A clinical evaluation of benzodiazepine and hypnotic prescribing from admission to discharge in acute adult care

Victoria Crossman
Cheshire and Wirral Partnership NHS Foundation Trust

Hypnotics and benzodiazepines should be prescribed on a short-term basis in line with 1988 Committee on Safety of Medicines advice on benzodiazepines and NICE guidance (TA 77). The appropriate prescribing of hypnotics and subsequent review upon discharge also forms part of the quality, innovation, productivity and prevention (QIPP) agenda. Recent feedback from primary care has suggested that Cheshire and Wirral Partnership (CWP) is initiating and discharging service users on hypnotics and benzodiazepines. This feedback has not been evidenced; therefore an evaluative piece of work is required.

AIMS AND OBJECTIVES
The aim of this piece of work is to explore whether the trust is initiating and subsequently discharging service users on hypnotics and benzodiazepines. The objectives are to explore patterns in the prescribing of benzodiazepines and hypnotics and to explore methods of review of these medications.

METHOD
The populations involved were those under 65 who were inpatients on the adult acute mental health wards on 1 March 2012 and had been so for eight weeks or less. Those patients were part of the audit for the month of March during which many of them were discharged thus allowing both aims of the audit to be considered. This was a clinical evaluation; ethical approval was not required as the project was commissioned by the local medical director.

RESULTS
The regular and prn medication of 63 acute adult service users was looked at across the trust. The results are set out in Table 1. Of the 63 service users, 47 were discharged before the end of March. Of those 47 service users only two (4%) were discharged on a benzodiazepine or hypnotic initiated by the trust.

DISCUSSION AND CONCLUSION
The results indicate that benzodiazepines and hypnotics are prescribed on admission for the majority of service users. However, it can also be concluded that the trust does not routinely initiate and subsequently discharge service users on benzodiazepines or hypnotics. It is a recommendation of this clinical evaluation that these medications are reviewed on a regular basis throughout a service user’s admission and discontinued if not indicated. Further, the results of this piece of work are to be shared with primary care colleagues in order to provide assurance regarding the aforementioned feedback.

REFERENCES

Table 1. Results

<table>
<thead>
<tr>
<th></th>
<th>Benzodiazepines</th>
<th>Hypnotics</th>
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<tbody>
<tr>
<td>Prescribed within 24 h of admission</td>
<td>53</td>
<td>35</td>
</tr>
<tr>
<td>Prescribed in primary care prior to admission</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Percentage newly prescribed by CWP</td>
<td>81%</td>
<td>77%</td>
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<tr>
<td>Prescribed on discharge</td>
<td>6</td>
<td>1</td>
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<tr>
<td>Prescribed in primary care prior to admission</td>
<td>4</td>
<td>1</td>
</tr>
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</table>

AUDIT CATEGORY
Winner

Monitoring of physical health of patients on clozapine and communication of results with the psychiatric team

Nawal Arif
St Charles Hospital, Central North West London NHS Foundation Trust

The physical health needs of patients with schizophrenia are often not adequately screened by clinicians. This was recognised by the NICE guidance for schizophrenia, which highlighted that general practitioners and secondary care psychiatric services should monitor the physical health of people with schizophrenia at least once a year, and these results should be communicated with the psychiatrist as well as documented in the case notes.

AIM
To assess compliance, at one of the Central North West London (CNWL) nurse-led clozapine clinics, to the CNWL clozapine operational guidelines and identify areas of practice that need to be improved.

STANDARDS
100% of patients attending clozapine clinic must have: (1) blood pressure, pulse, temperature, weight and height or body mass index monitored and recorded, including refusal, on the nursing assessment checklist (NACL) listed in the policy; (2) potential side effects assessed (eg, sedation, hypersalivation, tachycardia, constipation and weight gain) and recorded using either GASS tool or NACL and reported to their psychiatric team; and (3) lipids, BMs, LFTs, ECG, U&Es and FBC done, recorded as annual routine follow-up and reported to the prescriber or the community psychiatric team for the past two years.

METHODS/DESIGN
An audit tool was designed and a total of 30 outpatients receiving clozapine for at least three years were selected with a blood monitoring frequency of
RESULTS
1. 90% (27) of these patients had weight, blood pressure, pulse and temperature measured at each visit. But none had height or body mass index measured. Results for all five physical health measures were documented in Jade for 90% (27) patients. However, no documentation was found in the NACL.

2. 80% (24) patients were asked about side effects. All 80% (24) had their side effect recorded in Jade. However, either GASS tool or NACL were used to record side effects. No record of communication was found for any of the reported adverse effects to their psychiatric team.

3. Lipids, glucose, LFTs, U&E and FBC were documented for 95% (28) patients in 2009. Of these result 90% (27) were recorded in NACL and one result was documented in Jade in 2009, while 83% (25) patients had results recorded in the NACL in 2010. There was no evidence or documentation in either patient’s notes or Jade that these results were disseminated to psychiatric teams.

DISCUSSION AND CONCLUSION
None of the standards was met. Clozapine clinic nurses are best placed to interface between primary and secondary care, therefore they play a crucial role in ensuring the physical health needs of this group are fully met and followed up by their community psychiatric teams. Recommendations include: increase awareness and train nursing staff to use NACL and GASS to record physical health measures and to communicate results, especially any abnormal results to the treating psychiatric team in order to prevent any adverse events.

REFERENCES

RESEARCH/OTHER CATEGORY
Winner
Antipsychotic-induced hyperprolactinaemia: a knowledge survey and development of trust guidelines for monitoring and management
Rachel Brown*, Jessica Gibson†, Phil Davison‡ and Helen Shaw§
*Clinical Lead Pharmacist, Oxford Health NHS Foundation Trust; †Consultant Psychiatrist, Oxford Health NHS Foundation Trust; ‡Consultant Psychiatrist, Oxford Health NHS Foundation Trust; §Clinical Lead Pharmacist, Oxford Health NHS Foundation Trust

The increased awareness and monitoring of the physical health of individuals with severe mental illness has primarily focused on cardiovascular and metabolic disease. Hyperprolactinaemia in this patient population has received less attention. This is despite the known effects of hyperprolactinaemia-induced hypogonadism which can cause decreased bone mineral density and osteoporosis.

AIMS AND OBJECTIVES
1 To survey doctors’ awareness of when prolactin should be measured, what the risks of hyperprolactinaemia are, and whether these risks are discussed with patients.
2 If necessary, develop more comprehensive and detailed trust guidelines for monitoring and managing antipsychotic-induced hyperprolactinaemia.

METHODS/DESIGN
A survey was designed. Eighteen clinicians were asked to complete the survey and then invited to participate in an educational session about hyperprolactinaemia, hypogonadism and bone risk. The survey tool was repeated after three months. The survey results helped inform the need for a more comprehensive trust guideline. An action plan was devised which included literature searching and consultation with colleagues in Endocrinology, Women’s Reproductive Health, Metabolic Bone Disease and Chemical Pathology.

RESULTS
The survey response rate was 72% (13/18). The main results were as follows (repeat survey in brackets): carry out a baseline prolactin level, 17% (14%); take a prolactin level in patients with symptoms of hyperprolactinaemia, 75% (75%); screen for more than one side effect of hyperprolactinaemia, 37% (58%); discuss amenorrhoea with females, 17% (58%); and discuss osteoporosis, 0% (34%).

A new trust guideline with formalised referral pathways to specialist colleagues was developed. The guideline includes detailed information about hyperprolactinaemia and a side effect screening tool, what to do for patients being initiated on or currently receiving an antipsychotic that raises prolactin, what to do with abnormal results, how to identify patients who require further investigation into the adverse effects of prolactin on bone, who to refer them to based on their history of fragility fracture, their gender, sexual dysfunction and lowered testosterone levels (males) and presence of amenorrhoea (females), as well as including recommendations for patients who do not meet the referral criteria but continue to have a raised prolactin.

DISCUSSION AND CONCLUSION
Although an improvement was seen after the educational session, the results remained poor. Clinicians indicated that lack of knowledge, concerns of non-concordance with medication and time constraints in clinic resulted in side effects not being discussed. Hypogonadism secondary to antipsychotics resulting in amenorrhoea or a lowered testosterone need only be present for three to six months before bone health may become compromised. For a population of patients already at increased risk due to lifestyle factors and who are likely to be taking antipsychotics long-term the prompt identification of those at risk is essential. It was clear that detailed guidelines, particularly in relation to managing the risk to bone health, were lacking and would be a valuable resource.

We hope that these guidelines will (a) provide clinicians with enough information and a comprehensive strategy for investigation and management of hyperprolactinaemia, (b) improve patient experience and outcomes, and (c) save time and resource for NHS trusts.

An audit to assess the guideline’s impact, using the local biochemistry database and patient notes, is planned.

REFERENCES

RESEARCH/OTHER CATEGORY
Runner-up
Pharmacists’ verbal clinical communication skills training
Caroline Parker* and Simon Michaelson†
*Consultant Pharmacist and †Consultant Psychiatrist, Central and North West London NHS Foundation Trust

Good verbal communication skills are central to providing excellent healthcare, and it is imperative that clinical pharmacists, as members of the healthcare team, develop effective communication skills. Poor communication skills may...
Neutropenia after the addition of Suboxone

Thuy Bui*, Michelle Hooper*, Robert Shields†
*Pharmacy Department, Alfred Health, Victoria, Australia; †Faculty of Pharmacy and Pharmaceutical Sciences, Monash University, Victoria, Australia

OBJECTIVE

To report a probable drug interaction between Suboxone (buprenorphine/naloxone) and clozapine, resulting in neutropenia.

RESULTS

Half the pharmacists surveyed (13/26) reported that they had received no communication skills training as an undergraduate, and similarly half (13/26) had not received any postgraduate training. The majority of respondents (19/26) said that they had received some “on the job” clinical communication skills training.

Seven senior clinical mental health pharmacists attended the brief clinical communication skills training programme. All had received “very little” formal or informal communication skills training ever, despite being in practice for a number of years and currently employed at a senior grade. Both participants’ knowledge about and confidence in their communication skills increased notably in all aspects following the training.

DISCUSSION AND CONCLUSION

Pharmacists reported receiving very little training in clinical communication skills, including senior clinical pharmacists who would be expected to train, guide and oversee the training and development of these skills in the staff they manage and teach. Even a relatively short clinical communication skills training programme was sufficient to noticeably increase the knowledge and confidence in communication skills of these senior and experienced clinical pharmacists. It is hoped that improving their skills and confidence will lead to better delivery of training to their staff.

Clinical communication skills are skills that can always be further improved and developed.

REFERENCES


RESEARCH/OTHER CATEGORY

Highly commended

CLINICAL FEATURES

A 37-year-old Caucasian male with a dual diagnosis of chronic schizophrenia and substance abuse. His psychiatrist had prescribed a combination of clozapine, aripiprazole and valproate to treat chronic schizophrenia and prevent clozapine-induced seizures. No episodes of neutropenia had been reported since starting clozapine over eight years ago. Suboxone was later prescribed by a drug and alcohol clinician, to treat heroin dependence. Within five weeks of starting Suboxone, the dose had been titrated up to 16mg/4mg. The following day, the routine monthly clozapine full blood examination (FBE) showed neutrophils of 1.8 × 10⁹/L, this falls within the “amber range” (neutrophils 1.5 × 10⁹/L – 2.0 × 10⁹/L).

INTERVENTIONS, CASE PROGRESS AND OUTCOME

A sustained reduction in neutrophils was reported over the next seven weeks, with a nadir of 1.10 × 10⁹/L. Despite four neutrophil results in the “red range” (neutrophils <1.5 × 10⁹/L), clozapine was continued on the advice of the Clopine haematologist. The valproate dose was reduced after five weeks, but the neutrophils did not improve. When the Suboxone was finally ceased, seven weeks after the first “amber result”, his neutrophils improved and “green results” (neutrophils >2.0 × 10⁹/L) continued to be reported. No further episodes of neutropenia have since been reported. No other opiate replacement therapy was prescribed in place of Suboxone.

DISCUSSION

Clozapine, valproate and aripiprazole have all had blood dyscrasias reported in association with their use.1–3 Suboxone, however, has not been previously described in the literature in association with blood dyscrasias.4–5 There are, however, two yellow card reports to the UK Medicines and Healthcare products Regulatory Agency of decreased white blood cell counts in association with Suboxone.4 The patient did not exhibit any physical signs of neutropenia and, if not for the routine haematological monitoring associated with clozapine treatment, it is unlikely that the neutropenia would have been identified unless the patient later developed signs.

CONCLUSIONS

The addition of Suboxone to a stable psychotropic regimen resulted in a sustained low neutrophil count. As the neutropenia resolved when Suboxone was ceased, and Suboxone is not reported to cause neutropenia, it is hypothesised that Suboxone interacted with the concurrent medications to cause the neutropenia by an unknown mechanism.

REFERENCES


BEST ORAL PRESENTATION

Winner

Psychiatrists’ views of antipsychotic use in the management of behavioural and psychological symptoms of dementia: a mixed methods study

Jonathan Cavan*, Lucy Reeves* and Carmel Hughes†
*Central and North West London NHS Foundation Trust, †Queen’s University Belfast

The use of antipsychotics for the management of behavioural and psychological symptoms of dementia (BPSD) is a controversial healthcare
AIMS AND OBJECTIVES

To explore psychiatrists’ views of antipsychotic use in managing BPSD including: (i) factors influencing decision to prescribe, (ii) preferred antipsychotic, and influence of psychiatrists’ grade and other factors in determining this, (iii) factors which influence review/discontinuation, (iv) psychiatrists’ experiences of uncomfortable prescribing decisions.

METHODS

Sequential mixed methods, using postal survey (initial quantitative phase) and face-to-face semi-structured interviews (explanatory qualitative phase). Participants were psychiatrists (n=17) with old age Psychiatry experience, employed within an NHS trust providing care to those with dementia across five London boroughs. Statistical analysis of survey outcome measures used Friedman test, Friedman test (post-hoc Wilcoxon Signed-Ranks test), Kruskal-Wallis H test (post-hoc Mann-Whitney U test) and Paired T test. Data analysis of interview transcripts used the stage “framework approach’. A conceptual framework consisting of main themes/subthemes was constructed. Data integration of results occurred at interpretation phase.

RESULTS

‘Risk of harm/distress to service users’ was ranked the most important factor influencing prescribing decision. Delusions and hallucinations were considered an appropriate indication by 100% and 94.1%, respectively. Agitation/aggression was the main non-psychotic BPSD (70.6%) considered appropriate, while other BPSD ranged from 0 to 47.1%.

Psychiatrists favoured quetiapine (50%) or risperidone (31.3%), which was not influenced by psychiatrists’ grade [P=0.136, Fisher’s Exact test]. Choice was influenced by familiarity/personal experience, side-effect profile and evidence-base (median value corresponding with “high” importance), with quetiapine and risperidone having the highest scores. Psychiatrists’ grade was not found to influence preferred antipsychotic; however, the influence was significant for the range of non-psychotic BPSD. Quetiapine is the preferred antipsychotic by psychiatrists, with “high” importance (31.3%) compared to risperidone (10%). Psychiatrists preferred quetiapine (50%) or risperidone (31.3%).

DISCUSSION AND CONCLUSION

This study found consensus and disparity among psychiatrists’ views, although generalisability of results is limited by the small sample size. Psychiatrists’ most important influencing factor to prescribe — ‘risk of harm/distress to service users’ — suggests consistency with national guidance. Psychiatrists broadly agreed antipsychotics are considered for psychotic symptoms; however, opinion was divided for the range of non-psychotic BPSD. Quetiapine is the preferred antipsychotic and largely a consequence of historical safety warnings. Although risperidone appears to be coming back into favour, due to increasing awareness of the available evidence-base and product licence. Psychiatrists’ grade was not found to influence preferred antipsychotic; however, the influence of consultant psychiatrists on prescribing in the elderly post-notification was highlighted. Psychiatrists’ shared practice in managing discontinuation was broadly consistent with current recommendations (<12 weeks). However, the importance of “uncertainty” regarding outcome of cessation was identified as a possible factor for continuation. Uncomfortable prescribing decisions were found to be associated with factors that are potentially modifiable. Further study is needed to investigate views that lack consensus and explore reasons why antipsychotics may be used unnecessarily in managing certain BPSDs.

REFERENCES


PREREGRINATION PROJECT BURSARY AWARD

Winner

Eleanor Marian Bevan

Heart of England Foundation Trust

On 5 November 2011 Lundbeck, the marketing authorisation holder of citalopram, in collaboration with the Medicines and Healthcare products Regulatory Agency, published a notification about the association of citalopram with dose-dependent QT interval prolongation. The notification laid out the important new recommendations for the use of citalopram. The new dosage and usage recommendations are as follows:

- The maximum dose of citalopram is now 40mg daily;
- In the elderly and in patients with reduced hepatic function the maximum dose is lowered to 20mg daily;
- Citalopram is contraindicated in patients with known QT interval prolongation or congenital long QT syndrome;
- Use of citalopram with other medicinal products known to prolong the QT interval is contraindicated;
- Caution is advised in patients at higher risk of developing torsade de pointes, for example, those with congestive heart failure, recent myocardial infarction, bradycardia or a predisposition to hypokalaemia or hypomagnesaemia because of concomitant illness or medicines.

AIM AND OBJECTIVES

The overall aim of this audit was to assess whether the changes in the licensing of citalopram were being adhered to for patients within the Solihull Mental Health Directorate. The objectives were:

- To determine how far the new licensing arrangements for citalopram were being followed;
- To investigate whether changes had been made to patients’ drug therapy in light of the new licensing arrangements.

METHOD

All patients prescribed citalopram pre-Lundbeck notification within the Solihull Mental Health Directorate were audited. Patients prescribed citalopram were found by visiting the various units and searching through patients’ notes and drug charts. An audit proforma was designed using the new recommendations in order to collect the necessary data. Patients’ drug therapy pre- and post-notification was determined by using past and present drug charts. Establishing whether the patient had QT interval prolongation or congenital long QT syndrome was also found by looking through patients’ notes and looking at their ECGs.

RESULTS

In total 19 patients were audited. No patient was prescribed citalopram more than the maximum daily dose of 40mg in adults and 20mg in the elderly post-notification. No patient was found to have congenital long QT syndrome. However, one patient did have a prolonged QT interval following an overdose of citalopram. The patients’ citalopram was subsequently stopped and switched to sertraline. Two patients remained on citalopram with a medicinal product known to have a low effect on QT interval prolongation and one patient remained on the contraindicated combination of citalopram with a medicinal product known to have a moderate effect on QT interval prolongation. There was no clear documentation on the rationale of use for this combination nor advice for regular ECG monitoring in the patients’ notes.

DISCUSSION AND CONCLUSION

In general the results show that changes in the licensing of citalopram are being adhered to. However, there is potential to improve care.
improvements include increased awareness of the Lundbeck notification and the new recommendations as well as the medicinal products known to have an effect on QT interval prolongation.

REFERENCES

PREREGISTRATION PROJECT BURSARY AWARD
Runner-up

An investigation into the issues faced by pharmacists concerning the prescribing and administration of “as required” (prn) psychotropic medication in psychiatric inpatients

Linzi Chalmers
Preregistration Pharmacist, South London and Maudsley NHS Foundation Trust

Pro re nata (prn) or “as required” medication is a common clinical intervention used within mental health units for the immediate treatment of distressed, aggressive and agitated patients. To date there are very few studies that have investigated pharmacists’ views on prn prescription and administration, as currently there is a strong bias towards nurses’ views within the literature.

AIM
The aim was to investigate whether pharmacists have particular issues or problems with the current system of prescribing and administration of prn medication.

OBJECTIVE
To carry out literature review; to collate data from pharmacists within the south of England using a questionnaire; to analyse and present the data; to interpret the findings.

METHODS
This was a quantitative project where an anonymous questionnaire was used not only to assess pharmacists’ awareness of prn issues but also to investigate how important they deemed the highlighted issues within practice. The questionnaire was piloted by mental health pharmacists within NHS Scotland before being formatted onto SurveyGizmo. It was then distributed by the College of Mental Health Pharmacy to all of its membership within England and the responses gathered and analysed.

RESULTS
A total of 33 pharmacists from the south of England who participated felt the prn system, if used correctly, was an effective measure for treating a patient’s symptoms. Of all the scenarios encountered, the issue found to be of most concern was the contribution of prn medication to “high dose” prescribing. The respondents felt the most pertinent change to improve practice would be to state the maximum number of doses within a 24-hour period. The majority agreed that doctors’ prescribing of prn medication needs to be improved.

DISCUSSION AND CONCLUSION
From the evidence gathered, a significant number of pharmacists believe there are problems with the current prn system. A study conducted by C. Paton et al showed that guidelines may need to be improved with regard to the prescribing of prn medication, as currently there are very few guidelines that exist on the overall prescribing of prn. This was supported by the sample set from this study. Useful insights from a pharmacist’s perspective have been highlighted from this project especially regarding the lack of prn guidelines, however, further studies are needed to assess the importance of improving prn practice and developing future guidelines.

REFERENCES

UNDERGRADUATE PROJECT BURSARY AWARD
Winner

Pharmacists and the prescribing and administration of prn medicines: What are the issues?

Fiona Fraser
University of Strathclyde

Pro re nata (prn) psychotropic medication is widely used in acute mental health settings. However, a variety of issues have been associated with its prescribing and administration. These include: an increased potential for polypharmacy including (pharmacokinetic/dynamic) drug interactions; inadvertent or consequential high doses of antipsychotics being administered and vague or unclear indications for the administration of the medicine. Previous research has largely focused on a medical or nursing perspective.

METHOD
A self-administered online questionnaire was therefore used to find out from mental health clinical pharmacists in Scotland their day-to-day experience of the prn system.

RESULTS
Forty-nine pharmacists responded to the survey (response rate 69%). From a list of potential scenarios routinely seen in their day-to-day practice, the majority (n=38, 76%) choose “vague or non-specific indications”, followed by “use of prn meds results in patient becoming high dose” (n=29) and “unclear details of time intervals between doses” as the third most common scenario (n=28). The most popular issue identified by the sample, as being the most important to improving the prn system, was “ensuring a maximum number of doses is clearly written on the prescription”. Awareness of prn-specific guidelines or protocols within their health board area was generally low (n=15, 31%). However, awareness of guidelines/protocols for rapid tranquillisation was much higher (98%). Pharmacists’ beliefs and attitudes were also examined. 51% (n=26) agreed with the statement that “patients are too reliant on pharmacological interventions to manage their symptoms” and 63% (n=31) agreed that “doctors’ prescribing of prn medication needs to improve”. A high number (69%) indicated they were “sufficiently competent in recognising rapid tranquillisation when it had been given to a patient”.

DISCUSSION
In conclusion, mental health pharmacists in Scotland have many concerns over the prescribing and administration of prn medicines. They routinely see situations which compromise the patient’s pharmaceutical care needs and have firm ideas about how the system could be improved. Most are confident in their knowledge and identification of prn prescribing/administration and, although they feel the prn system is necessary and effective for symptom management, they acknowledge that it needs improving.

REFERENCES
UNDERGRADUATE PROJECT BURSARY AWARD

Runner-Up

Pro re nata (prn) medication issues faced by mental health pharmacists

Laura Bathgate
School of Pharmacy, University of Strathclyde, Glasgow

Studies within mental health inpatient settings have demonstrated a number of areas where psychotropic pro re nata (prn) prescribing and administration are far from ideal. Many of these are particularly relevant to pharmacists, as “the expert on medicines” within the multidisciplinary team. Worryingly, the increased rates of high dose antipsychotic prescribing and polypharmacy associated with prn can contribute to an increased risk of side effects, adverse drug reactions and more frequent use of anticholinergic drugs.

AIM AND OBJECTIVES
The aim of this study is to investigate psychotropic prn medication issues faced by mental health pharmacists. The objectives are to: analyse data collected to gain an insight into pharmacists’ attitudes, identify the issues faced and possible solutions.

METHODS
A self-administered questionnaire was distributed online, from 6 to 19 February 2012, via the CMHP membership list. This report specifically focused on the responses collected from Wales and the North of England.

RESULTS
Of the 35 pharmacists who responded, 15 were aware of guidelines or protocols for prn prescribing within their workplace, with one third reporting adherence and efficacy. Likert-based five-point responses show pharmacists widely believe prn is effective if used correctly but that doctors’ prn prescribing needs to be improved. They also believe both nurses and patients rely too heavily on prn rather than other (behavioural) techniques.

DISCUSSION
Possible strategies to improve practice, particularly doctors’ prn prescribing, include: greater use and adherence to evidence based guidelines, introduction of carefully designed prn drug charts to eliminate many poor prescribing practices and the use of time-limited prescriptions to encourage review. Nursing practices — namely, reliance on prn over behavioural techniques and documentation surrounding administration — also need to be improved. Further studies are needed to investigate the impact of such changes on practice.

REFERENCES

PHARMACY TECHNICIAN PROJECT BURSARY AWARD

Winner

Antipsychotics in dementia: Are patients treated under shared care arrangements being reviewed in accordance with national guidance?

Joanne Woodward
5 Boroughs Partnership NHS Foundation Trust

Behavioural and psychological symptoms are often extremely distressing to both the patient and the care-giver, and include agitation, aggression and violence, as well as psychosis, paranoia and delusions. However the prescribing of antipsychotic medication in dementia patients carries with it a considerable risk.

The aim of this project was to determine whether service users initiated onto antipsychotics to treat behavioural and psychological symptoms of dementia (BPSD) by secondary care, but whose care is subsequently a shared responsibility between primary and secondary care, continue to be reviewed in line with national guidance from NICE, the Alzheimer’s Society and the General Medical Council.

METHOD
The audit was a retrospective case note audit of service users within one primary care trust (PCT) catchment area. An audit sample was identified by using a PCT medication review, which was undertaken between April and September 2011.

The audit covered 53 service users, registered with 44 separate GP practices, who were identified as having a diagnosis of dementia and currently prescribed an antipsychotic by the PCT under shared care arrangements with one of eight psychiatric consultants.

RESULTS
94% of service users audited did not have a documented risk/benefit analysis for starting or continuing treatment at their last review. 46% had been reviewed within the previous three months (although this does not take into account missed appointments). 53% had a documented therapeutic response to the treatment, and 64% had not had a review of adverse effects. In 25% of reviews, the outcomes (for communication to the GP) were not clearly documented. 88% of patients had never undergone a trial without medication, and in 88% of cases there was no justification for the use of a medication outside of its product license.

DISCUSSION
Despite the risks of antipsychotic use in BPSD and the extensive guidance on the monitoring that must be undertaken, there is substantial evidence that many service users are still not being adequately monitored. The lack of clear documentation within care records is potentially putting service users and medics at risk.

There are improvements to be made in communications between primary and secondary care, the use of medicines reconciliation and the use of “trial without drugs” to determine treatment effectiveness. Time limited prescriptions and the newly developed clinical pathways for treatment of BPSD should also be utilised wherever possible.

REFERENCES

Table 1. Results

<table>
<thead>
<tr>
<th>Ranking of most concerning routine clinical practices*</th>
<th>Ranking of issues pertinent to improving practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Prn use contributes to patient becoming high dose</td>
<td>1. All documentation surrounding administration recorded in patients’ notes</td>
</tr>
<tr>
<td>2. Non-specific/ambiguous indication</td>
<td>2. All prn prescriptions valid for a time-limited period</td>
</tr>
<tr>
<td>3. Substandard documentation of prn administration</td>
<td>3. Maximum number of doses in any 24-hour period is clearly stated</td>
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* Routine clinical practices = as seen by over 50% of pharmacists in their day-to-day clinical practice. Other routine clinical practices observed include dose written as a range (e.g., 1–2mg), multiple indications for one treatment and missing/unclear time intervals between doses.
Evaluating the effect of input from a Leeds and York PFT multidisciplinary team on the care of older people with dementia prescribed antipsychotic medication and living in care homes

Margaret Sitchell, Kathryn Atkins, Denise Solari, Catherine Leeming, Nigel Wainwright, Susan Wilson, Tilaiat Tanweer, Shrewti Gosrani, Havinder Singh, Michael Jubb and Julie Budd

Leeds and York Partnership Foundation Trust

The National Dementia Strategy1 and Banerjee report2 include the aim of reduction in antipsychotic prescribing in patients with dementia. The primary care trust (PCT) funded a project for a Leeds and York Partnership Foundation Trust multidisciplinary team (MDT) to reduce the prescribing of antipsychotics and improve the quality of life of people with dementia living in care homes.

AIMS AND OBJECTIVES

For a specialist MDT to reduce the number of care home residents with dementia who are prescribed antipsychotics. The objectives are to develop and deliver a training package to care home staff and provide individual assessment and input promoting person-centred care in non-pharmacological management of behavioural and psychological symptoms of dementia (BPSD). To evaluate changes in prescribing and incidence of challenging behaviour.

METHODS/DESIGN

The project was approved by R&D as a service development and did not need ethics approval. The project MDT includes a pharmacist, care homes nurse, occupational therapist and psychologist and has psychiatrist input. Three homes out of 180 (approximately) were selected, with a mix of residential and nursing status. Consent was gained from the home and GP. A baseline data collection identified residents prescribed antipsychotics and measures, e.g., NPI, the prevalence of BPSD.

Four two-hour training workshops were delivered to staff on dementia and its experience, medication, delirium, pain, meaningful activity and the environment. A formulation and care plans were developed with carers to address challenging behaviour for individuals. Whole home formulation informed the team approach and whole home interventions. The team worked with prescribers to reduce and stop antipsychotics where possible, monitoring for emergent BPSD. Repeat measures are undertaken at discharge from the project.

RESULTS

Seventeen residents were taking antipsychotics for BPSD. Six (36%) died in the course of the study, three (18%) before intervention. Three (18%) residents were assessed as unsuitable for antipsychotic withdrawal. Two (12%) clients had an unsuccessful trial of withdrawal. Three (18%) clients have had their antipsychotics stopped. Four (24%) clients have had a partial reduction, three of whom have a plan for stopping completely. Two (12%) residents have had other medication altered and have a plan for antipsychotic stop.

DISCUSSION AND CONCLUSION

The team approach has improved carers’ understanding of residents’ behaviour and increased staff confidence in delivering person-centred care and managing BPSD. Homes have changed their use of rooms and staff to improve activity and quality of life of residents. There is an understanding of the risks of medication and antipsychotic prescribing has been reduced. On stopping medication some clients have shown no change, others are more alert, had improved sleep and interact better. Reinstituting the antipsychotic in one resident resolved re-emergent hallucinations but infection and delirium has complicated the picture in the other. Integration of this project into the care homes team is planned.

REFERENCES

1 Department of Health, National Dementia Strategy, February 2009.

The use of a Modified Delphi Technique to identify quality indicators for medication use in people ageing with intellectual disability and behaviour disorders

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People ageing with intellectual disability (PAWID) are among the most vulnerable members of society and often face many barriers to quality healthcare. Poor quality of care undermines every goal of healthcare, resulting in premature mortality, and possibly even widening health disparities. The current practice of using psychotropic medications is controversial and no guidelines exist in Ireland to assist practitioners in this area.

OBJECTIVE

To design a Modified Delphi Technique (MDT) with a multidisciplinary panel to determine the extent of agreement on quality indicators for the medication use process in PAWID and behaviour disorders.

STUDY DESIGN

Qualitative MDT consisting of a pilot and two rounds. Ethics approval was obtained. Literature and guideline review1 identified 38 candidate QIs. QIs were rated on a nine-point Likert scale against three criteria — importance, scientific soundness and feasibility. Robust QIs were voted 7, 8 or 9 by at least 80% panellists for importance and scientific soundness and 7, 8 or 9 by at least 70% for feasibility.

RESULTS

The Round 1 survey was completed by 25 panellists. QIs not reaching consensus were reframed for Round 2. Following both rounds, 30 QIs were robust. Following application of stricter criteria six high importance QIs were identified: medication review, general health review, restrictive practice, excessive dose antipsychotics, gradual dose reduction and dementia and antipsychotic medication.

DISCUSSION

The Delphi procedure is valuable for achieving a consensus about issues where none existed previously. The use of a multidisciplinary panel should increase the robustness and acceptability of the findings in an area where there is no accepted “gold standard” method for QI development.

This MDT is a first attempt in Ireland to provide QIs for the medication use process for PAWID and behaviour disorders that should assist services in ensuring the quality of care delivered to this vulnerable population.

REFERENCES

2 Del S. The use of medications for the management of problem behaviours in adults who have intellectual (learning) disabilities (Online). London: St George’s, University of London. 2012 (accessed 10 September 2012).
Aims and Objectives

Aim: To improve efficiency of medicines supply to an off-site, 105-bedded rehabilitation unit.

Objectives: To reduce time spent by the MMT ordering medicines to allow them to conduct alternate activities, eg training; to contribute to reduction in overtime and sickness levels in the pharmacy team; to reduce drug expenditure for the unit via decreased wastage.

Methods/Design

1 SOPs written for nursing and pharmacy staff detailing the new process, including a list of medicines exempted from being supplied as stock.
2 Pharmacy and the local care quality teams consulted before changes were made, to ensure understanding and co-operation. SOPs distributed.
3 The MMPT devised spreadsheets detailing all patients’ current treatment, which informed the purchasing and distribution manager what should be on the initial stock list and levels. Subsequent changes are communicated via e-mail, eg. when medicines are stopped, started or altered.
4 New stock lists compiled. Certain medicines remained stock regardless of whether patients were prescribed them, eg, emergency medicines, rapid tranquillisation.
5 New stock lists in use from June 2011. Nursing teams informed of change by MMPT.
6 The process was piloted for three months.

Results

Total monetary saving 2011/12 compared with 2010/11 was £16,952.

No impact on the number of medication errors reported.

Overtime reduced by up to 2 hours 11/12 versus 2010/11, 5,720 minutes to 1,665 minutes.

Days off sick reduced by just under a half, from 356 to 187.

Feedback from nursing and pharmacy staff gathered via questionnaire in September 2011 was positive.

The number of non-stock medicines supplied reduced from 4009 in 2010/11 to 1874 in 2011/12, whereas the number of stock items increased from 2,778 to 3,637. This represents a significant dispensary workload decrease, but increase in pharmacy stores.

Pilot deemed successful after three months and continued. Implemented on similar wards within the organization from September onwards.
that had no overall dose change were mainly in service users with a personality disorder and this may indicate the difficulties therapeutic engagement with these clients. Further reasons for this could be investigated. It is recommended that this audit is performed annually to assess ongoing performance.

REFERENCES

Prescribing and review of benzodiazepines in locked rehabilitation wards at CNWL NHS Foundation Trust
Srikrishna Samathagani
Central and North West London NHS Trust

Benzodiazepines are routinely prescribed for managing anxiety, agitation or aggression in inpatients. Risk associated with benzodiazepine use includes dependence, tolerance and paradoxical disinhibition. It is usually used for periods of a few weeks or so to reduce the risk of dependence. Ward pharmacist identified that many patients on some of the locked rehabilitation units were prescribed benzodiazepines for prolonged period of time and as a result audited the prescribing pattern across the rehabilitation units at CNWL.

AIMS AND OBJECTIVES
To evaluate the frequency, duration and review of benzodiazepine prescribing in locked rehabilitation units. Audit standard: All (100%) of regular benzodiazepine prescription should be reviewed at least once every two weeks.

METHODS/DESIGN
Retrospective audit looking at the prescribing and review of benzodiazepine over three months in four different locked rehabilitation units. Data relating to the type of benzodiazepine prescribed, duration of treatment and documented review during the study period was recorded. Only reviews that were documented in Jade (electronic notes) were considered in this audit. Any review that was verbally discussed but not documented was excluded.

RESULTS
Of the 42 patients audited, 14 were prescribed regular benzodiazepines, of whom only three had their benzodiazepine reviewed once every two weeks. All three patients belonged to the same rehabilitation unit. Five of the 14 patients had no documented review for at least three months. Ten of the 14 patients were on regular benzodiazepine for more than three months. Most of the patients (8/14) were prescribed clonazepam as a regular benzodiazepine.

DISCUSSION AND CONCLUSION
The frequency of benzodiazepine prescribing and review varies across the locked rehabilitation units. Benzodiazepines are prescribed for prolonged period in some of CNWL units. This finding is consistent with previous studies in other rehabilitation units. However, clear documentation of review is lacking for most of the patients on long-term benzodiazepines. Patients in locked rehabilitation units occupy long-term hospital beds and there is high prevalence use of high dose antipsychotic therapies and antipsychotic polypharmacy, indicating their illness is not always easy to manage. Nonetheless, patients deserve to be well reviewed and monitored as a protection against over medication and arbitrary treatment. Action plan from this audit includes: (a) review of benzodiazepines at units where there is comparatively higher level of benzodiazepine prescribing; (b) ensure all patients initiated on benzodiazepines are reviewed at least once every two weeks initially; (c) ensure all patients requiring longer-term (more than six months’) treatment are reviewed twice-monthly (minimum); (d) rehabilitation team to maintain database of patients who are on long-term benzodiazepine and keep record of next review date; (e) review all patients on long-term treatment giving consideration to trial withdrawal of benzodiazepines; (f) ensure that all reviews are clearly documented in the Jade notes; and (g) finally re-audit in 2013. All of the above action plan to be achieved before January 2013.

Audit of antibiotic prescribing within inpatient wards and compliance with hospital guidelines in Harplands Hospital
Rachel Tarbuck
North Staffs Combined Healthcare NHS Trust

Infection control and antibiotic prescribing is one of the areas within the NHS under scrutiny, particularly with publicity surrounding healthcare associated infections, Clostridium difficile and meticillin-resistant Staphylococcus aureus rates. This is important within mental health as patients require holistic care. Pharmacy is central to monitoring and advising regarding antibiotic prescriptions — and as such, ideally placed to audit antibiotic prescribing.

AIMS AND OBJECTIVES
The audit’s aim is to improve patient care by identifying prescriptions that are inappropriate, and thus improving services by recommending and implementing changes, such as additional training or updating guidelines. The reports are also used to identify inappropriate non-compliance with hospital guidelines. This impacts patient safety as more effective, prudent antibiotic prescribing reduces risks of healthcare associated infections, the patient is more likely to be treated effectively and safely and costs are also likely to be reduced.

METHODS/DESIGN
An audit data collection tool was developed and a standard operating procedure (SOP) written for antibiotic processing within pharmacy. This enabled all antibiotic prescriptions passing through the department or clinically screened on wards to have data collected. All members of the team were briefed on the use of the tool and the forms could be completed by any member. A clinical pharmacist then took responsibility for collecting data from the patients’ notes or blood results. This data is collated monthly. The report contains the summary of the data, as well as recommendations for improvements. Any incidents within the month are directly reported to Infection Control for follow up as well as a trust incident report completed at the time of occurrence.

RESULTS
Ongoing data collection: Urinary tract infections, skin infections and respiratory infections are most common indications for prescriptions. Repeated courses of antibiotics are frequent, along with lack of consideration for co-morbidities and interacting medications. There were pharmacist interventions in 41% of prescriptions. Quinolone and cephalosporin prescriptions are low in number and challenged at each incident by the ward pharmacist. Adherence to the guidelines for antibiotics initiated within the trust was good (92.5% of scripts).

DISCUSSION AND CONCLUSIONS
Individual prescribers are contacted at the point of inappropriate prescription receipt, any trends identified and used to improve awareness. Trends are further identified by production of four-monthly reports, to ensure any training shortfall are rectified. The audit reports aid provision of safe, rational, effective, economic and evidence-based pharmaceutical care, as well as detection, resolution and prevention of actual and potential medication related issues, with the overall aim of improving patient care within a multidisciplinary team. The reports feed into the Infection Prevention and Control Annual Programme as well as guideline and economic groups. Thus, the audit data, associated reports and ongoing monitoring from pharmacy directly impacts patient care and safety, education of prescribers, nurses and patients as well as highlighting any incidents. Data is used to identify trends, risks and areas requiring improvements, thus enabling the multidisciplinary team to deliver excellent patient care.

REFERENCES