

Editorial

Ethical dilemmas: should antipsychotics ever be prescribed for people with dementia?

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**Summary**

The use of antipsychotics for the treatment of behavioural and psychological symptoms of dementia (BPSD) is controversial. Antipsychotics cause harm and evidence-based guidelines advise against their use. We argue that antipsychotics may be justified using a palliative model: by reducing severe distress in those whose life expectancy is short.

Declaration of interest

C.K., C.F., C.P., A.T. and M.C. have all received funding for research into the treatment of agitation in dementia from pharmaceutical companies.

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Distress in dementia

At its core, dementia is an irreversible, disabling and fatal illness. Some people live well with dementia and are not distressed by it, but for many people with dementia and their families it is a distressing illness. The prevalence of both depression and psychosis are high, and people with dementia are increasingly unable to articulate symptoms of these disorders as their illness progresses. At any one time, around 40% will have delusions and 20% hallucinations.¹ Over time, challenging behaviours such as restlessness and agitation, wandering, vocalisations, resisting help with dressing and personal hygiene, verbal and physical aggression and other inappropriate behaviours often occur, although both the intensity and duration of these behaviours are highly variable. Collectively, these phenomena are described as behavioural and psychological symptoms of dementia (BPSD) and affect 50–80% of individuals to varying degrees.² The aetiology of BPSD is diverse; as well as depression and psychosis, other potential causes include medical problems such as heart failure, respiratory disease and infection, poor understanding of the environment or the intentions of carers, fear and anxiety, insomnia, hunger, boredom, isolation and inadequate spiritual care. Each of these causes lead to a targeted pharmacological, psychological or environmental intervention. There are also clear similarities between BPSD and the behaviours associated with severe physical pain.

Dame Cicely Saunders, founder of the first modern hospice and palliative care movement, recognised that pain is 'total' and encompasses physical, mental and existential pain with no form of pain being clearly more important or more deserving of treatment than any other.³ Scales for detecting and measuring pain in people with severe dementia cannot easily distinguish physical from mental pain. The Abbey Pain scale⁴ includes features such as vocalising, looking tense or frightened, grimacing, fidgeting, rocking, increased confusion and refusing to eat. The PAINAD scale⁴ includes calling out, crying, clenching fists and striking out as behavioural manifestations of pain. Being in pain is clearly distressing; but what should be done if that pain is not as a result of physical causes that can be treated with analgesics, but rather is emotional pain with its roots in deteriorating cognition, confusion, anxiety, fear and psychosis?

We argue that although BPSD may be challenging to others it is difficult to justify the use of potentially harmful treatments on this basis alone. However, the Nuffield Council⁵ recently noted the limited availability of palliative models of care for people with dementia and point out that 'risk assessments' must include analyses of benefit. Thus where BPSD are driven by the individual's mental distress/pain, the risk–benefit analysis may suggest that treatments with known harmful side-effects are justified. In people with terminal cancer, palliative radiotherapy and chemotherapy are often used to improve quality of life in the short term even though these treatments are associated with side-effects that may shorten life. Should the same principles not apply to the use of antipsychotics in people with advanced dementia?

Problems associated with the use of antipsychotics in people with dementia

There is evidence that these medicines may improve psychosis and aggressive behaviour, with a number needed to treat (NNT) of between 5 and 11,⁶ but in recent years evidence regarding efficacy has been overshadowed by concerns about harm; making their use highly controversial. First-generation antipsychotics such as thioridazine and promazine have been used for decades to manage distress in people with advanced dementia. The extrapyramidal, anticholinergic and hypotensive side-effects of these drugs led many to believe that the newer antipsychotics would be better tolerated in people with dementia. Clinical trial programmes investigating whether second-generation antipsychotics were effective in BPSD and better tolerated than the older drugs led to concerns being raised about the safety of risperidone, then

olanzapine and then all the atypical antipsychotics. A recent Department of Health report⁶ set out the problems very clearly. Antipsychotics cause death: the absolute risk increases by 1% within 3 months.⁶ There is a similar risk of stroke (half of which are serious)⁶ as well as cognitive decline, falls, fractures and deep vein thrombosis.⁷

The undoubted harms caused by antipsychotics have led to attempts to curtail their use in people with dementia. In March 2004, the Committee on Safety of Medicines advised that risperidone and olanzapine should not be used for BPSD.⁶ In the USA Omnibus Budget Reconciliation Act (OBRA) regulations were similarly intended.⁸ In 2007 the National Institute for Health and Clinical Excellence (NICE) advised antipsychotics should only be prescribed in people with significant distress,⁷ a view supported in the UK parliamentary report *Always a Last Resort* which drew attention to the overuse of these medicines but also introduced the concept of severe distress as a justification for their use.⁹ The Department of Health's⁶ latest report combines a stringent call for a review of these medicines with an acceptance that they are appropriate for use in some.

Why do psychiatrists continue to prescribe these dangerous drugs? We suggest that they may not be behaving irresponsibly, but that the target symptom they use antipsychotics for is distress. However, this is not directly measured in most controlled clinical trials.

How should distress in dementia be managed?

Severe distress should be appropriately palliated using the best and most effective medicines with the overriding goal of reducing suffering. Mental and physical pain are equally important and both must be effectively treated. Sometimes this may require the risk of increased harm. This fits with the recent UK Parliamentary inquiry that emphasised the importance of alleviating severe distress.⁹ The multiple possible causes of distress in dementia require skilled assessment, with treatment then tailored to the proven or perceived cause. A chest or urine infection should be treated with the appropriate antibiotic, depression with an anti-depressant, and physical pain with an appropriate level of analgesia. Poor nursing or spiritual care requires an improvement in care. Beyond these specific interventions, non-pharmacological approaches to managing BPSD and distress are and should remain first-line treatments and there is no real controversy surrounding their use. However, BPSD may arise from psychotic symptoms that cause confusion or fear, but these symptoms may be poorly expressed and harder to access in severe dementia. Under these circumstances, a trial of an antipsychotic drug may be indicated, and it is important to remember that reducing distress is a particular priority where life expectancy is short. Antipsychotics may do this by directly targeting the psychotic symptoms that drive this distress, or by a less specific action such as reducing arousal or anxiety. There is support for this non-specific effect from studies that have suggested that risperidone, olanzapine, aripiprazole and quetiapine, may be more effective for alleviating agitation than in treating specific psychotic symptoms in people with dementia.⁷ Given the perception that antipsychotics are overprescribed in people with dementia, and that clinical guidelines generally recommend minimising their use,⁶⁻⁹ it is surprising that there are relatively few studies on the effects of antipsychotic withdrawal in dementia. In fact those that do exist suggest that whereas antipsychotics can be withdrawn without consequence in the majority of individuals, behaviour in those who are most disturbed usually deteriorates.¹⁰ These data support the need for regular review of individuals prescribed antipsychotic drugs so that prescribing does not continue longer than is necessary to alleviate suffering.

Two typical case scenarios would exemplify our approach to treating distress. First, Rita was admitted having been shouting out at night and very restless. Her husband could no longer cope. Earlier on in her illness she had felt her house was going to be taken over by people from France. Treatment then with risperidone had been successful and she returned home. This time, she did not express any delusions but did appear anxious and fearful. Treatment with olanzapine led her to be more settled. When this was discontinued, she became too agitated to eat. With olanzapine, she was able to remain at home. Second, Ada was discharged from a dementia unit to nursing care on a low dose of sulpiride given for hallucinations and paranoia. Following review at the home this was (appropriately) discontinued. But she became agitated and called out appearing distressed. But she was no longer able to describe any psychotic symptoms: the only sign was that of distress. Sulpiride was restarted and she settled and appeared less distressed.

Acceptance of the concept of severe distress as a cornerstone of treatment might increase the understanding among clinicians and carers of the most important intervention in people with dementia who are distressed – effective reduction of that distress. If old age psychiatry services move more clearly towards a palliative model as dementia progresses, they may become more able to justify the use of antipsychotic drugs for the express purpose of reducing suffering. Further, by focusing on the alleviation of severe distress, care may become more person-centred.

An ethical conclusion

We assert that it is unethical to assume that all individuals with BPSD warrant treatment with an antipsychotic, but equally unethical to assume that antipsychotic drugs are never indicated, and suggest the following approach to treating BPSD and distress.

- Treatable physical or environmental causes of distress should be excluded as best as possible. It is unacceptable to treat depression or physical pain with an antipsychotic and still more so to manage patients who are distressed because of poor care by sedating them and thereby rendering them quiet and more tolerant of that poor care.
- Where no treatable cause is identified and BPSD are not distressing to the individual, pharmacological interventions are not justified. Doctors are very often under pressure from carers and staff to 'medicate to make a person more manageable' and this must be resisted.
- Where no treatable cause is identified and the individual is clearly distressed, a trial of an antipsychotic may be considered; in such patients the benefits of reducing distress may outweigh the risk of harm.
- A frank discussion of both benefit and risk with relatives and carers is essential and almost invariably helpful.

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extra

Epidemic hysteria aboard ship in 1848

Malcolm Kinnear

Dr Colin Arrott Browning (1791–1856), a minister's son from Auchtermuchty, joined the Royal Navy as assistant surgeon near the end of the Napoleonic Wars and served aboard the frigate HMS Hebrus at the bombardment of Algiers in 1816. He rejoined the Navy after receiving his MD and spent several years as surgeon in warships before being appointed surgeon superintendent in his first convict transport in 1831. He made nine highly successful voyages in this capacity, mainly to Van Diemen's Land (Tasmania), that of the Hashemy being his last, and wrote two books on the subject (*The Convict Ship* and *England's Exiles*, later compiled into one). A dedicated and competent physician, he was a forthright advocate of humane treatment and literacy for convicts, and a fervent evangelist.

'Shortly after the Wakefield and Pentonville prisoners were received on board, many of them were successively seized with a variety of violent, and indeed alarming, nervous affections, which had never occurred in any of my former ships. Two, three, and even as many as nine at a time were borne through the narrow prison door, and conveyed in a state of insensibility, either fainting or in violent convulsions, to the upper deck, and plied with the remedies used in such cases.

'The appearance our decks exhibited for a period of at least three days and nights was most appalling, being often aggravated by the shrill convulsive shrieks of the sufferers, which were most painfully heard in every part of the ship, even in the poop cabins. The whole scene was, beyond description, touching and perplexing. In many instances these fits were followed by severe spasmodic affections of the stomach and bowels. With regard to their cause, I have no hesitation in attributing them to the great and sudden change, from the solitary cell in which the people had been so long buried to comparative freedom aboard the Transport, and unrestrained intercourse with a large body of fellow-prisoners, to whom they were mostly strangers: the excitement acting on men who were in a state of bodily and mental feebleness, and morbidly susceptible of impression. It is worthy of observation, that the Parkhurst boys who had been congregated and worked together for some time before their embarkation, were not attacked with fits.

'The effects of long confinement on the convicts embarked in the Hashemy were most visible; all their energies were impaired, I had almost said gone; their power of thinking, their common sense, and in a peculiar degree their memory, appeared to have been left behind them buried in their cell; many of them seemed like children; all complained of unfitness for the considerate performance of any duty. Those especially whom I had selected to act as petty officers, were soon found not to have strength for the continued execution of duties requiring thought and activity, and often complained to me, in the most plaintive language, of the utter prostration of their energies.'

Extract from *The Convict Ship and England's Exiles* by Colin Arrott Browning, first published by Hamilton Adams in 1851.

Malcolm Kinnear is Colin Arrott Browning's great-great-grandson.

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