APS 01

Ymchwiliad ar ddefnydd o feddyginiaeth wrthseicotig mewn cartrefi gofal
Inquiry on the use of anti-psychotic medication in care homes
Ymateb gan Goleg Gwyddorau Dynol ac Iechyd, Prifysgol Abertawe
Response from the College of Human and Health Sciences, Swansea University

[Via email]

Priorities for Health, Social Care & Sport Committee Consultation

Use of antipsychotic medication in care homes

Summary

The Older People's Commissioner and the Flynn Review [Opens in a new browser window] both highlighted concerns about the inappropriate use of antipsychotics to control the behavioural and psychological symptoms of people living with dementia. The Committee could seek to assess the scale of the problem, and examine possible solutions.

We have developed and tested an intervention which has been shown to reduce the use of sedative medicines, including antipsychotics, in care homes. Our intervention is the West Wales Adverse Drug Reaction (WWADR) Profile for mental health medicines (to be sent on request). It lists problems that might be associated with or exacerbated by these medicines, and asks nurses to monitor these and inform prescribers or pharmacists. We have shown in randomised controlled trials and observation studies that structured nurse-led medicines' monitoring using the WWADR Profile benefits patients, for example, by reducing pain and sedation, encouraging behavioural interventions and identifying high risk cardiovascular conditions. Our trials indicate that the intervention does not cause harm, and there is potential for considerable cost saving. The comments of the care home managers, some papers, endorsements and our video are below.

I should like to discuss how our evidence-based solution could contribute to the consultation and be operationalized.

I look forward to hearing from you,

Professor Sue Jordan

Detailed response

The Committee will look at the use of anti-psychotic medication in care home settings, and the ways in which its inappropriate use could be reduced, including the consideration of:

- **the availability of data on the prescribing of anti-psychotics in care homes, to understand prevalence and patterns of use;**

Antipsychotics were prescribed for 17.3% of residents in nursing homes and 18.6% in residential homes in England in 2009, and follow-up in 2012 found the respective figures had edged up to 21.0% and 19.2% (point prevalences). There was a six-fold variation between geographical areas, and a social class gradient: prescription durations, but not doses, were often excessive (Szczepura et al 2016). I was unable to identify a similar figure for care

homes in Wales, but in the 5 care homes in our trial 21/175 (12%) residents were prescribed antipsychotics: this lower figure is likely due to the volunteer nature of our sample (Jordan et al 2015).

· **prescribing practices, including implementation of clinical guidance and medication reviews;**

There is no evidence indicating that clinical guidance has reduced antipsychotic prescribing to older adults. There have been many UK recommendations and costly initiatives to reduce prescribing of antipsychotics for older adults, particularly those with dementia (Banerjee 2009, Older People's Commissioner 2014, Department of Health's 2009 National Dementia Strategy, MHRA 2012). A large observational study indicates that, to date, none have succeeded (Szczepura et al 2016). Similar (FDA) warnings in the USA resulted in increased prescribing of benzodiazepines and anti-dementia medicines, but no changes in antipsychotics (Singh & Nayak 2016).

Other warnings and guidance have been more successful. For example: an interrupted time series analysis indicates that prescribing has been channelled from paroxetine to other SSRIs (Pamer et al 2010); FDA black-box warnings resulted in reduced initiation doses of SSRIs (Bushnell et al 2016).

In none of our research projects have we found evidence of medication reviews or documentation of side effects before introduction of our intervention (Jordan et al 2014, 2015). Our ongoing work with cluster pharmacists indicates that nurse-led medicines monitoring facilitates their medication reviewing.

NICE (2015) recommends medication monitoring, but no strategies are suggested. We propose a low-cost strategy to implement the relevant NICE recommendations from Medicines' Optimisation, Guideline 5 (2015), Managing Medicines in Care Homes, Social Care Guideline 1 (2014), and Psychosis and Schizophrenia clinical guideline (2014) (details are appended).

· **provision of alternative (non-pharmacological) treatment options;**

Treatments should be tailored to individuals' needs. We (Jordan et al 2015) found that detailed, careful monitoring identified individuals' diverse needs, reduced antipsychotic prescribing and significantly increased the number of problems addressed: pain (cf. Rajkumar et al 2017), dental problems, behaviour problems, anxiety (cf. Fossey et al 2006).

Some, not all, non-pharmacological interventions improve quality of life scores, and all require considerable investment in staff time (Ballard et al 2016). These interventions, and fidelity of their delivery, are unlikely to be captured in electronic databases. They are also restricted by time pressures, institutions' priorities and staff's perception of the intervention (Lawrence et al 2012).

· **training for health and care staff to support the provision of person-centred care for care home residents living with dementia;**

Some person-centred care initiatives have reduced the prescribing of antipsychotics, although clinical outcomes are not clear and many initiatives are not supported by research evidence (Fossey et al 2014). In practice, releasing staff for training is difficult, due to staffing shortages and time pressures. Therefore, interventions with minimal training needs are likely to be more feasible: provision of websites and materials that can be accessed at any time may be more realistic than face-to-face training. Many interventions addressing a single symptom (e.g. pain, akathisia) or problem (e.g. anxiety, disturbed behaviour) are described in the literature, therefore, *we recommend a single comprehensive Profile* with signposts to further exploration with specialist measurement tools if necessary. Our 1-sided West Wales Adverse Drug Reaction (WWADR) Profile, with vital signs, can be passed to prescribers and pharmacists with problems highlighted. We hope there will be opportunities to link with the all-Wales electronic records initiative (NWIS/WCCIS).

There are advantages to formalizing the links between clinical practice and universities to address the current goal. Links are often made in the context of specific projects. The proposal to develop an ENRICH network of research-ready care homes in Wales, to parallel that in England and Scotland, may help to address this. However, voluntary networks are unlikely to attract the care homes most in need of support, and the care homes' inspectorate should consider mandating documentation of medication monitoring, in parallel with the ongoing monthly nutritional assessments.

· **identifying best practice, and the effectiveness of initiatives introduced so far to reduce inappropriate prescribing of anti-psychotics;**

Interventions must be based on research evidence, ideally randomised controlled trials with supporting qualitative evidence. There are suggestions that consultant-led medication review (Ballard et al 2016) and pharmacist-led interventions are ineffective (RESPECT 2010), and Cochrane reviewers found evidence for implementation to be equivocal and of low quality (Alldred et al 2016, Patterson et al 2014). Provision of advice confers some benefits, but demands professionals' time (Corbett et al 2012). Therefore, based on our trial and earlier work (appended), we are proposing a multi-disciplinary intervention, led by nurses, the

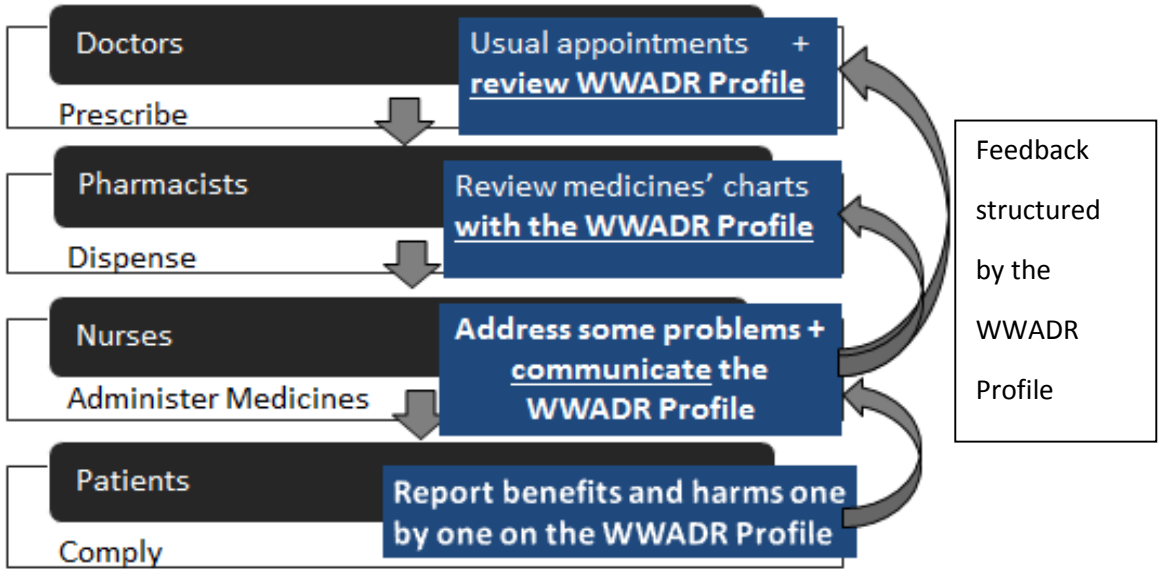
professionals closest to the patients, to introduce systematic patient feedback into medication management and prescribing (figure) (Jordan et al 2015, 2016). Our literature searches indicate that the WWADR Profile is the only comprehensive nurse-led monitoring instrument for mental-health medicines (Jordan et al 2004, 2016, Gabe et al 2011, Vaismoradi et al 2016).

NICE examplars are an additional source of 'best practice' (for example, Jordan 2015).

· **use of anti-psychotic medication for people with dementia in other types of care settings.**

Some 2% of those aged >80 in primary care are prescribed antipsychotics, with a social class gradient, based on interrogation of the UK Health Improvement Network (THIN) database (Marston et al 2014). More work is needed to identify and target these patients, but the fees expected by GPs to undertake medication review may be a barrier (Dreischulte et al 2016). Our intervention has proved successful in community settings (Jones et al 2016, Jordan 2002, et al 2002). Interrogation of the all-Wales GP prescribing database in SAIL could be discussed, but coverage is ~60% of patients and ~70% of general practices.

Fig. The Medication Chain + WWADR Profile Feedback



Note. This figure illustrates the principle of the operation of the WWADR Profile in a range of settings.
© Sue Jordan 2015 From: Jordan S, Gabe-Walters ME, Watkins A, Humphreys I, Newson L, Snelgrove S, Dennis M. (2015) Nurse-Led Medicines' Monitoring for Patients with Dementia in Care Homes. PLoS ONE 10(10): e0140203. doi:10.1371/journal.pone.0140203 http://dx.plos.org/10.1371/journal.pone.0140203

Appendix 1

NICE recommendations met by the West Wales Adverse Drug Reaction (WWADR) Profile

1. Medicines' Optimisation G5 2015

Recommendation 9
Consider using a screening tool to identify potential medicines-related safety incidents.
Recommendation 27
During a structured medication review, take into account …

- How safe the medicines are, how well they work for the person, how appropriate they are
- Any monitoring that is needed

2. Managing Medicines in care homes SC1 2014

Recommendation 1.8 Reviewing Medicines
1.8.3 Health and social care practitioners should ensure that medication reviews involve the resident and/or their family members or carers and a local team of health and social care practitioners (multidisciplinary team).
1.8.5 Health and social care practitioners should discuss and review the following during a medication review:

- the resident's (and/or their family members' or carers') concerns, questions or problems with the medicines
- all prescribed, over-the-counter and complementary medicines that the resident is taking, and what these are for
- how safe the medicines are, how well they work, how appropriate they are, and whether their use is in line with national guidance
- any monitoring tests that are needed
- any problems the resident has with the medicines, such as side effects or reactions, taking the medicines themselves (for example, using an inhaler) and difficulty swallowing
- helping the resident to take or use their medicines as prescribed (medicines adherence)

3 Psychosis and Schizophrenia in adults: treatment and management CG178 2014

Recommendations 1.3.6.4

- Monitor and record the following regularly and systematically throughout treatment, but especially during titration:
- response to treatment, including changes in symptoms and behaviour
- side effects of treatment, taking into account overlap between certain side effects and clinical features of schizophrenia (for example, the overlap between akathisia and agitation or anxiety) and impact on functioning
- the emergence of movement disorders
- weight, weekly for the first 6 weeks, then at 12 weeks, at 1 year and then annually (plotted on a chart)
- waist circumference annually (plotted on a chart)
- pulse and blood pressure at 12 weeks, at 1 year and then annually
- fasting blood glucose, HbA_{1c} and blood lipid levels at 12 weeks, at 1 year and then annually
- adherence
- overall physical health. **[new 2014]**

Appendix 2

Examples of previously unsuspected problems identified and addressed

- cardiac arrhythmias and severe hypertension (Jordan 2002, 2002),
- drug-induced Parkinsonism (Jordan et al 2014),
- respiratory tract infections (Gabe el al 2014),
- chest pain and valproate-induced pancreatitis (Jones et al 2016).

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Our video & website
https://youtu.be/E_CPDgsmA4s
http://www.swansea.ac.uk/wwadr/#

Care Homes Managers who participated in the RCT (Jordan et al 2015)

- Home Manager said " The profiles are very useful and have enabled us to review and discuss the medications with the GP and CPN. As a result, for example we have stopped some antipsychotic medications that the patient no longer requires". (Wilson, Care Home Manager, Glan Garnant)
- Paula Aplin said " The WWADR profiles are really useful and the staff are more educated and informed about drug reactions. The increase in staff confidence has made a big difference to medication management for the service users in our care ".
- Aldo Picek Clinical nurse manager said "The tool increased the nurse knowledge and improved attitudes towards accountability. Increased confidence helped to identify side effects and change medications".
- Sue Levy the Home Manager said " I use the checklist routinely in my practice and for the few minutes it takes, it provides a patient centred care for the person which makes it worthwhile. It has made me reflect and think of things that I wouldn't have prior to using the profile".

The work is endorsed by Age Cymru. Age Cymru are supportive of this piece of research.

Alzheimer's Society, Wales will be supporting our research in forthcoming discussions with Welsh Government.

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