame mental disorders within a biomedical context. Promoting closer contact between people seems to be a generalisable means of breaking down prejudice and stigmatising attitudes. Perhaps more work should be done to explore new methods of achieving this.

Finally, activism and campaigning are likely to be seen more and more in our age of social media, along with the general assertion of 'rights'.[Fig G] Those in the mental health professions should embrace such movements and not be too shy in participating in them, but should remain sceptical of 'quick fixes' and surges of popular sentiment. In the meantime, campaigns of a different kind – to increase resources put into research in psychiatry and psychiatric care, from governments, industry and the public – while less glamorous, must continue unabated.

Fig G The green ribbon has been used in anti-stigma campaigns with the slogan: Stand up against stigma – No Health without Mental Health.

Professor Anthony David

Tony David qualified in medicine from Glasgow University in 1980. He worked for two years as a registrar in neurology in Glasgow and then took up psychiatry training at the Maudsley in 1984. He was an MRC research fellow at the Institute of Psychiatry, Psychology & Neuroscience (IoPPN) from 1987-90 and then senior lecturer at King's College School of Medicine & Dentistry. He was awarded a personal chair in 1996 in Cognitive Neuropsychiatry.

He has been a consultant psychiatrist in the NHS since 1990, including 12 years in charge of an acute general admissions ward, and latterly seeing national referrals of complex neuropsychiatric problems and those under clinical neuroscience services at King's College Hospital. He was appointed Vice Dean for Academic Psychiatry at the IoPPN in 2013.

Professor David has made research contributions in several areas, from cancer to chronic fatigue, schizophrenia to hysteria, neuroimaging to epidemiology. He has published more than 550 papers in scientific and medical journals and has co-edited 13 books, including the fourth edition of *Lishman's Organic Psychiatry*. He has been a fellow of the Academy of Medical Sciences since 2002, and an NIHR senior investigator since 2008. He has previously served as an associate director of the Mental Health Research Network (MHRN) and chairman of the British Neuropsychiatry Association. He is a fellow of the Royal Colleges of Physicians and of Psychiatrists, and a member of the Experimental Psychology Society.

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