cambridge.org/psm

Original Article

Cite this article: Pathak A, Lim E, Lawrie S (2021). Needlessly controversial: the reporting of pharmaco- and psycho-therapy for the treatment of depression in the UK media. *Psychological Medicine* **51**, 2798–2803. https://doi.org/10.1017/S0033291720001427

Received: 17 November 2019 Revised: 23 April 2020 Accepted: 5 May 2020

First published online: 29 May 2020

Key words:

Antidepressants; media; newspaper; psychotherapy; public; therapy

Author for correspondence:

Anushka Pathak, E-mail: anushkapathak7@gmail.com

Needlessly controversial: the reporting of pharmaco- and psycho-therapy for the treatment of depression in the UK media

Anushka Pathak¹ (i), Elizabeth Lim¹ (ii) and Stephen Lawrie² (iii)

¹Medical School, The University of Edinburgh, Edinburgh, UK and ²Division of Psychiatry, The University of Edinburgh, Edinburgh, UK

Abstract

Background. It is well-established that media influences public perceptions, and that media coverage of psychiatry is negative compared to the rest of medicine. No studies that we know of, have compared media reporting on antidepressants and talking therapies as treatments for depression. We hypothesised that coverage of antidepressants would be more negative than that of psychotherapies in both headlines and articles.

Methods. We identified online articles in The Sun, Daily Mirror, Daily Mail, Daily Express, and The Guardian between 11 June 2013 and 11 June 2018. Two raters independently evaluated their titles/content with regard to their portrayal of antidepressants and psychotherapies (positive/negative/neutral), with good inter-rater reliability.

Results. We identified 221 articles. Antidepressants featured in 184 articles, of which 27 (15%) portrayed them positively, 68 (37%) negatively, and 89 (48%) neutrally; and 173 headlines, of which 24 (14%) portrayed them positively, 64 (37%) negatively, and 85 (49%) neutrally. Antidepressants received more coverage than psychotherapy, which featured in 132 articles, of which 48 (36%) portrayed them positively, 3 (2%) negatively, and 81 (61%) neutrally; and 53 headlines, of which 16 (30%) portrayed them positively, 2 (4%) negatively, and 35 (66%) neutrally. A Fisher's exact test revealed a statistically significant difference between the portrayal of antidepressants and psychotherapies in both articles ($p = 2.86 \times 10^{-15}$) and headlines ($p = 2.79 \times 10^{-6}$).

Conclusion. Despite the two treatments being similarly effective, the portrayal of antidepressants in the UK online media is more negative than that of psychotherapy. This could potentially discourage patients from considering taking antidepressants, and provoke patients currently taking antidepressants to stop abruptly.

Introduction

Depression is a prevalent and frequently incapacitating mental health condition, characterised by persistent low mood which negatively impacts functioning and daily life (Malhi & Mann, 2018). Currently, effective treatment can be found in the form of antidepressants (Cipriani et al., 2018) and talking therapies such as cognitive behavioural therapy (CBT) (National Institute for Health and Care Excellence; NICE, 2018). There is evidence to suggest that they are similarly effective (Amick et al., 2015), and that the two work better together than alone; indeed, NICE guidelines in the UK advocate a combinatorial therapeutic strategy for moderate to severe depression, where both pharmaco- and psycho-therapies are used in conjunction with one another (NICE, 2018). However, even though these efficacious therapies are available, around 40% of people with depression do not receive treatment (Lubian et al., 2016), thought to be due, in part, to hesitancy about the treatment options available.

Reluctance to present for treatment of depression may result from needlessly controversial coverage of the treatment of depression with antidepressants – both in medical journals (McCormack & Korownyk, 2018; Parker, 2018; Warren, 2018) and the media (Adlington, 2018; Boseley, 2008, 2018). Newspapers remain an important influence on public perceptions, and studying their portrayal of topics provides insight into the attitudes held by members of the public, and, potential patients. Indeed, there is considerable evidence that negative public attitudes of mental illness as a whole can be attributed to media coverage (Borinstein, 1992; Dietrich, Heider, Matschinger, & Angermeyer, 2006; Thornton & Wahl, 1996).

Numerous previous studies have repeatedly and consistently shown that media coverage of psychiatry, in general, is more critical than that of the rest of medicine (Aragonès, López-Muntaner, Ceruelo, & Basora, 2014; Chen & Lawrie, 2017; Day & Page, 1986; Lawrie, 2000; Pieters, De Gucht, & Kajosch, 2003; Thornicroft et al., 2013). Given the ongoing controversy about the efficacy and adverse effects of antidepressants, we wondered whether media coverage of psychotherapy would be more positive than that of antidepressants for

© The Author(s), 2020. Published by Cambridge University Press





depression. To our knowledge, no previous studies have compared the depiction of antidepressants ν . talking therapies in the British or other media. As such, our objective was to analyse British media over a 5-year period to compare and contrast the coverage of psychotherapy and pharmacotherapy for depression, and to test the hypotheses that the coverage of pharmacotherapy would be more negative than that of psychotherapy in both the headlines and articles themselves.

Methods

Newspaper selection

The online editions of five popular, national newspapers, namely, The Sun and the Daily Mirror (tabloid), the Daily Mail and the Daily Express (middle-market), and The Guardian (broadsheet), were selected for analysis. These newspapers have the highest readership figures within their categories of tabloid, middle-market, and broadsheet (National Readership Survey, 2016), and also encompass a range of political positions, with The Sun, the Daily Mail, and the Daily Express positioned towards the political right, and the Daily Mirror and The Guardian towards the political left (Smith, 2017). The newspapers included in the analysis, therefore, provide a broad reflection of the content read by readers from a range of backgrounds.

Search strategy

The search string, 'antidepressant OR antidepressants OR antidepressant OR anti-depressants OR psychotherapy OR therapy' was inputted into Google Advanced Search to identify articles for analysis. To be included, articles had to include the search string within their headlines (rather than just within their web-links), and had to have been printed within the 5-year period between 11 June 2013 and 11 June 2018. This ensured that articles were relevant and that they provided a reflection of media portrayal of antidepressants and talking therapies over several years. This identified 728 articles.

In order to further ensure that articles included in the analysis were relevant to the aim, three exclusion criteria were applied. One such criterion was that articles that mentioned therapy but did not also mention depression, were excluded. This was due to the fact that many articles that mentioned therapy were not relevant to the topic of depression, instead referring to other forms of therapy such as retail therapy or couples' therapy. This was not, however, the case for articles that mentioned antidepressants. Articles were also excluded if they mentioned therapy in the title and depression in the article, but the type of therapy mentioned in the title was not talking therapy for depression. Another criterion was that short articles attached to videos were also excluded. In total, 507 articles were excluded as a result of these exclusion criteria, leaving 221 articles, all of which were included in the analysis.

Data collection and analysis

The content of articles and their headlines were analysed independently of one another. They were each categorised as either positive, negative, neutral, or not applicable (N/A) with regards to the way in which they portrayed antidepressants and talking therapies respectively. To be categorised as positive with regard to talking therapies, for example, the article had to predominantly

portray talking therapies positively (i.e. that they were effective for the treatment of depression, and/or that they impacted on lives in a positive way). To be categorised as negative with regard to antidepressants, for example, the article had to predominantly portray antidepressants negatively (i.e. that they were not effective, and/or that they were associated with debilitating adverse effects or withdrawal symptoms).

The two investigators performed the analysis of all headlines and articles independently, and then compared their results, noting any differences between their gradings. Cohen's Kappa value of 0.79 indicates that a substantial level of reliability was achieved. Any differences were reviewed and discussed, and, in each case, a conclusion reached.

We used Fisher's exact test to test the hypotheses that there was a statistically significant difference between the overall portrayal of antidepressants and talking therapies in headlines and in articles. A two-tailed significance value of p < 0.05 was used.

Results

In total, 221 articles were analysed (see Supplementary Material), of which 24 (10.9%) were printed in The Sun, 22 (10.0%) in the Daily Mirror, 94 (42.5%) in the Daily Mail, 18 (8.1%) in the Daily Express, and 63 (28.5%) in The Guardian. Antidepressants featured in 184 articles (83.3%) and 173 headlines (78.3%), and therefore received more coverage than talking therapies for depression, which featured in 132 articles (59.7%) and 53 headlines (24.0%).

Of the 173 headlines in which antidepressants featured, 24 (13.9%) portrayed them positively, 64 (37.0%) negatively, and 85 (49.1%) neutrally (see Table 1; Fisher's exact $p = 2.79 \times 10^{-6}$). This highlights that, while most of the headlines that mentioned antidepressants portrayed them neutrally, more than twice as many headlines portrayed them negatively than positively. An example of a headline deemed positive with regard to the portrayal of antidepressants, in this case highlighting their effectiveness as a treatment for depression, is, 'Antidepressants DO work and millions more should be on them' (Daily Express, 2018). Other headlines which portrayed antidepressants positively often sought to reassure that they were safe. One such example is, 'Common antidepressants 'do NOT increase the risk of heart attacks and stroke' (Parry, 2016). These often presented a counterargument to headlines creating fear surrounding antidepressants. Headlines judged to portray antidepressants negatively often made use of dramatic quotes and alarming study findings which often involved harm to oneself or to others. Examples of such headlines include, 'Mother says antidepressant drugs turned her son into a 'psychotic killer' (Johnston, 2017) and 'Antidepressant drugs are 'immensely harmful' and responsible for thousands of deaths, claims leading scientist' (Parsons, 2015).

Of the 184 articles in which antidepressants were featured, 27 (14.7%) portrayed them positively, 68 (37.0%) negatively, and 89 (48.4%) neutrally (see Table 2; Fisher's exact $p = 2.86 \times 10^{-15}$). These results highlight that the pattern of the portrayal of antidepressants in articles was similar to that of their portrayal in headlines, with most articles portraying them neutrally, but with more than twice as many portraying them negatively than positively. While many different aspects relating to antidepressants were discussed in the articles and their headlines, a common topic relating to their positive portrayal included their effectiveness as a treatment for depression, and common topics relating to their negative

2800 Anushka Pathak *et al.*

Table 1. Number of headlines portraying antidepressants and talking therapies positively and negatively

	Antidep	Antidepressants		Talking therapies	
	Positive portrayal	Negative portrayal	Positive portrayal	Negative portrayal	
Overall	24	64	16	2	
The Sun	2	6	1	0	
Daily Mail	10	36	4	0	
Daily Express	1	7	4	0	
The Guardian	11	7	7	2	
Daily Mirror	0	8	0	0	

portrayal included their side effects, 'withdrawal' symptoms, and risks associated with their use in youths.

When considering the portrayal of antidepressants in each individual newspaper, The Sun, the Daily Mirror, the Daily Mail, and the Daily Express all followed a similar pattern of portrayal to that described above, printing more articles and headlines that portrayed antidepressants negatively than positively. The Guardian was the only newspaper that diverged from this pattern, printing more articles and headlines that portrayed antidepressants positively than negatively.

Of the 53 headlines in which talking therapies were featured, 16 (30.2%) portrayed them positively, 2 (3.8%) negatively, and 35 (66.0%) neutrally (see Table 1; Fisher's exact test $p = 2.79 \times 10^{-6}$). Much like the portrayal of antidepressants, most of the headlines that mentioned talking therapies portrayed them neutrally. However, in contrast to the portrayal of antidepressants, far more headlines portrayed them positively than negatively. Headlines portraying talking therapies positively often referred to those, especially celebrities, who had found therapy an effective form of treatment for depression, e.g. 'Richard E. Grant: 'Therapy saved my life' (Daily Express, 2014). No general observations about common topics relating to the negative portrayal of talking therapies could be made due to their limited number.

Of the 132 articles in which talking therapies were featured, 48 (36.4%) portrayed them positively, 3 (2.3%) negatively, and 81 (61.4%) neutrally (see Table 2; Fisher's exact $p = 2.86 \times 10^{-15}$). Again, the pattern of the portrayal of talking therapies in articles was similar to that of their portrayal in headlines, with most articles portraying them neutrally, but, again in contrast with the portrayal of antidepressants, with far more portraying them positively than negatively. Those articles that portrayed talking therapies often referred positively to a relative lack of side effects and celebrities who had benefited from it. The few articles that portrayed them negatively often argued that talking therapies were not an effective treatment for depression, with one article stating this was because some forms of therapy fail to understand the underlying cause of the depression (James, 2014). While the portrayal of talking therapies was more often positive than negative, it is interesting to note that the portrayal of the provision of therapy was often negative due to its limited availability, and reference was made to the fact that, as a result, antidepressants were being used as a 'sticking plaster' (Dunne, 2017).

Table 2. Number of articles portraying antidepressants and talking therapies positively and negatively

	Antidepressants		Talking	Talking therapies	
	Positive portrayal	Negative portrayal	Positive portrayal	Negative portrayal	
Overall	27	68	48	3	
The Sun	3	6	4	0	
Daily Mail	13	39	10	1	
Daily Express	1	8	4	0	
The Guardian	9	8	26	2	
Daily Mirror	1	7	4	0	

With regard to the portrayal of talking therapies in the articles, all five of the newspapers again followed the pattern of portrayal described above, printing more articles that portrayed talking therapies positively than negatively. While four newspapers also followed this pattern for the headlines, the Daily Mirror did not, as itdid not print any headlines which mentioned talking therapies

On post hoc testing, we compared the right-wing press (The Sun, Daily Mail, and Daily Express) and left-wing press (The Guardian and Daily Mirror) (Smith, 2017). We found that there was no statistically significant difference in the reporting of antidepressants between the right-wing and left-wing publications in either the articles (Fisher's exact p = 0.196) or the headlines (Fisher's exact p = 0.065). There was also no difference in terms of reporting about psychotherapy in either article (Fisher's exact p = 1.00) or headlines (Fisher's exact p = 0.471). However, when comparing the Guardian ν . all other newspapers, we found that there was a statistically significant difference in the reporting of antidepressants in both headlines (Fisher's exact p = 0.001) and articles (Fisher's exact p = 0.019) i.e. the other newspapers were more critical of antidepressants than the Guardian. No such bias was found in the reporting of talking therapies between the Guardian and the other newsbrands, in either headline (Fisher's p = 0.471) or articles (Fisher's p = 1.00).

Discussion

We looked at 221 articles and their headlines in the British press online and found that the portrayal of antidepressants was more negative than the portrayal of psychotherapy for depression. Antidepressants were more often portrayed negatively than positively while talking therapies were more often portrayed positively than negatively. This was the case in each of the five newspapers we surveyed, apart from a slightly more balanced coverage of antidepressants in The Guardian, where the number of articles portraying antidepressants positively is greater (by 1) than the number of articles portraying them negatively. Of the five publications studied, antidepressants were more negatively portrayed in all – though particularly in the Daily Mail and the Daily Express. This all suggests that the media portrayal of antidepressants over these 5-year period was a lot more negative than that of talking therapies. When comparing the right- (The Sun, Daily Mail, and Daily

Express) and left-wing newspapers (The Guardian and Daily Mirror) (Smith, 2017), we noted that there was no significant difference in the portrayal of antidepressants and talking therapy between the newsbrands. However, a difference did exist between the portrayal of antidepressants in the Guardian (the only broadsheet newspaper in our study) compared to the rest of the publications we studied, suggesting that the other tabloid publications were more critical of antidepressants.

The finding that antidepressants were portrayed more negatively than psychotherapy generally mirrors the public's perception of these treatments for depression - (Angermeyer, van der Auwera, Carta, & Schomerus, 2017). It is likely that the public's perception has been influenced by these portrayals in media. Not only is there potential for this attitude to be highly damaging to patients on or considering taking antidepressants, it is also apparently ignorant of the issues in assuming that psychotherapy is always a beneficial management option. Of all the articles analysed, only two headlines referred to the harms of psychotherapy, and only three articles discussed these harms. It is interesting to note that both the headlines which were negative in their portrayal of psychotherapy were published in the Guardian; lending further credence to the view that left-leaning publications are more balanced in their approach to reporting on treatments for depression. The lack of coverage is concerning given that a study analysing data from both the National Audit of Psychological Therapies and an Improving Access to Psychological Therapies review found that 13% of people feel harmed, and 5% feel harmed in the long term (Crawford et al., 2016). We concur with Nutt and Sharpe (2008) in their suggestion that perhaps a method by which patients can report 'adverse effects' of therapy (in a similar manner to the 'yellow card' reporting scheme already in place for pharmacological therapies), should be implemented. Such a step could prompt a very welcome (albeit delayed) media discourse on the potential harms of psychotherapy. Balancing the current discourse on treatments for depression is highly desirable.

Online press coverage of depression therapies in our survey appears to reflect 'issue framing', where, by highlighting certain aspects (and downplaying others) of topics, public perception can be warped (Scheufele & Tewksbury, 2007). We found that the majority of negative antidepressant articles focused upon the adverse effects associated with these medications, rather than highlighting the positive overall effect of these drugs on patients' lives – while, in contrast, focusing on the positive aspects of talking treatments for depression.

Another important point of note is that in a considerable number of articles, the article headline was more negative than the article itself (which was more balanced). Though it is promising that the exploration of the topic within the article is generally presented as more nuanced, this finding highlights a potentially damaging aspect of the press coverage of depression – as readers may not actually read the full article and only read the headline, or perhaps just the first few paragraphs. Indeed, a survey of Guardian readers reveals that 89% of people trust and accept what is written in the headline, without even reading the underlying article (Tobitt, 2018). Academic literature also reinforces the 'effects of subtle misinformation' that can be propagated by misleading headlines alone (Ecker, Lewandowsky, Chang, & Pillai, 2014).

We must consider possibilities as to why the bias against antidepressants exists in the media. In our opinion, it is likely that the bias is introduced by the journalists, rather than from the press releases which accompany major papers. The sub-editor in charge of headlines often makes attention-grabbing headlines which relate to more balanced articles (as highlighted in the above paragraph), clearly suggesting the bias of journalistic coverage, and in particular the role of sub-editors.

Further, we cannot identify any obvious temporal trend in the publication of articles/change in the balance of reporting, but it was our impression that the publication of large meta-analysis by Cipriani et al. (2018) in The Lancet seemed to trigger an upsurge in reporting in general, as many articles used this scientific publication as a base for their reporting. This has been noted by Adlington (2018), who wrote the BMJ 'The study finding morphed into a media message that all antidepressants are effective in all depression'.

The Royal College of Psychiatrists has noted that professional psychiatric opinion can sometimes be lost in news publications, and have therefore produced guidance encouraging psychiatrists to engage with the media, in a responsible way (Royal College of Psychiatrists, 2017). In this, they have advised that psychiatrists highlight (either via social media or by contacting the journalist) positive examples of reporting, as means of recognising and reinforcing these more accurate portrayals. Some charities have also expressed concerns about the media reporting of mental health conditions and have made resources available to aid publications in making responsible choices when reporting on the topic. For example, the charity Mind has Media Advisory Service and specific spokespeople who can be consulted to ensure media portrayals of mental health conditions are accurate and non-stigmatising.

Throughout the process of grading articles, one difficulty became apparent – 'depression' has become an everyday word, and is therefore used as such in the press. There is ambiguity surrounding 'depression' as a term used to cover everything from the psychiatric diagnosis of Major Depressive Disorder (as defined in the Diagnostic and Statistical Manual of Mental Disorders, 5th ed.; DSM-5) (American Psychiatric Association, 2013), through to signifying a potentially transient feeling of unhappiness. In many articles, it was unclear which of these the article referred to.

Although the results of this study are interesting and may point to wider negative coverage of antidepressants in the international media, it is important to note that this work is limited in terms of time and coverage. Our study was specific to the use of antidepressants/talking therapy in depression, and we did not include anxiety and anxiety-related disorders during our data collection. Given that antidepressants and talking therapies are also licensed treatments for anxiety and anxiety-related disorders (Craske & Stein, 2016), it would be an interesting area of future research to compare how the portrayal may or may not differ for these conditions. Further, only the British media was analysed and only five publications and 5 years were covered. Another important limitation is that this study only included online news publications, and could not sample other news sources. This is of particular note, given that televised news is the most-used news platform for the UK public (Ofcom, 2019). In future studies, a database such as Factiva could be helpful to employ, as Google Search results may vary over time as content is re-categorised over time. Additionally, a larger sample size of articles would help strengthen our conclusions.

Conclusion

In this study, we found that media coverage of antidepressants is considerably more negative than that of talking therapies for depression. Such representations likely contribute to widely held views that antidepressants are dangerous or unhelpful. Given 2802 Anushka Pathak *et al.*

that antidepressants are generally available and effective treatments for depression, this has the potential to be damaging to patients who are considering taking medication for their depression, and to patients on medication who may suddenly stop as a result of these negative portrayals in media.

Supplementary material. The supplementary material for this article can be found at https://doi.org/10.1017/S0033291720001427.

Acknowledgements. This research received no specific grant from any funding agency, commercial, or not-for-profit sectors.

Conflicts of interest. None.

References

- Adlington, K. (2018). Pop a million happy pills? Antidepressants, nuance, and the media. British Medical Journal (Clinical Research Ed.), 360, k1069. doi: 10.1136/bmj.k1069m.
- American Psychiatric Association, DSM-5 Task Force. (2013). Major depressive disorder. In *Diagnostic and statistical manual of mental disorders* (5th ed., pp. 160–168). Washington DC: American Psychiatric Publishing, Inc. doi: 10.1176/appi.books.9780890425596.dsm04.
- Amick, H. R., Gartlehner, G., Gaynes, B. N., Forneris, C., Asher, G. N., Morgan, L. C., ... Lohr, K. N. (2015). Comparative benefits and harms of second generation antidepressants and cognitive behavioral therapies in initial treatment of major depressive disorder: Systematic review and meta-analysis. *British Medical Journal (Clinical Research Ed.*), 351, h6019. doi: 10.1136/bmj.h6019.
- Angermeyer, M. C., van der Auwera, S., Carta, M. G., & Schomerus, G. (2017).Public attitudes towards psychiatry and psychiatric treatment at the beginning of the 21st century: A systematic review and meta-analysis of population surveys. World Psychiatry, 16(1), 50–61. doi: 10.1002/wps.20383.
- Aragonès, E., López-Muntaner, J., Ceruelo, S., & Basora, J. (2014). Reinforcing stigmatization: Coverage of mental illness in Spanish newspapers. *Journal of Health Communication*, 19(11), 1248–1258. doi: 10.1080/10810730.2013.872726.
- Borinstein, A. B. (1992). Public attitudes toward persons with mental illness. *Health Affairs*, 11(3), 186–196. doi: 10.1377/hlthaff.11.3.186.
- Boseley, S. (2008). Prozac, used by 40 m people, does not work say scientists. *The Guardian*, February 26. Retrieved from https://www.theguardian.com/society/2008/feb/26/mentalhealth.medicalresearch.
- Boseley, S. (2018). The drugs do work: antidepressants are effective, study shows. *The Guardian*, February 21. Retrieved from https://www.theguardian.com/science/2018/feb/21/the-drugs-do-work-antidepressants-are-effective-study-shows.
- Chen, M., & Lawrie, S. (2017). Newspaper depictions of mental and physical health. BJPsych Bulletin, 41(6), 308–313. doi: 10.1192/pb.bp.116.054775.
- Cipriani, A., Furukawa, T. A., Salanti, G., Chaimani, A., Atkinson, L. Z., Ogawa, Y., ... Geddes, J. R. (2018). Comparative efficacy and acceptability of 21 antidepressant drugs for the acute treatment of adults with major depressive disorder: A systematic review and network meta-analysis. *The Lancet*, 391(10128), 1357–1366. doi: 10.1016/S0140-6736(17)32802-7.
- Craske, M. G., & Stein, M. B. (2016). Anxiety. The Lancet, 388(10063), 3048–3059. doi: 10.1016/S0140-6736(16)30381-6.
- Crawford, M. J., Thana, L., Farquharson, L., Palmer, L., Hancock, E., Bassett, P., ... Parry, G. D. (2016). Patient experience of negative effects of psychological treatment: Results of a national survey. *The British Journal of Psychiatry*, 208(3), 260–265. doi: 10.1192/bjp.bp.114.162628.
- Daily Express. (2014). Richard E. Grant: "Therapy saved my life." Daily Express, April 28. Retrieved from https://www.express.co.uk/celebrity-news/472827/Richard-E-Grant-Therapy-saved-my-life.
- Daily Express. (2018). Antidepressants DO work and millions more should be on them. *Daily Express*, February 22. Retrieved from https://www.express.co.uk/life-style/health/922423/depression-news-antidepressants-drugs-work-study-oxford-university-UK-mental-health.
- Day, D. M., & Page, S. (1986). Portrayal of mental illness in Canadian newspapers. The Canadian Journal of Psychiatry, 31(9), 813–817. doi: 10.1177/ 070674378603100904.

Dietrich, S., Heider, D., Matschinger, H., & Angermeyer, M. C. (2006). Influence of newspaper reporting on adolescents' attitudes toward people with mental illness. Social Psychiatry and Psychiatric Epidemiology, 41(4), 318–322. doi: 10.1007/s00127-005-0026-y.

- Dunne, D. (2017). Children YOUNGER than SIX are being prescribed antidepressants by doctors who are using them as a "sticking plaster", experts warn. Daily Mirror, June 20. Retrieved from https://www.daily-mail.co.uk/health/article-4621124/Antidepressants-prescribed-children-six. html.
- Ecker, U. K. H., Lewandowsky, S., Chang, E. P., & Pillai, R. (2014). The effects of subtle misinformation in news headlines. *Journal of Experimental Psychology: Applied*, 20(4), 323–335. doi: 10.1037/xap0000028.
- James, O. (2014). Is the NHS's therapy for depression a total waste of time? GOOD HEALTH viewpoint. *Daily Mail*, October 21. Retrieved from https://www.dailymail.co.uk/health/article-2800946/is-nhs-s-therapydepression-total-waste-time.html.
- Johnston, L. (2017). Mother says antidepressant drugs turned her son into a "psychotic killer." *Daily Express*, July 30. Retrieved from https://www. express.co.uk/life-style/health/834580/antidepressants-drug-murder-killing-rampage-Shane-Clancy.
- Lawrie, S. M. (2000). Newspaper coverage of psychiatric and physical illness. Psychiatric Bulletin, 24(3), 104–106. doi: 10.1192/pb.24.3.104.
- Lubian, K., Weich, S., Stansfeld, S., Bebbington, P., Brugha, T., Spiers, N., ... Cooper, C. (2016). Mental health treatment and services. In *Mental health and wellbeing in England: Adult psychiatric morbidity survey 2014* (pp. 70–105). Leeds: NHS Digital.
- Malhi, G. S., & Mann, J. J. (2018). Depression. *The Lancet*, 6736(18), 1–13. doi: 10.1016/S0140-6736(18)31948-2.
- McCormack, J., & Korownyk, C. (2018). Effectiveness of antidepressants. British Medical Journal, 360, k1073. doi: 10.1136/bmj.k1073.
- National Institute for Health and Care Excellence. (2018). Depression in adults: recognition and management. Retrieved from https://www.nice.org.uk/guidance/cg90/chapter/1-Guidance#care-of-all-people-with-depression.
- National Readership Survey. (2016). Newsbrands: Print/PC. NRS October '15 September '16 / comScore September '16. Retrieved from http://www.nrs.co.uk/latest-results/nrs-padd-results/newspapers-nrspaddresults/#.
- Nutt, D. J., & Sharpe, M. (2008). Uncritical positive regard? Issues in the efficacy and safety of psychotherapy. *Journal of Psychopharmacology*, 22(1), 3–6. http://doi.org/10.1177/0269881107086283.
- Office of Communications. (2019). News Consumption in the UK: 2019. Retrieved from https://www.ofcom.org.uk/__data/assets/pdf_file/0027/157914/uk-news-consumption-2019-report.pdf.
- Parker, G. (2018). The benefits of antidepressants: News or fake news? *The British Journal of Psychiatry*, 213(2), 454–455. doi: 10.1192/bjp.2018.98.
- Parry, L. (2016). Common antidepressants "do NOT increase the risk of heart attacks and stroke." *Daily Mail*, March 22. Retrieved from https://www.daily-mail.co.uk/health/article-3505142/Common-antidepressants-NOT-increase-risk-heart-attacks-stroke.html.
- Parsons, J. (2015). Antidepressant drugs are "immensely harmful" and responsible for thousands of deaths, claims leading scientist. *Daily Mirror*, May 13. Retrieved from https://www.mirror.co.uk/news/technology-science/science/antidepressant-drugs-immensely-harmful-responsible-5690650.
- Pieters, G., De Gucht, V., & Kajosch, H. (2003). Newspaper coverage of psychiatry and general medicine: Comparing tabloids with broadsheets. *Psychiatric Bulletin*, *27*(7), 259–260. doi: 10.1192/pb.27.7.259.
- Royal College of Psychiatrists. (2017). Public Education Handbook: Practical Advice on Working with the Media. Royal College of Psychiatrists, London. https://www.rcpsych.ac.uk/docs/default-source/news-and-features/ media-centre/public_education_handbook_2017.pdf?sfvrsn=a3e007a7_2
- Scheufele, D. A., & Tewksbury, D. (2007). Framing, agenda setting, and priming: The evolution of three media effects models. *Journal of Communication*, 27, 9–20. 10.1111/j.0021-9916.2007.00326.x.
- Smith, M. (2017). How left or right-wing are the UK's newspapers? YouGov, March 7. Retrieved from https://yougov.co.uk/topics/politics/articlesreports/2017/03/07/how-left-or-right-wing-are-uks-newspapers.
- Thornicroft, A., Goulden, R., Shefer, G., Rhydderch, D., Rose, D., Williams, P., ... Henderson, C. (2013). Newspaper coverage of mental illness in England 2008–

- 2011. British Journal of Psychiatry, 202(s55), s64–s69. doi: 10.1192/bjp.bp.112.112920.
- Thornton, J. A., & Wahl, O. F. (1996). Impact of a newspaper article on attitudes toward mental illness. *Journal of Community Psychology*, 24(1), 17–25. doi: 10.1002/(SICI)1520-6629(199601)24:1<17::AID-JCOP2>3.0. CO;2-0.
- Tobitt, C. (2018). Sun remains most-read UK newsbrand as new Pamco data shows Guardian and Observer most trusted. *Press Gazette*. Retrieved from https://www.pressgazette.co.uk/sun-remains-most-read-uk-newsbrand-as-new-pamco-data-shows-guardian-and-observer-most-trusted/.
- Warren, J. (2018). Network meta-analysis of antidepressants. *The Lancet*, 392 (10152), 1010–1011. doi: 10.1016/S0140-6736(18)31797-5.