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An independent audit of Pharma influence in public mental health trusts in England in 2016.

Abstract

Without data, many people still think pharmaceutical companies' influence is negligible, even benevolent. We audited their marketing activities, alongside simple financials. 43/53 Trusts responded to Freedom-of-Information-Act requests. Trusts' policies varied in prohibiting seven activities: 86% (gifts) to 37% (leaflets). In practice, industry-sponsored training events (51%)/ direct talks (40%) were common (averaging 36 sponsored events/talks per Trust that year). Only 8/36 (22.2%) Trusts provided legally-required Conflicts-of-Interests registers; 5 (14%) had none.

The top training-provider/sponsor received almost double where they trained most, and the largest share (average 33.6%) of the whole psychiatric-medications budget everywhere. Two most expensive medications (branded, "Long-Acting-Injectables") were prescribed very differently (0%-77%). Independent post-qualification medical education/ marketing-bans are needed to avoid extremely over-medicalised practice.⁵ Trusts already ban Pharma marketing.

An independent audit of Pharma influence in public mental health

Trusts in England in 2016.

Introduction

What's the harm in a free lunch? Pharmaceutical Companies seem to often provide free lunches in return for a presentation by their staff, (e.g. “*Long-term control of schizophrenia symptoms with Paliperidone*”, 20 minutes delivered by a charismatic young salesperson who also leaves a great deal of inspirational reading material about their product and hand-outs). The free food is seen by many staff as a harmless perk. *But is it? How common are such presentations? And are they even officially allowed?* The harm, potentially, is that Pharma employees understandably deliver as glowing and uncritical accounts of their products as they can. They also minimise/ brush away non-pharmacological alternatives. Because their “training” is so endemic, this could be one of the biggest factors in what is, for many (including ourselves), overly-medicalised treatment worldwide (Ilyas and Moncrieff, 2012). The figures for current medication prescriptions are extreme: by 2012 one in eight adults in the USA were being prescribed antidepressants (Kantor et al., 2015). In 2016, England had 64.7 million prescriptions for a population of 55.3 million. This was more than double the prescriptions in 2006. For four successive years ADs have had a larger annual increase than any other type of medication in England (NHS Digital 2017).

These extraordinary prescribing rates continue to increase despite limited evidence of efficacy. The most recent meta-analysis, of 131 randomised placebo-controlled trials of antidepressants, involving 27,422 people, found that the overall effect size did not reach the threshold for ‘clinical significance’ (Jakobsen et al., 2017). They also found no difference between those taking ADs or placebos in rates of suicide, suicide attempts or suicide ideation.

Antipsychotics are also ineffective for most people (Hutton et al., 2013). For example, a review of 38 trials of antipsychotic drugs found that the reductions in symptoms did not meet the threshold for ‘minimal clinical improvement’, and that 17% of those taking the drugs long term relapsed, compared to 39% of those taking placebo, meaning that only 22% were benefitting from the medication (Leucht et al., 2009). Another review, of 120 studies involving over 21,500 people, confirmed that APs are associated with less than minimal global improvement (Lepping et al., 2011). Furthermore both antidepressants (Read et al., 2014, 2017) and antipsychotics (Hutton et al., 2013; Longden and Read, 2016) have a range of adverse ‘side effects’ some of which are very common, dangerous, or both. Some have argued that ‘non-compliance’ is responsible for all these negative findings and have advocated for long-acting injectable (LAI) antipsychotics. A recent meta-analysis, based on 21 trials and nearly 5,000 patients, however, found no difference in efficacy between these injections and antipsychotics in pill form (Kishimoto et al., 2014).

In addition, industry funded trials of antipsychotics are five times more likely than independent trials to report positive findings (Perlis et al., 2005), with a similar bias operating in antidepressant trials (Kirsch et al., 2008). Numerous prominent USA psychiatrists have recently been exposed ‘ghost writing’ research articles for the industry and receiving large undisclosed payments (Mosher et al., 2013). About one fifth of the income of the American Psychiatric Association comes from drug companies (Angell, 2011). Most leading psychiatric journals are dependent on drug company advertising.

This reliance on drugs comes at the expense of other, more evidence-based approaches such as psychological therapies. Although the UK Government recommendations for both depression (N.I.C.E., 2016) and psychosis (N.I.C.E., 2014) include psychological therapies and other psychosocial interventions, the national mental health strategy states: ‘there are very long waits for some of the key interventions recommended by NICE, such as

psychological therapy, and many people never have access to these interventions’ (NHS Mental Health Taskforce, 2016).

NHS mental health Trusts in England seem not to be even monitoring this imbalance between drugs and more evidence-based approaches. Fifty out of 51 NHS mental health Trusts were unable to report, in response to a Freedom of Information Act request, how many of their patients who had committed suicide in the previous year had been offered psychological therapy in keeping with N.I.C.E. guidelines (Geekie et al., 2017). Only nine Trusts could report how many ECT recipients had first been offered psychological therapy (Read et al., 2017), as also required by NICE guidelines (2016). (In two of those nine Trusts no ECT recipients had been offered therapy).

All this is taking place in the context of research showing that psychosocial factors play a major role in the etiology of most mental health problems (Cromby et al., 2013), including psychosis (Read and Bentall, 2013; Varese et al., 2012). Furthermore, the public in almost every country where surveys have been conducted (with the notable exception of the USA) concur with the research and understand that psycho-social factors are far more important than bio-genetic influences in the etiology of mental health problems, including psychosis (Angermeyer and Dietrich, 2006; Read et al., 2006, 2013).

Despite all of the above there is very little monitoring of the ways that drug companies seek to influence mental health services in the UK’s National Health Service. A rare instance is a British Medical Journal investigation of all 207 Clinical Commissioning Groups (CCGs) in England, which commission local healthcare services. (Readers not familiar with the English system -and those who are but find it confusing- will find a brief explanation in the footnote.)¹ It was found that between 2015-16 and 2016-2017 CCGs had received more than

¹ *The UKs’ NHS (National Health Service) is a free-for-patients system funded by national taxation (completely separate private health insurance and treatment has also always been available for those who want that as well). The NHS’s structure reflects many attempts to “marketise” what began as a centrally-controlled state system. Decisions are now made 1) locally to fit local demographics and need, and 2) by clinicians, in the shape*

£5 million from private companies and charities, but declared only about a quarter of that amount in their public registries (Moberly, 2018a). The money included ‘hundreds of payments from drug companies that they have failed to disclose to patients and the public’, 73% of which were for company sponsorships of ‘education’ and ‘training’ events. These payments included both unsolicited offers from companies and the results of CCGs blatantly pursuing industry funding. CCGs varied enormously. While just nine of the 207 CCGs accounted for half of all the drug company payments, some CCGs had policies against receiving any such payments. Dr Robert Morley, of the British Medical Association’s GP Committee, described the undeclared payments as ‘astonishing’ and ‘a breach of the ethical standards expected of public office holders’ (Moberly, 2018b).

This led to calls for an urgent inquiry into drug company influence in medicine. It was equally astonishing to note that there had already been such an inquiry. In 2005, the UK House of Commons Health Committee on “The Influence of the Pharmaceutical Industry” presented a clear-eyed and influential report (House of Commons Health Committee, 2005). While generally positive about the potential for successful collaboration and mutual benefit, this report highlighted: “A number of practices have developed which act against the public interest. The industry affects every level of healthcare provision.” (p3)

The aim of the current study was to conduct the first audit of the relationship between the pharmaceutical industry and NHS Trusts that provide public mental health services in England, using Freedom of Information requests. We addressed key problem areas identified by the committee:

of 200+ local “Care Commissioning Groups” (CCGs) comprising general doctors and other healthcare staff. CCGs distribute about 60% of the entire NHS budget. They invite local Hospitals and other providers (mostly “NHS Trusts”, but also private sector ones) to compete for long-term bulk contracts delivering care (which is then free-for-patients, and badged as “NHS”). For example providers can bid to deliver all old-age mental health services in an area.

Marketing as “Education”

In 2005 the Health Committee identified that the amount the Department of Health spent providing independent medicines information to prescribers was the equivalent of “0.3% of the approximately £1.65 billion a year that the pharmaceutical industry spent on marketing and promotional efforts” (p39).

“In addition to receiving visits from company representatives, doctors are invited to attend sponsored events, meetings, workshops and symposia, which may be little more than “hospitality masquerading as education”. In combination with company representative visits, they have a major effect on prescribing practice. When questioned, however, doctors usually deny that drug promotion affects their own prescribing practices (although they do believe that it affects other doctors’ prescribing habits).” (p58)

Our first hypothesis was that many Trusts do not cover such activities in their policies and even where they do, such marketing is frequent in practice.

Conflicts of interest

The Bribery Act (2010) prohibited “the supply, offer or promise of any gift, pecuniary advantage or benefit in connection with the promotion of medicinal products, to HCPs or suppliers.” The Sunshine Law introduced on 1 April 2016 meant senior medical staff in England and Wales (but not Scotland) had to declare gifts and hospitality received from pharmaceutical companies. Failure to do so could result in dismissal and/ or prosecution under the Bribery Act. NHS Clinical Commissioning Groups (CCGs) and NHS hospital Trusts are legally required to maintain registers that document the pharma-related business interests of medical staff, in a way similar to the UK parliament’s register of MPs’ financial

interests. Since 2016 such registers have been in the Standard Contract for commissioning. (In America, the Sunshine Law was part of the Affordable Care Act (2010), making clinicians declare whether they received money or not from industry, allowing patients to check whether their doctor was paid to prescribe particular medicines.)

Our second hypothesis was that many Trusts do not have the legally-required registers. We suggest better practice would be to tell patients at the time of prescribing that there is a potential conflict of interest. We further hypothesised that most Trusts do not do this.

Patient Information

The Committee identified that Patient Information Leaflets (PILs) “should be the most straightforward way for the industry to provide patients with the information they require. Unfortunately, they are rarely in a comprehensible form.” They recommended independent information for patients, and noted that information directly received from doctors is deemed to be more trustworthy by patients.

Our third hypothesis was that many Trusts still rely on drug companies’ own information sheets to inform patients about what to expect from their medicines.

Branded/ Generic and Long-acting Injectables

The 2005 Health Committee highlighted pharmaceutical companies’ strategies to “subdue or delay competition from generic manufacturers, known as ‘life cycle management.’” (p90). For example, “Evergreening” involves “extending the patented life of a branded product, typically by reformulating the drug, for instance by using a different drug delivery system, changing a dosage form, or presentation (e.g. from tablet to capsule).” In the Committee’s view, branded medications were effectively the same as off-patent generic rivals clinically, but were widely used because of heavy marketing. They noted “The British Generic

Manufacturers Association (BGMA) listed five examples in which the originating company had employed evergreening methods, resulting in little or no therapeutic gain, but at a cost to the NHS estimated between £164 million and £369 million”. The all-party House of Commons Committee of Public Accounts (House of Commons Health Committee, 2007) estimated that at least £200 million per year could be saved from the drug budget without affecting patient care, simply by switching from branded to generic medicines. *Our fourth hypothesis* was that branded medications are still heavily used.

It was not possible in this survey to investigate all possible reasons for the continued use of branded medicines in mental health (many of which, of course, will be valid). However, our clinical experience suggested that Long-Acting-Injectable medications (LAIs) are among the most used and most expensive, despite a lack of evidence from meta-analyses that LAIs offer any benefits over oral medications (Haddad, Taylor, & Niaz, 2009; Kishimoto et al., 2014); *Our fifth hypothesis* was that these expensive LAIs are widely used despite this lack of evidence. We also hypothesised that the proportion of LAIs used was linked to the amount of training provided by the pharmaceutical companies.

Method

The study used a cross-sectional, retrospective design targeting all NHS mental health Trusts in England. Ethical approval was not required as there was no interaction with patients.

In May 2017, a Freedom of Information (FOI) Act request was sent to all 53 NHS Trusts. The following questions were asked, in relation to ‘the last financial year’ (covering April 2016-March 2017, the first financial year for which Trusts had a legal duty to keep a publically available register)

- ‘Does your organisation have any policy/policies which regulate the relationship between the pharmaceutical industry and the Trust? If so, please provide copies.’ It then asked whether the policy covered seven specific issues. The next question was ‘How is the relationship between the Trust and the pharmaceutical industry monitored?’, followed by a request for actual data for each of the seven issues (Table 1).
- ‘What was the total annual spend by the Trust on psychiatric medications?’
- ‘What proportion of the psychiatric medicines budget was spent on brand name medication?’
- ‘What proportion of the psychiatric medicines budget was spent on generic medication?’
- ‘What proportion of the medicines budget was spent on atypical long-acting injectable antipsychotics?’
- ‘What percentage of patients are currently prescribed atypical long-acting injectable antipsychotics?’
- ‘What two companies account for the largest proportion of overall medicines spend, and what percentage of the medicines budget does each of these constitute?’
- ‘What two companies provide the most hospitality/training/gifts/sponsorship?’
- ‘Does the Trust inform service users when prescribers are receiving income from drug companies?’; ‘If not, why not?’;
- ‘Does the Trust inform service users when research they are being invited to take part in involves payment by a drug company to the Trust?’; ‘If not, why not?’

Results

The overall response rate was 43 of 53 (81.1%). The yearly expenditure on pharmaceuticals was given by 33 Trusts. The total spent on pharmaceuticals was £69,542,470, averaging £2,107,348 per Trust, and ranging from £414,000 (Isle of Wight) to £5,957,642 (Birmingham & Solihull).

Drug company marketing activities in NHS Trusts: Practice

Between 32 and 38 Trusts (rates varied) responded to the questions about the occurrence of seven company marketing activities (Table 1). The two most frequent activities were training events (51.4%), and talks to mental health staff by company personnel (40.0%). The least reported was advertising materials on premises (18.2%). These are probably underestimates because Trusts did not know whether they engaged in the activity in between 10.6% and 39.4% of cases (e.g. 'not collected'; 'not collated'). This was the case for 21.6% of Trusts in relation to training events, producing an actual possible range of 51.4% to 73.0%.

Of the 27 Trusts providing data for all seven activities, 18 (66.7%) reported at least one activity, and five (18.5%) were engaged in five or more (Dudley& Walsall, Northamptonshire, Sussex, West London, and 2gether). The mean was 2.33, with an additional average of 1.85 'don't knows', so the actual average of activities per Trust was between 2.33 and 4.28.

Thirteen Trusts listed the number of training events sponsored or provided by companies. The mean was 19.9 (sd 34.1), ranging from one (South West London & St George's; Hertfordshire; and 2gether) to 114 (South West Yorkshire). Six Trusts provided the number of talks given by drug company salespersons. The average was 16.3 (sd 16.2), ranging from two (Cheshire& Wirral) to 45 (Southern Health).

Only between two and nine Trusts provided evidence of these seven activities being monitored. Nine Trusts gave details of gifts, including: paid conference attendances (seven), food (six) and books (one). Seven Trusts stated how many staff worked for both the Trust and the industry; one staff member in six Trusts and four in the other (South London & Maudsley). Only two Trusts gave examples of advertising materials (a stand at an academic program, and ‘mugs and pens’). Nine Trusts reported that all payments for research went to the Trust; one reported that research payments went to staff.

Drug company marketing activities in NHS Trusts: policies

Nearly all the Trusts (41 of 43) had internal Trust policies about contact with pharmaceutical companies. The other two Trusts said they adhered to the ‘Code of Practice of the Pharmaceutical Industry’ written by the Association of British Pharmaceutical Industry (ABPI). Of the 41 with internal policies eight also referred to the ABPI policy.

The frequency with which the seven specific marketing activities were covered by policies ranged from 86.0% for ‘gift, pecuniary advantage or benefit in kind, to mental health staff’, and 81.4% for ‘drug companies providing/sponsoring training events’, to 37.2% for ‘drug company information/advice leaflets’. The average number of the seven activities reported to be covered by the policies was 4.6 (sd 2.16). The policies of 10 of the 43 Trusts (23.2%) covered all seven activities. The policies of 12 Trusts (27.9%) covered three or fewer.

Conflicts of Interest: Registers

36 Trusts provided information about how the relationship between the Trust and the pharmaceutical industry was monitored. Voluntary declaration by staff was the most common form of monitoring (17; 47.2%). These declarations typically involved using an internal register (14; 38.9%) or telling a manager or internal committee (five; 13.8%). Only two

(5.5%) used the external, publicly accessible, ABPI register. Five said no monitoring occurred at all (13.8%). Eight (22.2%) provided a copy of the register.

Conflicts of Interest: Informing service users

Of the 21 Trusts that answered the question about whether service users are informed when their *clinical* prescribers had received income from drug companies, all but one (Cumbria) said service users were *not* informed (95.2%).

Of the 19 who answered the question about whether service users are informed when the *research* they are invited to take part in involved drug company payments to the Trust all but one (Coventry & Warwick) reported that in these circumstances service users are informed (94.7%).

Patient Information

Over a third of trusts said they used drug company information leaflets (37.5%), 31.2% said they did not, and 31.2% said they did not know.

Branded/ Generic

The percentage of brand name medication (vs generic drugs) used was reported by 11 Trusts. The average proportion was 31.7% (s.d. = 27.36%), ranging from 0% to 74%.

Long-acting injectables (LAIs)

The proportion of the whole psychiatric medication budget spent on LAIs was given by 28 Trusts. The average was 43.9% (sd = 15.5), ranging from 13% to 77%. These Trusts spent a total of £30,382,708 on LAIs, averaging £1,085,097 per Trust.

Market share

22 Trusts reported which company received the largest share of their drug expenditure: all 22 Trusts named Janssen. 17 Trusts also provided the amount of money paid to Janssen. The total received by Janssen from the 17 Trusts was £12,585,585, at an average of £740,329. The proportion of the total medication budget received by Janssen ranged from 13.5% to 58%, with an average of 33.6%.

The second highest earning company was Otsuka/Lundbeck for eight Trusts, followed by Novartis and Mylan for three each. The average earnings of Otsuka/Lundbeck was £282,904 per Trust, (Janssen therefore earning 2.8 times more).

Training

Janssen provided the most training for eight of the 14 Trusts (57%) which answered that question. Three other companies were the most frequent training providers in two Trusts each (Lilly, Sunovion, and Otsuka/Lundbeck). In the eight Trusts where they were the top training provider Janssen's average earnings (£1,035,328) were nearly double that in the Trusts where they were not the top training provider (£637,361).

Best practice

Five Trusts reported a complete absence of any of the seven company sponsored activities. Two of these Trusts (Cambridge, and Leeds & York) reported that their internal policy covered all seven of the activities. The other three Trusts (Rotherham, Somerset, and Cheshire & Wirral) covered five of the seven activities in their policies.

Discussion

Drug company marketing activities

The majority of NHS mental health Trusts have, like the CCGs (Moberly, 2018), failed to draw a strong-enough boundary between themselves and the pharmaceutical industry. Most Trusts (59%) engaged in two or more drug company sponsored activities, most commonly: industry sponsored training events (51%), talks to mental health staff by drug company personnel (40%) and drug company advice/information leaflets (37%). As is the case for CCGs, the most common route into Trusts for the pharmaceutical industry is via sponsored training programmes (Moberly, 2018). The average number of sponsored training sessions in the past year was 20 per Trust. In addition, there was an average of 16 talks to staff per Trust given directly by drug company salespeople, producing a total average of 36 events a year. Meanwhile, in many Trusts patients are given sponsored information and advice leaflets. It is concerning that managers, CCGs or NHS England don't feel the need to prohibit these efforts by the pharmaceutical industry to influence staff and patients.

Nevertheless, five Trusts engaged in none of the seven activities investigated, demonstrating that it is perfectly possible for Trusts to draw an ethical boundary around public services.

Policies and monitoring

Although nearly all Trusts had policies relating to drug companies, most were incomplete. Only 37% covered the common industry strategy for influencing patient behaviour – information leaflets. The finding that the most commonly cited external policy was written not by NHS England or the Ministry of Health, but by the ABPI (i.e. the pharmaceutical industry's own organisation), indicates naiveté at best, complicity at worst. Monitoring seemed very variable, with the most common method being voluntary reporting by staff. Five Trusts acknowledged that they engaged in no monitoring at all, and by having no register are failing to comply with this legal requirement. The finding that only two Trusts entered data into a publicly accessible register matches the recent audit of CCGs which found that most

drug company money remains undeclared (Moberly, 2018). Astonishingly, most Trusts (95%) did not feel patients should know if their prescribing doctor has been rewarded by the company whose medications they are prescribing (unlike in America). By contrast, when engaged in research, Trusts were scrupulous in being clear about such conflicts of interest, probably due to the ethical review built in to research governance.

A dominant influence - Janssen

One company received the largest amount of money from every one of the 22 Trusts which answered this question. That company was four times more likely than any other to be the leading sponsor of training programmes, and Trusts in which Janssen trained the most, paid it on average half a million pounds more. Janssen produces two of the four long-acting injectable atypical antipsychotics (LAIs) available in the UK. An average of 44% of the entire psychiatric drug spend in each Trust was on LAIs, despite the fact that LAIs are considerably more expensive than oral medications yet not proven to be any more effective. A recent meta-analysis, based on 21 trials and nearly 5,000 patients found no difference in efficacy between these injections and antipsychotics in pill form (Kishimoto et al., 2014).

The cost to the NHS and patients

Trusts used the most expensive medications to vastly different extents: LAIs (13% to 77% of total spend) and brand name drugs (0% to 74%). This variation strongly suggests to us that prescribing decisions are not being made solely on clinicians' independent assessments of the evidence. Reducing the use of brand name medications and LAIs could save NHS mental health services many millions of pounds annually, some of which could be used to fund training events (House of Commons Health Committee, 2007).

We suggest a further significant cost is a culture where the efficacy of many psychiatric medications is extremely over-estimated, way above the available independent evidence, e.g. for antidepressants, (Jakobsen et al., 2017) and antipsychotics (Lepping, Sambhi, Whittington, Lane, & Poole, 2011; Leucht, Arbter, Engel, Kissling, & Davis, 2009). There is also a general vast under-estimation of their side-effects (Davies & Read, 2018; Longden & Read, 2016). Further there is a general and extreme over-emphasis on the pharmaceutical over other proven avenues of treatment recommended in NICE guidelines.² We suggest this directly reflect the nature of Pharma marketing. Unchecked pharmaceutical marketing has skewed healthcare culture, as a President of the American Psychiatric Association recently warned: “As we address these Big Pharma issues, we must examine the fact that as a profession, we have allowed the bio-psychosocial model to become the bio-bio-bio model.” (Sharfstein, 2005).

Limitations

There are natural limits with correlational studies, and we suggest Trusts may want to use an experimental design where they stop all marketing activities and see if their pharmaceutical expenditure goes down without a detriment in clinical outcomes. Ten Trusts failed to respond. The overall response rate (81%), however, was higher than for two similar FOI studies of mental health Trusts by the same research team (Geekie, Read, Renton, & Harrop, 2017; Read, Harrop, Geekie, & Renton, 2017). The data are only as good as the knowledge and competence of, and time and resources available to, the Freedom of Information Officer in each Trust. It would have been valuable to ask if any action had ever been taken from a

² NICE Guidelines are official recommendations by the UK’s “National Institute for Health and Care Excellence”, independent bodies of experts who recommend best practice based on current evidence and Health Economics.

clinician having too many conflicts of interest. With hindsight we should have asked an open question about ‘other’ drug company sponsored activities.

Conclusions and Recommendations

Our opinion is that NHS Trusts, NHS England, or the Ministry of Health should prohibit NHS staff and services from receiving any pharma money, and bar drug company salespeople from NHS premises, something many staff already want. In the meantime, local managers and commissioners could follow the ethical example of the five Trusts who provide no opportunities for drug industry marketing on their premises. Similarly, staff could refuse to attend industry sponsored events, decline all gifts (including ‘free’ lunches and merchandise), and take it upon themselves to remove drug company leaflets from NHS property. There are a number of doctors’ organisations campaigning for industry marketing to be kept out of education and practice; (“No Free lunch” (UK: nofreelunch-uk.org , US: www.nofreelunch.org), and the German equivalent “Mein essen zahl‘ ich selbst” (“I buy my own lunch”; <https://mezis.de>), as well as “The Unbranded Doctor”(http://npalliance.org/action/the-unbranded-doctor).)

The most common argument in favour of such marketing activities is that Continued Education budgets are very limited, and drug companies fill that gap. The data here and elsewhere suggest it would be far cheaper to properly fund independent post-qualification education. The Royal College of Physicians working party on “Patients, physicians, the pharmaceutical industry and the NHS” (Royal College of Physicians, 2009) suggested “The ABPI and its members should establish a pooled fund to invest in medical education. Such a fund would unlink financing from a single company, diminishing the perception of undue commercial influence and bias.” (para 3.42). It also said “In rewriting the relationship between medicine and the pharmaceutical industry, and in the spirit of a more balanced and

mutually respectful partnership, all gifts to doctors, including food and travel, become untenable and should end.” (3.41)

References

- Angell, M. (2011). The illusions of psychiatry. *New York Review of Books*
- Angermeyer, M., & Dietrich, S. (2006). Public beliefs and attitudes towards people with mental illness. *Acta Psychiatrica Scandinavica*, 113, 163-179.
- Cromby, J., Harper, D., & Reavey, P. (eds.) (2013). *Psychology, Mental Health and Distress*. Basingstoke: Palgrave Macmillan.
- Davies, J., & Read, J. (2018). A systematic review into the incidence, severity and duration of antidepressant withdrawal effects: Are guidelines evidence-based? *Addictive Behaviors*, (July), 1–10. <https://doi.org/10.1016/j.addbeh.2018.08.027>
- Geekie, J., Read, J., Renton, J., & Harrop, C. (2017). Do English mental health services know whether they followed N.I.C.E. guidelines with patients who killed themselves? *Psychology and Psychotherapy: Theory, Research and Practice*, 90(4), 797–800. <https://doi.org/10.1111/papt.12141>
- Haddad, P. M., Taylor, M., & Niaz, O. S. (2009). First-generation antipsychotic long-acting injections v. oral antipsychotics in schizophrenia: Systematic review of randomised controlled trials and observational studies. *British Journal of Psychiatry*, 195(SUPPL. 52), 20–28. <https://doi.org/10.1192/bjp.195.52.s20>
- House of Commons Health Committee. (2005). *The Influence of the Pharmaceutical Industry*. Retrieved from <http://www.parliament.uk/the-stationery-offi>

ce.co.uk/pa/cm200405/%0Acmselect/cmhealth/42/42.pdf.

House of Commons Health Committee. (2007). *Department of Health: prescribing costs in primary care*. UK Government. Retrieved from

www.publications.parliament.uk/pa/cm200708/cmselect/cmpublicacc/173/173.pdf

Hutton, P., Weinmann, S, Bola, J., & Read, J. (2013). Antipsychotic drugs. In J. Read & J. Dillon (eds.), *Models of Madness (2nd edition)*. (pp. 105-124). Hove, UK: Routledge.

Jakobsen, J. C., Katakam, K. K., Schou, A., Hellmuth, S. G., Stallknecht, S. E., Leth-Møller, K., ... Gluud, C. (2017). Selective serotonin reuptake inhibitors versus placebo in patients with major depressive disorder. A systematic review with meta-analysis and Trial Sequential Analysis. [BMC Psychiatry. (2017), 17:(58)]. doi: 10.1186/s12888-016-1173-2. *BMC Psychiatry*, 17(1). <https://doi.org/10.1186/s12888-017-1311-5>

Ilyas, S., Moncrieff, J. (2012). Trends in prescriptions and costs of drugs for mental disorders in England, 1998-2010. *British Journal of Psychiatry*, 200, 393-398.

Kantor, E., Rehm, C., Haas, J., Chan, A. & Giovannucci, E. (2015). Trends in prescription drug use among adults in the United States from 1999-2012. *Journal of the American Medical Association*, 314, 1818-1830.

Kirsch, I., Deacon, B., Huedo-Medina, T., Scoboria, A., Moore, T., & Johnson. B. (2008).

Initial severity and antidepressant benefits: a meta-analysis of data submitted to the Food and Drug Administration. *PLOS Medicine*, 5, 260-268.

Kishimoto, T., Robenzadeh, A., Leucht, C., Leucht, S., Watanabe, K., Mimura, M., ... Correll, C. U. (2014). Long-acting injectable vs oral antipsychotics for relapse prevention in schizophrenia: A meta-analysis of randomized trials. *Schizophrenia*

Bulletin, 40(1), 192–213. <https://doi.org/10.1093/schbul/sbs150>

Lepping, P., Sambhi, R. S., Whittington, R., Lane, S., & Poole, R. (2011). Clinical relevance of findings in trials of antipsychotics: Systematic review. *British Journal of Psychiatry*, 198(5), 341–345. <https://doi.org/10.1192/bjp.bp.109.075366>

Leucht, S., Arbter, D., Engel, R. R., Kissling, W., & Davis, J. M. (2009). How effective are second-generation antipsychotic drugs? A meta-analysis of placebo-controlled trials. *Molecular Psychiatry*, 14(4), 429–447. <https://doi.org/10.1038/sj.mp.4002136>

Longden, E., & Read, J. (2016). Assessing and Reporting the Adverse Effects of Antipsychotic Medication: A Systematic Review of Clinical Studies, and Prospective, Retrospective, and Cross-Sectional Research. *Clinical Neuropharmacology*, 39(1). Retrieved from https://journals.lww.com/clinicalneuropharm/Fulltext/2016/01000/Assessing_and_Reporting_the_Adverse_Effects_of.6.aspx

Moberly, T. (2018a). The pharma deals that CCGs fail to declare. *British Medical Journal*, 360:j5915

Moberly, T. (2018b). CCGs fail to declare pharma funding. *British Medical Journal*, 360:j5911

Mosher, L., Gosden, R., & Beder, S. (2013). Drug companies and ‘schizophrenia’: unbridled capitalism meets madness. In J. Read, & J. Dillon (Eds.), *Models of Madness (2nd edition)*. (pp. 125-139). Hove, UK: Routledge.

National Institute of Clinical Excellence. (2016). *Depression in Adults: Recognition and Management. Clinical Guideline 90*. www.nice.org.uk/guidance/cg90/chapter/1-Guidance#care-of-all-people-with-depression

- National Institute of Clinical Excellence. (2014). *Psychosis and Schizophrenia in Adults: Prevention and Management. Clinical Guideline 178*. www.nice.org.uk/guidance/cg178
- NHS Digital. (2017). *Prescriptions Dispensed in the Community 2006-2016*. London: N.H.S
- NHS Mental Health Taskforce (2016). *The Five Year Forward View for Mental Health*. London: NHS. www.england.nhs.uk/mentalhealth/taskforce
- Perlis, R., Perlis, C., Wu, Y., Hwang, C., Joseph, M., & [Nierenberg, A.](#) (2005). Industry sponsorship and financial conflict of interest in the reporting of clinical trials in psychiatry. *American Journal of Psychiatry*, 162, 1957–1960.
- Read, J. (2006). Prejudice and schizophrenia: a review of the ‘mental illness is an illness like any other approach. *Acta Psychiatrica Scandinavica*, 114, 303-318.
- cRead, J., & Bentall, R. (2013). Madness. In J. Cromby et al. (eds.) *Psychology, Mental Health and Distress*. (pp. 249-282). Basingstoke: Palgrave Macmillan,
- Read, J., Cartwright, C., Gibson, K. (2014). Adverse emotional and interpersonal effects reported by 1,829 New Zealanders while taking antidepressants. *Psychiatry Research*, 216, 67-73.
- Read, J., Gee, A., Diggle, J., & Butler, H. (2017). The interpersonal adverse effects reported by 1,008 users of antidepressants; and the incremental impact of polypharmacy. *Psychiatry Research*. doi.org/10.1016/j.psychres.2017.07.003
- Read, J., Harrop, C., Geekie, J., & Renton, J. (2017). An audit of ECT in England 2011-2015: Usage, demographics, and adherence to guidelines and legislation. *Psychology and Psychotherapy: Theory, Research and Practice*, 263–277. <https://doi.org/10.1111/papt.12160>

Royal College of Physicians. (2009). *Innovating for health: patients, physicians, the pharmaceutical industry and the NHS. Report of a Working Party. Royal College of Physicians*. London.

Sharfstein, S. (2005). Big Pharma and American psychiatry: The good, the bad and the ugly. *Psychiatric News*, 40(3).

Varese, F., Smeets, F., Drukker, M., Lieveise, R., Lataster, T., Viechtbauer, W., et al. (2012). Childhood adversities increase the risk of psychosis: A meta-analysis of patient-control, prospective- and cross-sectional cohort studies. *Schizophrenia Bulletin*, 38, 661-671.

Table 1: Number of Trusts in which specific activities were paid for by drug companies in past year.

Activity	Occurred	Did not occur	Don't know
1. Drug companies offering any gift, pecuniary advantage or benefit in kind, to mental health staff. (n=38). ^a	14 (36.8%)	20 (52.6%)	4 (10.6%)
2. Staff working for both the mental health provider and the pharmaceutical company (e.g. as an advisor/ providing training/working as a researcher). (n=36).	10 (27.8%)	21 (58.3%)	5 (13.9%)
3. Drug company reps verbally presenting drug company information to mental health staff. (n=35).	14 (40.0%)	12 (34.2%)	9 (25.8%)
4. Drug companies providing/sponsoring training events. (n=37).	19 (51.4%)	10 (27.0%)	8 (21.6%)
5. Drug company provides information/advice leaflets. (n=32).	12 (37.5%)	10 (31.2%)	10 (31.2%)
6. Drug company advertising materials on premises (including pens, mugs, calendars, or other equipment with pharmaceutical company logo or	6 (18.2%)	14 (42.4%)	13 (39.4%)

information e.g. Blood pressure machines, tourniquet). (n=33).			
7. Drug company payments to staff or Trust for recruiting patients into research studies. (n=37).	11 (29.8%)	20 (54.1%)	6 (16.2%)

a These questions were responded to by between 32 and 38 Trusts