

Accepted 9.1.2021

Are antidepressants overprescribed? Patients' experiences of the prescribing process

READ, J., GIBSON, K., CARTWRIGHT, C.

Abstract

An online survey was completed by 1829 New Zealand adults prescribed anti-depressants. Only 43% were experiencing self-reported 'severe' depression when first prescribed anti-depressants. Thus, most prescriptions were for depression that was self-reported as mild or moderate, despite studies suggesting that antidepressants are no more effective than placebo at these levels. GPs prescribed at lower depression levels than psychiatrists and spent less time with patients. 35% of GPs and 42% of psychiatrists reportedly gave no information about adverse effects. Almost no prescribers gave information about adverse effects in the personal and interpersonal domains, or about withdrawal effects. Closer adherence to evidence-based prescribing and to the principle of informed consent may lead to a reduction in unnecessary, ineffective, and potentially harmful prescribing.

Keywords: Antidepressants, Prescribing process, General practitioners, Psychiatrists, Adverse effects, Informed choice

INTRODUCTION

In the U.S.A. 8% of the population aged over 12, used antidepressants, in a given month, between 1999-2002, increasing to 13% (37 million adults) by 2011-2014 (Pratt et al., 2017). In the U.K. annual antidepressant [AD] prescribing has doubled over ten years. By 2017-2018, 7.3 million adults (17% of the adult population) were prescribed ADs, over twelve months, in England alone; with even higher rates for women, older people and people living in deprived areas (Taylor et al., 2019). Similarly high prescription rates are found in

Australia, Belgium, Canada, Denmark, Iceland, Portugal and Sweden (OECD, 2017). In New Zealand, where the current study was conducted, the number of annual recipients for people aged 15 or over increased by 21% from 2008 to 2015, in which year 13% of all New Zealanders were prescribed an antidepressant (16% of females and 9% of males) (Wilkinson & Muller, 2018).

These continual increases in already high rates of prescribing occur in the context of research which has raised significant concerns about both efficacy and safety. Nearly two decades ago it was identified that less than half of trials find ADs superior to placebo (Khan et al. 2002; Turner et al., 2008). We subsequently learned that this lack of difference between ADs and placebos is particularly frequent in properly blinded, non-industry studies (Khan & Brown 2015; Moncrieff, 2015). A meta-analysis found that ‘the overall effect of new-generation antidepressant medications is below recommended criteria for clinical significance’ (Kirsch et al. 2008, p. 265) with no benefit compared to placebo for all but a tiny minority of recipients, namely ‘patients at the upper end of the very severely depressed category’ (p. 260). There is evidence that antidepressants are no more effective than placebo in anyone - regardless of severity. Moncrieff and Kirsch (2015) have shown that the differences (even those in people with severe depression) are well below empirically evidenced criteria for clinical relevance. A recent meta-analysis, of 131 placebo-controlled trials, confirmed that the overall effect size falls short of “clinical significance” and established that ‘The harmful effects of SSRIs versus placebo for major depressive disorder seem to outweigh any potential small beneficial effects’ (Jakobsen et al., 2017).

High rates of adverse biological effects have long been identified, including: nausea, impotence, insomnia, diarrhoea, dry mouth, dyspepsia, and sweating (Antonuccio & Healy, 2012; Moret et al. 2009; Uher et al. 2009). More recently equally high rates of adverse effects in the personal and interpersonal domains have been found. A UK survey of nearly 1,500 AD

users found that over half experienced adverse effects, with 44% reporting that ADs affected their sex lives, 27% their ability to work or study, and 21% their relationships with family or friends (MIND 2012). An even larger sample of AD recipients, the 1,829 involved in the current study, reported the following rates of adverse effects: sexual difficulties - 62%, emotionally numbing - 60%, drowsiness - 58%, dry mouth - 58%, weight gain - 56%, withdrawal effects - 55%, feeling not like oneself - 52%, agitation - 47%, reduction in positive feelings - 42%, caring less about others - 39%, and suicidality - 39% (Read et al. 2014).

Researching the doctor-patient interaction during which ADs are first prescribed, from the patients' perspective, may shed some light on this phenomenon of extremely high rates of prescribing despite modest efficacy and significant adverse effects. Examining doctor behaviours, such as degree of information sharing and extent to which additional treatment suggestions are made, may inform future clinical practice.

The current sample's experiences of their interactions with the prescriber, have previously been reported to be related to whether the patients experienced the ADs as effective. Following logistic regression analysis and controlling for a range of other psychosocial variables, self-reported efficacy was independently predicted by both the amount of information about ADs offered by the prescriber and the perceived quality of the relationship between the prescriber and the patient (Read et al. 2015).

The current paper, therefore, reports, using the largest online survey to date, on: amount of time spent with patient, the sharing of five types of information about ADs, the offering of six potential treatment suggestions besides ADs, the perceived quality of the prescriber-patient relationship, and the extent to which the patient felt the doctor understood their problems.

Some commentators blame the ever increasing epidemic of AD prescribing on a combination of an overly biological approach towards human distress adopted by psychiatry and the powerful influence of the drug companies on both prescribers and consumers (Dowrick & Frances 2013; Healey 2004; Gøtzsche 2013; Moncreiff 2015), which is often exerted via industry-sponsored websites (Read & Cain 2013; de Wattignar & Read 2009).

Meanwhile some psychiatrists blame, as well or instead, General Practitioners (GPs), who certainly have long since surpassed psychiatrists as the most frequent prescribers of ADs. For example:

‘To be sure, in some primary care settings, antidepressants are prescribed too casually; after too little valuation time; and for instances of normal stress or everyday sadness, rather than for Major Depressive Disorder’. (Pries 2014)

‘What we are observing is that Americans are increasingly viewing psychiatric medications as a solution for a wide range of social and interpersonal problems and for dealing with daily stress [and] general medical providers appear to be going along with this trend’ (Mojtabai 2011).

This paper, therefore, also analyses whether there are significant differences between GPs and psychiatrists, not only in terms of information sharing, making non-medical treatment recommendations, and the quality of the doctor-patient relationship, but also in terms of the severity of depression leading to a first prescription and also in whether diagnostic criteria for depression were met.

METHODS

The Questionnaire

The *Views and Experiences of Antidepressants in New Zealand* questionnaire (Cartwright et al., 2016; Gibson et al., 2018; Read et al. 2014, 2015, 2016, 2018) has 47 questions, covering: demographics; the prescribing process, including the profession of the prescriber and information given about ADs; information about AD usage and perceptions of their effectiveness; self-reported level of depression and number of Diagnostic and Statistical Manual (DSM) symptoms for Major Depressive Disorder at time of first prescription; side-effects; benefits; experiences of alternative treatment options; and beliefs about the causes of depression. This anonymous questionnaire has multiple-choice questions, rating scales and open-ended questions.

Following ethics approval from the University of Auckland Human Participants Ethics Committee, the questionnaire was placed online. A webpage advertising the study was established. This webpage provided the participant information for the study and a link to the questionnaire. The study was further publicised in the media via media releases, advertisements and interviews with the researchers.

Participants

The criteria for participation included having been prescribed ADs in the preceding five years (regardless of when first prescription was made) and being 18 years of age or over. Of the 2,171 people who started the survey, 295 stopped before the end of the second of the eight sections. These responses were not analysed. Of the remaining 1876, 45 referred to medications other than ADs. Of the remaining 1,831, the latter of each of two pairs of responses with the same IP address (indicating use of same computer) and similar responses, were discarded.

Between 1,812 and 1,827 of the remaining 1,829 participants responded to the demographic questions. Females constituted 76.6% of the sample. The modal age group was 36-45 (24.2%); 16.3% were 18 to 25, and 15.9% were 56 or older. A large majority, 92.1%, identified as 'New Zealand/European'; 2.9% as Maori, 1.2% as Asian, 0.4% as Pacific Islander and 3.5% as 'Other'.

Half (49.6%) had a university degree; 26.1% had gained a diploma or certificate after high school, 17.2% had completed high school, and 7.1% did not complete high school. (In 2006, 14.2% of adult New Zealanders had an undergraduate degree or higher and 22.4 percent had no formal qualification). Annual income (in NZ dollars) ranged from less than \$10,000 (15.0%) to more than \$100,000 (7.7%). The modal income was \$40,000 to \$59,999 (22.1%). (The median income of the NZ population in 2012 was \$29,000).

About half (52.6%) reported first being prescribed ADs between 2000 and 2009; with 25.9% reporting 2010 to 2013; 16.1% 1990 to 1999, and 5.4% prior to 1990. Nearly all (97.4%) had taken the ADs when prescribed them, and 69.1% were still taking them. Just over half (51.7%) had taken them for more than three years, and 7.8% for less than three months.

The majority of the 2,819 respondents (1,501, 82.1%) had first been prescribed ADs by a GP; and 296 (16.2%) by a psychiatrist. Thirty-two (1.7%) either cited other practitioners or did not respond to this question.

Data Analysis

The relationships between a range of dependent variables and the key independent variable of Prescriber (GP vs. Psychiatrist) were explored with either chi-squares (χ^2) where the dependent variable was categorical, or two-tailed t-tests for continuous variables.

Relationships of the independent variables and the potentially confounding variable of

depression severity were tested with chi-squares, spearman rank coefficients (r) or t-tests, as appropriate. (Only *significant* relationships between depression severity and independent variables are reported in the Results section). Where both Prescriber and depression severity were related to an independent variable a univariate analysis of variance (ANCOVA) (or a three-way contingency analysis in the one instance where all three variables were categorical) was conducted to control for depression severity, and thereby ascertain whether Prescriber was related to the dependent variable independently of depression severity.

Because of the large number of analyses, only results at the $p < .025$ were considered to be statistically 'significant', to reduce the probability of type I errors (false positives).

RESULTS

Severity of Depression

In the 'year before taking antidepressants' the self-reported severity of depression was:

'severe' - 42.7%, 'moderate' - 37.8%, 'mild' - 11.8%, 'not at all' - 7.6%. Depression was

reported as greater for people who had first been prescribed ADs by psychiatrists [PSY-PTs] than for those first prescribed ADs by general practitioners [GP-PTs] ($X^2 = 27.8$, $p < .001$).

More than half (55.7%) of PSY-PTs rated their depression as 'severe', compared to 40.1% of GP-PTs. Therefore depression severity was seen as a potentially confounding variable in the relationships between the Prescriber variable and the other variables analysed in this study. In no instances, however, did ANCOVAs find that depression severity accounted for a relationship between the Prescriber variable and any of the independent variables reported on below.

Although PSY-PTS reported more DSM-IV symptoms of depression (mean = 7.04, s.d. = 2.95) than GP-PTs (mean = 6.59, s.d. = 2.74) ($t = 2.52$, $df 1795$, $p = .012$), there was

not a significant difference between the two groups in the proportion of patients that met DSM-IV criteria for a Major Depressive Disorder (72.8% overall).

Demographics, Timeframe and Antidepressants

Who first prescribed the ADs was unrelated to the gender, age, ethnicity, level of education or sexual orientation of the patients. PSY-PTs, however, had significantly lower current incomes than GP-PTs ($t = 3.95$, $df 1,781$, $p < .001$).

On average GP-PTs were first prescribed ADs later than PSY-PTs (2004.7 vs. 1999.9) ($t = 8.72$, $df 374.3$, $p < .001$), i.e. GPs were responsible for an increasing proportion of AD prescriptions over time. Severity of depression was also related, negatively, to recency of prescription ($r = -0.12$, $p < .001$); i.e. in more recent years people were being prescribed ADs at lower reported levels of depression. However, when an ANCOVA controlled for depression severity, the GP-PT group remained independently predictive of recency of prescription ($p < .001$).

The PSY-PTs took the ADs for longer than the GP-PTs (mean/s.d = 5.24/1.43 vs 4.49/1.71 years respectively) ($t = 7.82$, $df 460.6$, $p < .001$). Depression severity was also related, positively, to length of time on ADs ($r = .21$, $p < .001$). However, when an ANCOVA controlled for depression severity, the PSY-PT group remained independently predictive of a longer time on ADs. When recency of prescribing was added as an additional covariate the PSY-PT group remained independently predictive of a longer time on ADs.

There was not a significant difference in terms of how many were still taking the drugs at the time of survey completion (69.1% overall).

The three ADs most commonly prescribed by GPs were: citalopram (32.6%), fluoxetine (28.4%) and paroxetine (13.3%). The three ADs most commonly prescribed by Psychiatrists were: fluoxetine (23.7%), citalopram (22.6%) and venlafaxine (20.8%).

Interaction with Prescriber

Time spent with patient.

Responses to the question ‘Approximately how long did the doctor spend with you on the day they prescribed antidepressants?’ were: 5 minutes - 5.4%; 15 minutes - 36.6%; 30 minutes - 33.6%; 45 minutes - 12.9%; 60 minutes - 7.3%; more than 60 minutes - 4.3%. Psychiatrists spent far more time with patients ($X^2 = 333.1$, $p < .001$). The modal time patients spent with a GP (40.3%) was 15 minutes. The modal time spent with a psychiatrist (25.1%) was 60 minutes. Depression severity was also related, positively, with time spent ($r = .14$, $p < .001$). However, after an ANCOVA controlled for depression severity, the PSY-PT group remained independently predictive of length of time spent with prescriber ADs ($p < .001$).

Quality of relationship.

Responses to ‘How would you describe your relationship with the doctor?’ were: ‘very good’ - 40.7%; ‘good’ - 35.4%; ‘not sure’ - 16.3%; ‘not good’ - 5.2%; not at all good’ - 2.4%. Table 1 shows that GP-PTs were more satisfied with the quality of their relationship with the prescribing doctor than were PSY-PTs ($X^2 = 58.1$, $p < .001$). The relationship was categorised as ‘very good’ by 43.3% of GP-PTs and 26.7% of PSY-PTs.

Responses to ‘How well do you think your doctor understood your problems?’ were: ‘a lot’ - 33.8%; ‘quite a lot’ - 26.9%; ‘OK’ - 21.4%; ‘not a lot’ - 13.9%; ‘not at all’ - 4.0%. GP-PTs responded more positively than PSY-PTs ($X^2 = 17.1$, $p < .002$). Thirty five percent of GP-PTs responded ‘a lot’, compared to 25.7% of PSY-PTs (see Table 1).

+ + *Insert Table 1 about here* + +

Information.

Table 2 summarises the findings about information sharing. More than half of all respondents (58.7%) were told how ADs work; with no significant difference between the two groups. Most patients (77.8%) were told what benefits they could expect from taking ADs; with no significant difference between the groups. Most (85.9%) were told what problem(s) the ADs were being prescribed for; again, with no significant difference between groups.

As previously reported (Read et al, 2018), nearly two thirds (64.2%) were told about at least one potential adverse effect, most commonly nausea (16.8%) and weight changes (10.7%), but less than 1% were told about withdrawal effects or dependence. More GPs (65.4%) than psychiatrists (58.1%) shared information about one or more possible adverse effects ($X^2 = 5.5$, $p = 0.019$). Depression severity was also related, positively, to being informed about adverse effects ($X^2 = 19.41$, $p < .001$). A three way contingency analysis revealed that only with severely depressed patients were GPs significantly more likely than psychiatrists to give information about adverse effects (70.5% vs 59.3%, $X^2 = 6.8$, $p = .009$), but that there was no significant difference between GPs and psychiatrists with mildly or moderately depressed patients.

More than half (54.9%) were told how long to take the drugs for. They were told: ‘less than 3 months’ - 5.9%; ‘4-6 months’ - 21.3%; ‘7-12 months’ - 19.9%; ‘more than a year’ - 25.5%; ‘until you felt better’ - 27.5%. GPs were more likely to tell patients how long to take the ADs ($X^2 = 5.54$, $p = .019$). Psychiatrists told their patients to take them for longer than was the case for GPs ($t = 3.3$, $df 744$, $p = .001$).

Depression severity was also related, positively ($X^2 = 32.1$, $p < .001$). However, after an ANCOVA controlled for depression severity, the PSY-PT group remained independently predictive (albeit less strongly) of being told to take the ADs for longer ($p = .007$). How long

people were told to take the drugs was highly predictive of how long they actually took them ($X^2 = 137.49$, $p < .001$).

++ Insert Table 2 about here ++

Additional treatment recommendations.

Respondents reported that during the appointment at which the ADs were prescribed six additional suggestions were made, with the following frequencies:

‘counsellor/psychologist/psychotherapist’ - 73.8%; ‘exercise schedule’ - 43.4%; ‘social activities’ - 23.6%; ‘nutritional advice’ - 20.6%; ‘relationship counselling/family therapy’ - 13.6%; and ‘support group’ - 13.2%. The mean number of recommendations made was 1.88 (s.d. = 1.47). The modal response was one recommendation (28.7%). Approximately one in every five patients (18.7%) received none of the six types of recommendation. Psychiatrists made more of the six recommendations (mean = 2.20, s.d. = 1.57) than GPs (mean = 1.82, s.d. = 1.44) ($t = 4.1$, $df = 1795$, $p < .001$). Specifically, psychiatrists were more likely than GPs to suggest ‘counsellor/psychologist/psychotherapist’, ‘relationship counselling/family therapy’ and ‘support group’ (all $p < .001$) (see Table 3).

Number of recommendations was also related, positively, to depression severity ($r = .14$, $p < .001$). However, after an ANCOVA controlled for depression severity, the PSY-PT group remained independently predictive of number of recommendations ($p = .001$).

++ Insert Table 3 about here ++

Outcomes

Of the 1,710 (93.5%) participants who answered the question ‘Did the anti-depressants reduce your depression’, 1,416 (82.8%) ticked ‘yes’ and 294 (17.2%) ticked ‘no’. Similarly,

of the 1691 (92.5%) who answered the question ‘While taking anti-depressants my quality of life was...’ 1,443 (85.3%) ticked either ‘slightly improved’ or ‘greatly improved’, 99 (5.9%) ticked ‘unchanged’ and 149 (8.8%) ticked either ‘slightly worse’ or ‘a lot worse’. There was no significant difference between the GP-PTs and PS-PTs on either of these two outcome measures.

On the Total Adverse Effects score (20 effects scored from 0- 3 on severity) the PSY-PTs produced a significantly higher mean (17.08, s.d. = 10.75) than the GP-PTs (13.71, s.d. = 10.25) ($t = 4.0$, $df 1,103$, $p < .001$). The greatest differences in terms of specific symptoms were: suicidality ($p < .001$), withdrawal effects ($p < .001$), dry mouth ($p = .001$) and agitation ($p = .001$).

DISCUSSION

Limitations

Some of the data is retrospective and therefore subject to the fallibilities of memory of experiences from weeks to several years in the past. The majority (69%), however, were still taking the ADs at the time of completing the questionnaire.

This sample, despite being the largest ever surveyed, was not representative of the New Zealand population. Maori, Pacific Islanders, older people, and poorer and less educated people were underrepresented. A New Zealand sample is clearly not representative of the rest of the world, but the results were broadly similar to a subsequent international survey using an almost identical questionnaire (Read, 2020; Read & Williams, 2018), except that more New Zealanders were told about adverse effects.

The possibility that an online survey might have disproportionately attracted people with ‘an axe to grind’ about ADs, seems unlikely given that 83% reported that the drugs had helped improve their depression.

Unnecessary Prescribing and Placebo Effects

When trying to make sense of the very high AD prescribing rates, one of the most important findings from this survey is the self-reported levels of depression prior to first prescription. The fact that only 42.7% of respondents described their depression as ‘severe’ should be considered in light of the meta-analysis finding that ADs are more effective than placebo only for people ‘at the *upper end* of the *very* severely depressed category’ [italics added] (Kirsch et al., 2008, p. 260). It can be concluded, therefore, that the majority of AD recipients, at least in New Zealand, are probably being prescribed ADs unnecessarily, in that they are unlikely to be receiving any benefit that can be attributed to the medication. Furthermore, one in five (19.4%) reported that they were only ‘mildly’ or ‘not at all’ depressed, and more than one in four (28.2%) did not meet diagnostic criteria for Major Depressive Disorder. (It is unlikely that many respondents had been prescribed ADs for reasons other than depression given that 93.5% responded to the question ‘Did the anti-depressants reduce your depression?’)

This is by no means the first study to identify high rates of non evidence-based, unnecessary prescribing. For example, a recent study found that 69% of AD recipients in Baltimore had never met DSM criteria for Major Depressive Disorder. The researchers concluded that ‘Our data indicate that antidepressants are commonly used in the absence of clear evidence-based indications’ (Takanayagi et al. 2015, p. 40). Of the approximately half a million US Veterans who were prescribed ADs outside of mental health services in 2010, 51% had no psychiatric diagnosis; and those aged 65 or older were more than four times more likely than those under 40 to be prescribed psychiatric drugs without a diagnosis (Wiechers et al. 2014). A previous paper has reported that within the current sample people over 55 were prescribed ADs with fewer DSM symptoms of depression and were more likely

to be prescribed ADs without meeting DSM criteria for a Major Depressive Episode (Read et al. 2016).

The fact that the vast majority of recipients were receiving no benefit from the chemical properties of their AD pills does not mean that the process of seeing a doctor and being given the pills did not help them, especially if the doctor listened well and shared useful information. The vast majority (82.8%) believed that the ADs reduced their depression. However, as reported in a previous paper, this belief was independently predicted by a number of non-pharmacological factors, including the quality of the relationship with the prescriber and being fully informed about ADs by the prescriber (Read et al. 2015). Placebo effects are real effects. A *British Medical Journal* review of diagnosis of, and treatment for, depression found that ‘High rates of placebo response account for much of the seeming beneficial effects of medication and this should be discussed sensitively with patients, who also need to be made aware of the side-effects, risks and costs associated with anti-depressants’ (Dowrick & Frances, 2013).

Interaction with Prescriber

Time spent with patient.

It is of obvious concern that for 42.0% of people ADs were first prescribed on the basis of a meeting lasting 15 minutes or less. Even accounting for possible previous meetings where the pros and cons of, and alternatives to, ADs might have been discussed, this remains problematic. While it is, at first glance, understandable that more time was taken with the more severely depressed, taking time with those who reported only ‘mild’ depression (50% of whom spent 15 minutes or less with the prescriber) might have allowed for greater exploration of effective alternatives, and, given that the lower the level of depression the more spontaneous remissions, for greater probability of a negotiated ‘wait and see’ approach.

Information.

Despite these rather short meeting times, an impressive amount of information about ADs was imparted and, significantly, remembered months or years later. (Furthermore, even more information may have been imparted but forgotten). More than half were told how ADs work and how long to take them. More than three quarters were told what they were being prescribed for and what benefits they could expect. The amount of time taken to impart all this information (probably after a decision to prescribe was taken) suggests that less time may have been spent on discussing whether or not ADs were the best approach, and what the alternatives were, *before* deciding to prescribe.

The finding that more than a third of respondents (36%) reported being told nothing at all about adverse effects is unsatisfactory. The finding is similar to a finding of 41% of 107 patients of British GPs being given no information (Byng et al. 2007). An international survey of 1,431 AD users from 38 countries, using an almost identical questionnaire to the current study, found that 64% had been told nothing at all about any adverse effects (Read & Williams, 2018) and, as was the case in the New Zealand sample (Read et al., 2018), less than 1% had been told about withdrawal effects (Read, 2020). Rarely or never mentioning adverse effects in the personal and interpersonal domains (e.g. emotional numbing, and caring less about other people), or withdrawal effects (Read, et al. 2014), is somewhat excusable given that drug companies, researchers and national and professional guidelines tend to ignore those effects. Nevertheless, even the most mentioned adverse effect, nausea, was mentioned only 17% of the time.

A recent review (Davies & Read, 2019a), commissioned by a UK parliamentary group to inform the Public Health England review (Taylor et al., 2019), found that just over half of people withdrawing from antidepressants experience withdrawal, and that half of these describe the withdrawal as ‘severe’. Despite concerted efforts, spanning two decades,

by drug companies and numerous psychiatrists, with vested professional and financial interests, to denigrate or minimise the evidence (Davies & Read, 2019b, Hengartner, 2019) the UK's National Institute for Health and Care Excellence (NICE) has amended its guidelines accordingly.

From now on there will be no excuse, at least in the UK, for not informing potential recipients about withdrawal. This is hugely important because the ever-increasing prescribing rates are fuelled primarily by long term use, much of which is the result of difficulty getting off the drugs. As early as 2011, half of AD users in England, about 3.5 million people, were taking ADs for longer than two years (Johnson et al., 2012). About half of AD users in the U.S. (about 18 million) take them for at least 5 years (Mojtabai & Olfson, 2014). In the current, New Zealand, sample, just over half (52%) had taken them for more than three years. High rates of long-term prescribing have also been uncovered in Australia (Ambresin et al., 2015) and the Netherlands (Eveleigh, 2015).

The principle of 'informed choice' should be a bedrock ethic for all medical and mental health staff. This failure to fully inform patients about all common adverse effects may be a significant factor contributing to the high numbers of people now taking ADs. In the survey of nearly 1500 AD recipients in the UK 45% thought they had not been given enough information about the drugs (MIND 2012), although the percentage was lower among those prescribed ADs more recently. This encouraging finding was replicated in the current study; being told about adverse effects was related to recency of first prescription (Read et al. 2014).

Quality of relationship.

It is important to note that most people (61%) thought the prescribing doctor understood their problem 'a lot' or 'quite a lot'; and an even more (76%) described the relationship as 'very good' or 'good'. Unsurprisingly, the length of the meeting was highly positively related to

both these variables ($r = 0.42$ and 0.33 respectively, both $p < .001$). The additional finding that both these variables are related to perceived positive outcome (Read et al. 2015) strengthens the argument that spending a little more time at the outset may be a good investment of limited resources.

Additional treatment recommendations.

Prescribers were clearly aware that ADs represent just one approach to depression, recommending, on average, two additional interventions. (The actual number may well have been higher as respondents were only given a list of six to report on, and recommendations for some of these six may have been forgotten). There was, however, considerable variation, with nearly half (47%) receiving one or no recommendations. Limited resources, for services and patients alike, might suggest that the relatively cheap approaches such as exercise (43%), social activities (24%) and nutritional advice (21%) could usefully be suggested more often, as either adjuncts or alternatives.

Confirmation from an open question

At the end of the questionnaire participants had been asked 'Is there anything else you would like to tell us about your experience of taking medication?' Open questions like this allow participants to spontaneously identify what is important to them, rather than answer questions about what researchers prioritise. The responses have been published elsewhere, with multiple examples (Read et al., 2020). It is worth noting, here, that the most common positive theme and the most common negative theme were both the relationship to the prescriber, rather than the drugs themselves. Thus, while 23% commented on adverse effects of the drugs, 32% wrote about unsatisfactory aspects of their relationship with the prescriber, most commonly lack of information about adverse effects and withdrawal, failure to offer alternative treatments, and insufficient emotional support. A collaborative approach was much appreciated.

Differences between GPs and Psychiatrists

The relationship between GP being the prescriber and recency of prescription is in keeping with the growing role of GPs in the prescribing of ADs. It does seem that GPs (at least in New Zealand) do, as suggested by some psychiatrists (Mojtobai, 2011; Pries, 2014) prescribe at lower levels of depression. They are, however, no more or less likely to prescribe to people who do not meet diagnostic criteria for Major Depressive Disorder.

It is no surprise to find that GPs spend significantly less time with patients. What is more interesting is that the extra time psychiatrists spend with patients does not lead to more patients feeling that they have a good relationship with, or are understood by, their psychiatrist. GPs fared better than psychiatrists on both of these variables. This may be partially understood in terms of either the ongoing nature of the relationships GPs often have with patients, and/or the fact that psychiatrists are inevitably more often in coercive relationships with patients than are GPs. However a study of non-compulsory outpatient prescribing by 43 psychiatrists found that the consultations in which ADs were prescribed lasted an average of 17.5 min, that the most commonly discussed topic over the course of treatment was ‘medication adherence’ and that in none of the 200 meetings studied was the patient ‘given an opportunity to talk’(Linden & Westram, 2011).

The finding that psychiatrists are less likely to provide information about adverse effects may, perhaps, be related to a greater fear that such information may reduce ‘compliance’. This hypothesis receives some support from the fact that the difference between the two professions occurred only with patients reporting ‘severe’ depression and probably, therefore, perceived to be at greater risk of suicide, which some psychiatrists may believe is preventable with ADs.

It is not clear why GPs made fewer additional treatment recommendations than

psychiatrists. An earlier survey of 86 New Zealand GPs had revealed that their reluctance to refer depressed women to nonmedical treatments was not to do with an overly bio-medical view of the causes of depression or because of lack of belief in alternatives to ADs, but because of the 'high cost and limited availability of psychological treatments and support services' (Wilson & Read 2001, p.84). This does not account, however, for not suggesting exercise and social activities, or giving nutritional advice, more often; which both professions could easily do, as adjuncts or alternatives for severe depression and as alternatives for mild or moderate depression.

Conclusions

It seems there are as many similarities between the two professions as differences. So, rather than singling out either profession for criticism or praise it seems more in keeping with our data to focus on areas where all prescribers might improve their practice. While GPs may be even more likely than their specialist colleagues to prescribe at lower levels of depression it seems more productive to highlight the fact that many prescriptions by *both* professions are not evidence-based, in that they appear to be prescribed at levels of depression at which ADs have been repeatedly shown to be no more effective than placebo. While psychiatrists are telling people to take their pills for longer than GPs, *both* groups should avoid prescribing these drugs for more than a few weeks before reviewing, because of the emerging evidence that these drugs have serious withdrawal effects (Cartwright et al. 2016 ; Davies & Read, 2019a; Haddad & Anderson 2007; Nielsen et al. 2012; Read et al. 2014, 2018, 2020; Read & Williams, 2018). Furthermore, *both* professions could better serve their patients by taking enough time, whenever possible, to ensure that the patient feels understood, to consider all alternatives *before* prescribing ADs, and to always give sufficient information - regardless of

one's fears that too much might lead to 'non-compliance' - to ensure that one's practice is in keeping with the fundamental ethical imperative of 'informed choice'.

Finally, feeling depressed when depressing things have happened is not a disorder in need of biological correction. Depression is often a meaningful, healthy, functional, and potentially growth-enhancing response to losses and disappointments. Closer adherence to evidence-based prescribing, and to the ethical principle of informed consent, may lead to a reduction in unnecessary, ineffective, and potentially harmful prescribing.

Funding

The study was supported by the University of Auckland's Faculty Research Development Fund.

Conflict of interest

No conflicts declared.

Acknowledgements

We thank all those who took the time to complete the survey.

References

- Ambresin, G., Palmer, V., Densley, K., Dowrick, C., Gilchrist, G., & Gunn, J. (2015). What factors influence long-term antidepressant use in primary care? Findings from the Australian diamond cohort study. *Journal of Affective Disorders, 176*, 125–132.
- Antonuccio, D., & Healy, D. (2012). Relabeling the medications we call antidepressants. *Scientifica, 2012*, 965908.
- Byng, R., Bury, C., & Weaver, L. (2007). Patients' experiences of consultations for depression and predictors of adherence to antidepressants. *Primary Care and Community Psychiatry, 12*, 109-15.
- Cartwright, C., Gibson, K., & Read, J. (2016). Long term antidepressant use: Patients' perspectives of benefits and adverse effects. *Patient Preference and Adherence 10*, 1401-1407.
- de Wattignar, S., & Read, J. (2009). The pharmaceutical industry and the internet: Are drug company funded depression websites biased? *Journal of Mental Health, 18*, 1-10.
- Davies, J., & Read, J. (2019a). A systematic review into the incidence, severity and duration of antidepressant withdrawal effects: Are guidelines evidence-based? *Addictive Behaviors, 97*, 111-121.
- Davies, J, Read, J. (2019b). Authors' Response to a critique By Jauhar And Hayes. *Addictive Behaviors, 97*, 127-130.
- Dowrick, C., & Frances, A. (2013). Medicalising unhappiness: new classification of depression risks more patients being put on drug treatment from which they will not benefit. *British Medical Journal, 347*, f7140.
- Eveleigh, R. (2015). *Inappropriate long-term antidepressant use in primary care: A challenge to change*. (PhD thesis). Nijmegen: Radboud University.
- Gibson, K., Cartwright, C., & Read, J. (2018). Conflict in men's experiences with

- antidepressants. *American Journal of Men's Health*, 12, 104-116.
- Gøtzsche, P. (2013). *Deadly medicines and organised crime: How Big Pharma has corrupted healthcare*. Radcliffe, London.
- Haddad, P., & Anderson, I. (2007). Recognising and managing antidepressant discontinuation symptoms. *Advances in Psychiatric Treatment*, 13, 447-457.
- Healey, D. 2004. *Let them eat Prozac: The unhealthy relationship between the pharmaceutical industry and depression*. University Press, New York.
- Hengartner, M. (2019). Commentary on Jauhar and Hayes. *Addictive Behaviors*, 97, 131.
- Jakobsen, J., Katakam, K., Schou, A., Hellmuth, S., Stallknecht, S., 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*, 17, 58.
- Johnson, C., Macdonald, H., Atkinson, P., Buchanan, A., Downes, N., & Dougall, N. (2012). Reviewing long-term antidepressants can reduce drug burden: A prospective observational cohort study. *British Journal of General Practice*, 62, e773–e779.
- Khan, A., & Brown, W. (2015). Antidepressants versus placebo in major depression: an overview. *World Psychiatry*, 14, 294-300.
- Khan, A., Khan, S., & Brown, W. (2002). Are placebo controls necessary to test new antidepressants and anxiolytics? *International Journal of Neuropsychopharmacology*, 5, 193-197.
- 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.
- Linden, M., & Westram, A. (2011). What do psychiatrists talk about with their depressed

patients parallel to prescribing an antidepressant? *International Journal of Psychiatry and Clinical Practice*, 15, 35-41.

MIND, 2012. Antidepressants prescribed too quickly and for too long.

http://www.mind.org.uk/news/7546_antidepressants_prescribed_too_quickly_for_too_long_finds_mind_survey

Mojtabai, R. 2011. WebMD News Archive, August 4.

<http://www.webmd.com/depression/news/20110804/antidepressants-prescribed-without-psychiatric-diagnosis>

Mojtabai, R., & Olfson, M. (2014). National trends in long term use of antidepressant medications: Results from the U.S. National Health and Nutrition Examination Survey. *Journal of Clinical Psychiatry*, 75, 169-177.

Moncrieff, J. (2015). Antidepressants: misnamed and misrepresented. *World Psychiatry*, 14, 302-303.

Moncrieff, J., & Kirsch, I. (2015). Empirically driven criteria cast doubt on the clinical significance of antidepressant-placebo differences. *Contemporary Clinical Trials*, 43, 60-62.

Moret, C., Isaac, M., & Briley, M. (2009). Problems associated with long-term treatment with selective serotonin reuptake inhibitors. *Journal of Psychopharmacology*, 23, 967-974.

Nielsen, M., Hansen, E., & Gøtzsche, P. (2012). What is the difference between dependence and withdrawal reactions? A comparison of benzodiazepines and selective serotonin re-uptake inhibitors. *Addiction*, 107, 900-908.

OECD. (2017). *Antidepressant drugs consumption, 2000 and 2015 (or nearest year) in Pharmaceutical sector*. Paris: OECD. https://doi.org/doi.org/10.1787/health_glance-2017-graph181-en.

Pies, R. (2014). Are antidepressants really “over-prescribed” in the US? *Psychiatric Times*,

Sept. 1, 2014. <http://www.psychiatrictimes.com/blogs/are-antidepressants-really-over-prescribed>

Pratt, L., Brody, D., & Gu, Q. (2017). *Antidepressant use among persons aged 12 and over: United States, 2011–2014*. Data Brief No. 283, August. National Centre for Health Statistics.

Read, J. (2020). How common and severe are six withdrawal effects from, and addiction to, antidepressants? The experiences of a large international sample of patients. *Addictive Behaviors, 102*, 106157.

Read, J., & Cain, A. (2013). A literature review and meta-analysis of drug company funded mental health websites. *Acta Psychiatrica Scandinavica, 128*, 422-433.

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., Cartwright, C., & Gibson, K. (2018). How many of 1,829 antidepressant users report withdrawal symptoms or addiction? *International Journal of Mental Health Nursing, 27*, 1805-1815.

Read, J., Gibson, K., & Cartwright, C. (2016). Are older people prescribed anti-depressants for longer and at lower levels of depression? *Australian Journal of Ageing, 35*, 193-197.

Read, J., Gibson, K., Cartwright, C., Shiels, C., Dowrick, C., & Gabbay, M. (2015). The non-pharmacological correlates of self-reported efficacy of antidepressants. *Acta Psychiatrica Scandinavica, 131*, 434-445.

Read, J., Grigoriu, M., Gee, A., Diggle, J., & Butler, H. (2020). The positive and negative experiences of 342 antidepressant users. *Community Mental Health Journal, 56*, 744-752.

- Read, J., & Williams, J. (2018). Adverse effects of antidepressants reported by a large international cohort: Emotional blunting, suicidality, and withdrawal effects. *Current Drug Safety*, 13, 176-186.
- Takanayagi, Y., Spira, A., Bienvenu, J., Hock, R., Carras, M., Eaton, W., & Mojtabai, R. (2015). Antidepressant use and lifetime history of mental disorders in a community sample: Results from the Baltimore Epidemiologic Catchment Area Study. *Journal of Clinical Psychiatry*, 76, 40-44.
- Taylor, S, Annand, F, Burkinshaw, P, et al. *Dependence and withdrawal associated with some prescribed medicines: an evidence review*. London: Public Health England, 2019.
- Turner, E., Matthews, A., Linardatos, E., Tell, R., & Rosenthal, R. (2008). Selective publication of antidepressant trials and its influence on apparent efficacy. *New England Journal of Medicine*, 358, 252-260.
- Uher, R., Farmer, A., Henigsberg, N., Rietschel, M., Mors, O., Maier, W., Aitchison, K. (2009). Adverse reactions to antidepressants. *British Journal of Psychiatry*, 195, 202-210.
- Wiechers, I., Kirwin, P., & Rosenbeck, R. (2014). Increased risk among older veterans of prescribing psychotropic medication in the absence of psychiatric diagnoses. *American Journal of Geriatric Psychiatry*, 22, 531-539.
- Wilkinson, S., & Mulder, R. (2018). Antidepressant prescribing in New Zealand between 2008 and 2015. *New Zealand Medical Journal*, 131, 52-59.
- Wilson, J., & Read, J. (2001). What prevents General Practitioners from using outside Resources for women experiencing depression: A New Zealand study. *Family Practice*, 18, 84-86.

Table 1

Quality of relationship and level of understanding

How would you describe your relationship with the doctor? **	Very good	Good	Not sure	Not good	Not at all good
Psychiatrists (n = 292)	26.7%	34.6%	24.7%	7.9%	6.2%
GPs (n = 1491)	43.3%	35.7%	14.7%	4.6%	1.6%
How well do you think your doctor understood your problems? *	A lot	Quite a lot	OK	Not a lot	Not at all
Psychiatrists (n = 292)	25.7%	25.7%	26.7%	15.4%	6.5%
GPs (n = 1487)	35.0%	27.3%	20.4%	13.7%	3.5%

* p = .002, ** p < .001; GPs > Psychiatrists

Table 2

Information imparted

	Problem(s) ADs prescribed for	Expected benefits	How long to take ADs for *	How ADs work	Side effects *
Psychiatrists (n = 283-288)	88.5%	78.6%	49.3%	58.0%	58.1%
GPs (n = 1446-1473)	85.5%	77.6%	56.2%	61.5%	65.4%

*p = .02

Table 3

Additional treatment suggestions

	Counsellor/ psychologist/ psychotherapist **	Exercise	Social activities	Nutritional advice	Relationship counselling/ family therapy **	Support group **	Mean total **
Psychiatrists (n = 296)	83.8%	41.9%	29.1%	23.6%	20.4%	19.9%	2.20
GPs (n = 1501)	72.5%	43.8%	22.8%	19.9%	12.4%	11.9%	1.82

** p < .001