APS 06

Ymchwiliad ar ddefnydd o feddyginiaeth wrthseicotig mewn cartrefi gofal

Inquiry on the use of anti-psychotic medication in care homes

Ymateb gan Boots UK

Response from Boots UK

Use of antipsychotic medication in care homes

Health, Social Care and Sport Committee inquiry

A response by Boots UK

1. Boots UK and medicines supply to care homes in Wales

1.1. Boots UK Ltd operates the largest chain of community pharmacies in the United Kingdom. It is synonymous with pharmacy in the public mind and is one of the country's most trusted brands.

1.2. Our company has over 2,500 health and beauty stores in the UK, most of which include a pharmacy.[1] Just over 100 of these are in Wales. Boots UK supplies medicines to a significant proportion of care homes across the UK, including in Wales.

1.3. Medicines are supplied by local community pharmacies to the appropriate care homes. We have dedicated care services dispensaries that focus on dispensing for care homes. Our local pharmacies are supported by our central Care Services Support Pharmacy in Nottingham which provides pre-packed medicines in monitored dosage system (MDS) inserts for local dispensing for individual patients in care homes.

1.4. Our Pharmacist Advice Visits to care homes are provided by a team of locally-based Care Services Pharmacists. They are the key point of contact between the pharmacy and the care home, providing feedback to the pharmacy if the home identifies any issues. Most importantly, they link in with the dispensary teams at the pharmacies, ensuring that medicines-related issues are addressed and actioned.

1.5. Each Pharmacist Advice Visit includes a section on antipsychotic use where an individual has had a confirmed diagnosis of dementia. Our pharmacists also undertake specialist audits, as required, including auditing the use of antipsychotic drugs.

1.6. We are pleased to respond to the Health, Social Care and Sport Committee's inquiry in to the use of antipsychotic medication in care homes and to provide further information on how community pharmacies can improve medication use.

[1] Figures from Walgreens Boots Alliance Annual Report for year ending 31st August 2016, excluding equity method investments

2. Identifying best practice and the effectiveness of initiatives

2.1. The work undertaken by our Care Service Pharmacists on reducing antipsychotic drug use in care homes was evaluated in a study run in conjunction with the School of Pharmacy, University of East Anglia. This was peer-reviewed and published in *Nursing Times* (2014;110:12-15). [*Copy of article attached*]

2.2. A clinical audit carried out by our Care Services Pharmacists, and which formed part of the NHS contractual requirement for audits, was carried out between July 2010 and June 2012 at 463 homes which provided care to 3,165 residents, of whom 1,300 (41.1%) had a recorded diagnosis of dementia.

2.3. Following the audit and review process, 653 patients (20%) had their doses of antipsychotics reduced and 548 (17%) had their prescription discontinued. The majority of discontinuations were as a direct result of the audit visit.

2.4. This audit demonstrates a small part of the work undertaken by our Care Services Pharmacists during Pharmacist Advice Visits. In particular, it highlights how the clinical advice given by the pharmacists can then be translated in to actions around prescribing and dispensing that give clear benefits to care home residents, staff and owners/managers.

2.5. It is this link between advice and action that is crucial. In our view, without this direct link between the Care Services Pharmacists and the community pharmacies that physically supply medicines to the care homes, and the GPs who prescribe for their patients, there is a grave danger that actions will not be taken or information will fail to be passed on, resulting in residents getting sub-optimal care.

3. Prescribing practices, including implementation

3.1. Changes to prescribing can result from individual patient reviews, specific audits or wider prescribing policies (at local and/or national levels).

3.2. As described above [Para 2.1-2.3], actions are required by both prescribers and dispensers to then ensure that changes to antipsychotic use, including reducing doses or stopping inappropriate prescribing are noted and actioned.

3.3. Prescribing, dispensing and administration records need to be updated in surgeries, pharmacies and care homes, respectively, to ensure that patients do not receive incorrect or duplicate medication following any changes.

3.4. The recently introduced Discharge Medication Review (DMR) service provided by community pharmacies also has a place in this. Through the DMR service, community pharmacists reconcile medication records for patients who have been admitted and discharged from hospitals, ensuring that any changes to prescribing are put in place.

3.5. In our view, this illustrates why a clear link needs to be maintained between the provision of clinical advice about medication use and the subsequent supply of medicines, including the use of antipsychotics. Separating the advice and supply functions runs the risk that the advice given will not be translated in to the necessary actions.

3.6. Our Care Services Pharmacists and the community pharmacy teams they support provide the key link that ensures joined-up working around the safe supply of medicines to patients in care homes.

4. Training for health and care staff

4.1. The service that we provide to care homes goes beyond the provision of medicines. It includes wider support through Pharmacist Advice Visits, advice on medicines management, condition-specific training for care home staff based on assessed needs and feedback, and support with patient-specific aids (such as body maps for topical medicines administration and warfarin dose recording charts) [see Para 4.5, below].

4.2. Our Care Services Pharmacists are encouraged to visit the care homes they are responsible for before making visits in order to familiarise themselves with the home and its needs before making a formal Pharmacist Advice Visit. Depending on the size and nature of the home, its location in the UK, the identified needs of its residents and their level of support required, and the agreement between Boots and the care home owners, homes generally receive between one and four visits a year.

4.3. Before our Care Services Pharmacists complete a Pharmacist Advice Visit they are required to complete a bespoke training package. The training covers introductory information, operating standards for Pharmacist Advice Visits, country-specific safeguarding training according to their country of practice and further safeguarding training developed by the company, and WCPPE (or equivalent) training packages on supporting people in care homes, guidance on consent, and country-specific covert medication administration guidance. In addition, the Care Services Pharmacists are recommended to study NICE guidelines on managing medicines in care homes and dementia.

4.4. Care home managers particularly value the support that our Care Services Pharmacists can offer before and after inspections by their regulatory bodies. Medicines management, including systems for safe storage, handling and administration of medicines, has become a high profile part of inspections. We can arrange additional visits in advance of or following inspections.

4.5. The Pharmacist Advice Visit is structured around a number of topics which are detailed below. For each area, the pharmacist discusses a number of key questions with the medicines lead in the care home and records the details. At the end of each section the pharmacist highlights any issues discussed, agreed next steps and who will be taking the required actions.

- Policies and systems for managing medicines
- Ordering and receipt of medication
- Storage of medication
- Controlled Drugs (CDs) - storage and use of the register
- Disposal of medication
- Clinical advice and medicines optimisation
- Administration of medication
- Recording the administration of medication
- Homely remedies
- Care home staff training

4.6. We deliver medicines directly to care homes at times agreed to suit the needs of each home and our staff are available to deal with changes to medication, including urgent supplies. Our links between the pharmacy service and supply of medicines

allows us to manage urgent requests in a safe and effective way, as we are aware of the clinical situation with each home and its residents.

Evidence submitted on behalf of Boots UK by:

Jonathan Buisson MFRPSII MRPharmS
International Pharmacy & Policy Manager
Walgreens Boots Alliance
2 The Heights, Brooklands, Weybridge, Surrey KT13 0NY
T: [redacted] E: [redacted]

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The risks of antipsychotic drugs to people with dementia are well known. A review by pharmacists with care home staff led to the drugs being reduced or discontinued

Reducing antipsychotic drugs in care homes

In this article...

- Risks of antipsychotic medication
- Reasons for reducing or discontinuing antipsychotics
- The nurse's role in medication review

Authors Aileen Prentice is Boots Care Services operations manager, Boots UK; David Wright is professor of pharmacy practice, School of Pharmacy, University of East Anglia.

Abstract Prentice A, Wright D (2014) Reducing antipsychotic drugs in care homes. *Nursing Times;* 110: 22, 12-15. Antipsychotic medication should be used in people with dementia only when there is an identified need and the benefits outweigh the risks. An audit-based service provided by pharmacists, working with nursing and care staff in residential homes, resulted in antipsychotic doses reductions of 20% and drug discontinuation in 17% of residents with dementia.

Prescribing and medicines management in care homes, which is largely the responsibility of nurses, care staff and GPs, needs improvement (Alldred et al, 2013). One of the main areas of concern is the inappropriate use of antipsychotic medication (Parsons et al, 2012); an estimated 180,000 people with dementia are treated with antipsychotic medication in the UK every year (Banerjee, 2009). The care home population is frail and susceptible to the side-effects of antipsychotics (Box 1).

It has been estimated that the use of antipsychotic medication in patients with dementia – who represent at least 60% of the care home population in the UK – equates to 1,620 cerebrovascular adverse events and 1,800 deaths per year on top of those that would be expected (Banerjee, 2009). Antipsychotics make a significant contribution to what is known as the "anticholinergic burden" of prescribed medication – the cumulative effect of using multiple medications with these properties at the same time – which is related to increased mortality (Fox et al, 2011).

Within the US, legislation was introduced to reduce antipsychotic prescribing in care homes (US Federal Government, 1987). Homes are required to employ an independent consultant pharmacist to undertake regular review of antipsychotic medication, with the aim of reducing or discontinuing drugs. Evidence suggests this has been effective (Gurvich and Cunningham, 2000).

Within most care homes in the UK, nursing and care staff and GPs provide care and manage medicines, with occasional visits from an independent pharmacist from a primary care organisation to review prescribing, and monthly interactions with a community pharmacy to supply the medicines.

While an independent pharmacist working closely with nursing and care staff has been shown to realise significant medicine acquisition cost savings and improve residents' quality of life, the impact on longer-term outcomes is largely unknown (Alldred et al, 2013).

One study based in northern England, using a pharmacist employed by a medical practice with a close working relationship with GPs and care and nursing staff, demonstrated a significant reduction in falls after a pharmacist-conducted clinical medication review (Zermansky et al, 2006). In another study, where a specially trained pharmacist focused on antipsychotic use in people with dementia, a 25% reduction in antipsychotic prescribing was achieved (Child et al, 2012).

New legislation to improve antipsychotic prescribing in the UK is unlikely, so

5 key points

1. At least 60% of people living in care and nursing homes in the UK have dementia
2. The use of antipsychotic medication in people with dementia is widespread, and causes an additional 1,800 deaths per year
3. Antipsychotic drugs contribute to the anticholinergic burden, which is associated with increased mortality
4. Quetiapine is commonly prescribed for behavioural and psychological symptoms, but its use is unlicensed
5. Working with pharmacists can make nurses more confident in questioning the appropriateness of antipsychotics

Quetiapine was the antipsychotic most often prescribed, in an unlicensed use

Alamy

we need practical and sustainable models of care to address concerns regarding antipsychotic prescribing.

Government plans for community pharmacies include greater involvement in the management of long-term conditions (Department of Health, 2008). In addition to care and nursing staff and GPs, community pharmacists in primary care are ideally located to review monthly prescriptions for residents in care homes.

The national audit of care homes

Our national pharmacy chain services a large number of care homes across the UK.

Care home leadership teams had expressed a need for support in better managing the medicines of their residents, with antipsychotic prescribing identified as a priority area.

It is an NHS contract requirement for community pharmacists to undertake at least two audits per year (Pharmacy Services Negotiating Committee, 2013). We therefore carried out an audit of antipsychotic medication between July 2010 and June 2012 with homes that were customers of our company and that had requested the service. The homes were run by national chains of care homes and were located in England, Scotland and Wales.

QUICK FACT

26% Percentage of residents receiving antipsychotic drugs despite having no symptoms

Preparation for the audit

Community pharmacists were trained to provide the audit-based service using online training packages and attendance at an Alzheimer's train the trainer session. This session increased their knowledge and enabled them to deliver a two-hour dementia awareness session to care staff in the care homes.

Using patient medication records held nationally by the community pharmacy company, pharmacists undertook a clinical assessment of antipsychotic prescriptions for individual residents to establish possible reasons for starting the medication, the duration of the prescription and any interactions.

A blank audit form, GP information letter, consent letter and explanation of the process were sent to home managers. They were asked to identify residents who were prescribed at least one antipsychotic medication, and who were either diagnosed with dementia or suspected of having dementia. If there was no suspected or confirmed diagnosis of dementia, and the resident was taking the medication for other medical conditions such as schizophrenia or bipolar disorder, they were not included in the audit.

The homes sent consent letters to the relatives of those residents identified as potentially suitable for the audit as well as an introductory letter to their GPs.

BOX 1. SIDE-EFFECTS OF ANTIPSYCHOTICS

- Sedation
- Postural hypotension
- Extrapyramidal symptoms such as restlessness
- Muscle twitching
- Parkinsonian symptoms
- Tardive dyskinesia (permanent involuntary movements)
- Cardiovascular accidents

The audit process

Pre-audit joint strategy

Before discussing individual residents, the audit-trained community pharmacists worked with the professionals responsible for patient care at each home to create an joint strategy for the use of antipsychotic medication in line with national guidance (National Institute for Health and Care Excellence, 2006).

Pre-visit work

Before the audit visit, care home managers were asked to collate the following information for all relevant residents:

- Date of admission;
- Date medication started;
- Medical conditions;
- Recent changes;
- Monitoring;
- History of falls and fractures.

Individual assessments to determine the presence of symptoms that required treatment with an antipsychotic were undertaken.

Audit visit

During the audit visit, pharmacists recommended antipsychotic medication reviews for residents who had not received a review within the last three to six months, or where there was evidence of side-effects or no current symptoms of behavioural and psychological symptoms of dementia (BPSD).

Pharmacists and home staff discussed guidelines from NICE (2006). Then, for each resident, a risk versus benefits discussion took place, with a particular focus on falls and cardiovascular accidents.

Where it was deemed necessary, the pharmacists recommended that staff should discuss titrated withdrawal of antipsychotic medication during the review. The audit pharmacist also discussed with the home staff the information that would be provided and discussed with the GP or psychiatrist during the review. This could include a description of other ways of managing BPSD, and how the resident's needs were being met after admission to the care home, including how the need for medication may have changed.

The audit visit was seen as helpful in facilitating a conversation between home staff and their GP to challenge prescriptions. A document was provided to the home to enable them to request an anti-psychotic medication review from the GP. Homes decided whether to use the form or to make more informal direct requests.

Follow-up

Pharmacists telephoned or revisited the homes twice, two to four months after the audit visit, to ascertain the impact of their recommendations.

Data governance and ethics

No resident-identifiable data was removed from any care home. All databases contained unique reference numbers, which could be identified only within care homes or community pharmacies providing the service and were stored on password-protected computers.

As this was a service evaluation, which falls under the remit of clinical audit, ethical approval was not sought. All homes provided written consent to participate. The community pharmacists providing the service were employed by the company responsible for the regular provision of medicines to the residents so the review of prescribing was within their remit.

Results of the audit

Data was analysed from 463 homes, which received a service from four audit-trained community pharmacists on behalf of 350 company stores.

A total of 3,165 residents receiving antipsychotic medication were reviewed, of whom 1,300 (41.1%) had a recorded diagnosis of dementia; 1,180 reviews were started in 2010, 1,078 in 2011 and 901 in 2012. For six reviews, the year of initiation was not recorded.

Of the 3,165 residents reviewed, 2,341

TABLE 1. ANTIBIOTICS PRESCRIBED TO RESIDENTS

Drug name	Number of prescriptions	Percentage of prescriptions
Flupentixol decanoate	2	0.06
Perphenazine	2	0.06
Unknown	2	0.06
Levomepromazine	4	0.12
Pericyazine	5	0.15
Prochlorperazine	6	0.18
Benperidol	7	0.22
Flupentixol	10	0.31
Zuclopenthixol	19	0.58
Trifluoperazine	30	0.92
Sulpiride	31	0.95
Chlorpromazine hydrochloride	41	1.26
Aripiprazole	52	1.6
Olanzapine	207	6.37
Promazine hydrochloride	235	7.23
Amisulpride	288	8.86
Haloperidol	396	12.18
Risperidone	548	16.85
Quetiapine	1,366	42
Total	**3,252**	**100**

(74%) demonstrated symptoms that may necessitate antipsychotic treatment. In 236 (7.5%) residents, antipsychotic medication was prescribed for BPSD, while a further 250 (7.9%) residents had been prescribed antipsychotic medication for another condition and had subsequently developed dementia.

By the first visit 147 (4.6%) of residents were deceased and a further 119 (3.8%) had died by the end of the follow-up visit.

Types of antipsychotic medication prescribed

Table 1 provides a summary of the antipsychotic drugs prescribed for the residents reviewed. In 87 instances, a resident was prescribed more than one antipsychotic concurrently and, in two cases, the name of the antipsychotic drug reviewed was not recorded. Quetiapine represented 42% of prescriptions, risperidone 16.8% and haloperidol 12.2%.

Reviews of medication

A total of 1,772 (56.0%) residents had had a recorded review of their antipsychotic medication within the previous three months, 465 (14.7%) within the previous six months and 228 (7.2%) in the previous 12 months.

Residents' antipsychotic prescriptions were reviewed when:

- They were currently receiving another antipsychotic;
- They were demonstrating side-effects from their medication;
- The risks of antipsychotic medication were deemed to outweigh the benefits;
- There was no evidence of symptoms;
- There was no evidence of review.

Fig 1 shows the numbers of prescriptions in which these criteria for questioning were found. Risks were deemed to outweigh benefits for 1,840 (58%) of prescriptions, while there was no evidence of symptoms for 824 prescriptions (26%).

Actions resulting from the audit

Table 2 shows the actions taken as a result of the audit process. A total of 653 patients out of 3,165 (20%) had their dose reduced while 548 (17%) had their prescription discontinued.

Just over half of dose reductions were made before the audit visit, while the majority of discontinuations resulted from the audit visit. There were a large number of anecdotal stories of significant success as a result of this audit.

Discussion

This large-scale audit found that in care home residents receiving antipsychotic medication, 26% did not have any symptoms that necessitated regular antipsychotic medication, and in 58% of cases the risk of the medication was deemed to outweigh the benefit. This relatively simple audit-based service resulted in over 20% of residents having their antipsychotic dose reduced and more than 17% having antipsychotic medication discontinued.

With the known side-effects of antipsychotic medication, including sedation, and an increased risk of falls and cardiovascular events, this service is likely to have improved the quality of life of a large number of care home residents.

The results suggest that nurses working in care homes should regularly question prescriptions for antipsychotic medication. This would ideally be done in partnership with the GP and community pharmacist.

It is not possible to determine what would have happened without this service. It is reasonable to assume that the regular reviews recorded as being undertaken would have led to some antipsychotics being reduced or stopped. However, it is unlikely that the large reduction seen in such a relatively short period of time would have occurred without active intervention by the community pharmacists.

The level of recorded regular antipsychotic medication review was high, so it is perhaps surprising that so many medicines were still considered suitable for stopping or reducing as part of the audit process. This may, however, demonstrate the value of using a third party to instigate such reviews, as in the US model (US

TABLE 2. CHANGES TO ANTIPSYCHOTIC MEDICATION

Time	Pre-audit planning	Pre-visit work	Three months after audit visit	Six months after audit visit	Total
Number of dose reductions	327 (10.3%)	14 (0.4%)	228 (7.2%)	84 (2.7%)	653 (20.6%)
Number of prescriptions discontinued	120 (3.8%)	2 (0.1%)	286 (9.0%)	140 (4.4%)	548 (17.3%)

Federal Government, 1987) since this provides a fresh perspective that is not clouded by historical practice. It may also provide support for less frequent independent reviews rather than regular in-house reviews. It would, however, also seem sensible for nurses in care homes for older people to review local practice to ensure that antipsychotic medication review is undertaken effectively.

The changes to prescribing at different time points of the project demonstrates the value of developing a care home strategy jointly, collecting information on each resident and holding interprofessional meetings to discuss individual prescriptions. The development of a joint strategy for antipsychotic prescribing was effective in reducing antipsychotic use, while the visits to discuss individual residents' prescriptions had a greater impact on therapy discontinuation.

Although in 58% of cases, the risk of antipsychotic medication was deemed to outweigh the prescription, it would be unreasonable to expect all these prescriptions to be discontinued, as such decisions must be taken with care and all factors require consideration.

The reductions in antipsychotic prescribing seen in this audit are similar to those found in other studies (Westbury et al, 2012; Patterson et al, 2010).

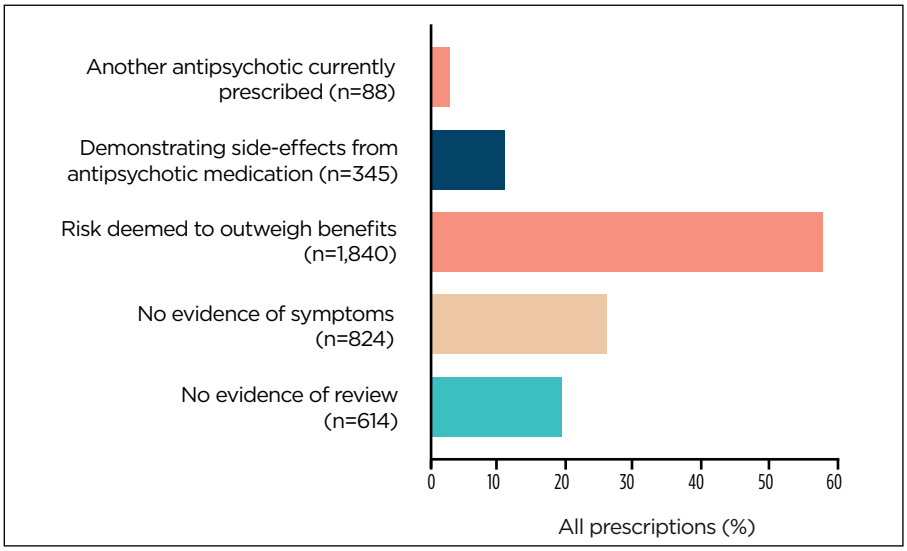
Quetiapine was found to be the most commonly prescribed antipsychotic for BPSD, which is an unlicensed use. Risperidone, the only licensed therapy, was used in fewer than one in six residents. The preference for quetiapine requires further exploration, as national guidance states that unlicensed use of medicines should only become necessary if the clinical need cannot be met by licensed medicines (Joint Formulary Committee, 2013). It would therefore be appropriate for prescriptions for quetiapine to be questioned.

While this audit-based service focused on strategies to manage the use of antipsychotic medication once prescribed, an additional emphasis by nurses, carers and GPs at the initiation of antipsychotic medication in patients with dementia in care homes on risk scoring, drug selection, effectiveness monitoring and review is perhaps also required.

The audit was designed to encourage conversations between nurses, care home staff and GPs about antipsychotic medication. The pharmacists reported that it appeared to empower the nursing and care staff to feel more confident with GPs. It also made nursing and care staff reflect on current practice, taking time out of the "day job" to review patient care and prescribing.

The audit team also reported, perhaps unsurprisingly, that engagement of the care homes involved was the key to success. Where the leadership team focused on positive outcomes for patients, we had more engagement and enthusiasm throughout the audit process. Furthermore, in homes with more stable employee populations, more of the actions seemed to be followed though, which ultimately influenced patient outcomes.

FIG 1. **PRESCRIPTIONS QUERIED**



Conclusion

This is a simple audit in an important area of practice that has potential for providing significant improvements in patient care.

A large number of medicines were discontinued or stopped as a result of this service, which will in many cases have immediately improved quality of life.

The results suggest that nurses and carers in care homes for older people should question, at the point of initiation, whether antipsychotic therapy is required and ensure the most appropriate drug is selected. At antipsychotic medication reviews, they should be aware that this should always be undertaken from the perspective of discontinuing or reducing therapy, rather than simply confirming that the therapy is working and not causing any harm. Working with suitably trained pharmacists provides the opportunity for an independent perspective on the appropriateness of and need for therapy. **NT**

● Declaration of interest: corresponding author Aileen Prentice is employed by Boots UK, which funded this work.

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