

# Qualitative research on 'Antipsychotic use in dementia'

**Final report** 

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# **Summary**

Most people with dementia experience behavioural and/or psychological symptoms to varying degrees. Appropriate management of these symptoms in aged residential care can have a significant impact on quality of life for residents, their families and aged care staff. Avoiding the over-use of antipsychotic medicines in dementia care is desirable because these medicines are associated with a range of adverse effects in older populations.

This qualitative research project explored health practitioners' attitudes and behaviours related to antipsychotic use in dementia care before and after participating in training and other support as part of a pilot. The main findings were as follows.

# Pre-pilot findings

- 1. There was a strong and consistent view that antipsychotic medicines had a role in managing behavioural and psychological symptoms of dementia in some circumstances, but their use should be carefully managed. Regular monitoring and review were seen as vital, with a view to reducing or eliminating antipsychotic use as appropriate.
- 2. Antipsychotics were generally used as a "last resort" after various non-pharmacological (e.g. behavioural, diversional or environmental) strategies had been trialled. There was a good level of knowledge and awareness about the use of non-pharmacological alternatives participants considered them routine and used a wide range of strategies.
- 3. Almost all participants reported the current level of antipsychotic use at their facility was appropriate; they did not think these medications were being overused. A team approach, including involvement of family members, was used to make decisions about antipsychotic use. There were mixed views on the feasibility of reducing antipsychotic use overall.
- 4. Key factors that helped to reduce the use of antipsychotics included: staff capacity and competence (e.g. in using non-pharmacological strategies to manage challenging behaviour); and good support from management, GP and family members.
- 5. The main barriers to reducing antipsychotic use were the desire to keep the resident in their current residential facility/home, and a lack of specialised dementia beds in the community. Delays in accessing psychogeriatric services was also identified as a barrier at times.

# Post-pilot findings

6. Several changes to knowledge and behaviour were reported after the pilot, including more use of best-practice guidance on antipsychotics, greater awareness of antipsychotic effects, 'thinking twice' about prescribing antipsychotics, and increased

application of non-pharmacological strategies. Managers reported improvements in how staff were managing challenging behaviours of residents.

- 7. The extent to which these changes are attributable to the pilot, however, cannot be determined. This is because of the qualitative (non-experimental) method, uneven participation in the pilot, and the presence of additional training during the pilot period.
- 8. Participants suggested there was a need for further training to keep updated on changes in antipsychotic medicines and the use of alternative strategies, particularly regular, interactive training.

# Introduction

This report presents findings from research carried out to support a pilot on antipsychotic use for dementia, held in two aged residential care facilities. The pilot was conducted by the Capital and Coast District Health Board's (CCDHB) Medicines Management Integrated Care Collaborative (MMICC), in conjunction with PHARMAC.

This qualitative study examined health practitioners' attitudes and behaviours related to antipsychotic use in dementia care before and after taking part in the MMICC pilot. It also identified barriers and enablers to reducing the use of antipsychotic medicines in aged residential care.

#### Background

There are concerns, both in New Zealand and overseas, about the increasing use of antipsychotic medicines in dementia care. Most people with dementia experience behavioural or psychological symptoms, such as depression, apathy, irritability, agitation, aggression or delusions, with varying degrees of severity.

Serious adverse effects are associated with antipsychotic medicines, to which older people are particularly susceptible. These include a higher risk of stroke and overall mortality. There is concern about the over-prescribing of antipsychotics to manage challenging behaviours associated with dementia (BPAC, 2013).

Best-practice guidance recommends that antipsychotics should only be used in people with dementia as a last resort, with non-pharmacological interventions trialled in the first instance (BPAC, 2013). Antipsychotics should be prescribed at the lowest effective dose, for the shortest possible time, and only for the specific indications in which they have proven benefit. Regular review of the continuing benefit, and monitoring for serious or intolerable adverse effects, is recommended. Staff training has been identified as a key action to reduce use of antipsychotic medicines among older people.

The Medicines Management Integrated Care Collaborative, which includes health professionals across CCDHB, in conjunction with PHARMAC, conducted a pilot on the use of antipsychotics in the aged residential care setting.

The 'Antipsychotic use in Dementia' pilot was carried out over an eight-month period, from November 2014, in two Wellington-based aged residential care facilities (Sprott House and Malvina Major). It aimed to assess how interventions (e.g. training of staff, provision of tools and resources including a best-practice guideline, and professional input from specialist nurses and clinicians) can help aged residential care staff to manage the care of residents with dementia. The pilot did not seek to compare the two aged residential care facilities.

PHARMAC commissioned Quigley and Watts Ltd, a Wellington-based public health research company, to provide qualitative research support to the pilot. The aim was to identify any changes in the attitudes and behaviours of participating health practitioners (clinical managers, nurses, residential caregivers and GPs) related to antipsychotic use after taking part in the pilot's training and support interventions (e.g. training, provision of best-practice guidance and other

resources, more proactive support from psychogeriatric services). Other work complemented this project including quantitative research and clinical audits and reviews.

#### **Research design**

This qualitative study used a non-experimental 'pre/post' design, where baseline attitudes and behaviours were identified in an initial interview before the pilot intervention began. Subsequently, the same participants were interviewed after the intervention to assess any changes in attitudes and behaviours after the pilot.

Although a pre/post design is less rigorous than designs using a control group, it is often used for exploratory purposes, and to evaluate changes in participants' knowledge, attitudes and behaviours. It also has advantages of convenience and financial feasibility. However, it was acknowledged from the outset a causal link between the pilot intervention and any changes in attitudes or behaviour could not be established using this design. This is because the research design is unable to control for multiple external factors that could affect health practitioners' attitudes and behaviours on this topic. Without a comparison group, it is difficult to determine what would have happened in the absence of the intervention.

The objectives of the study were:

- 1. To identify attitudes and behaviours of health practitioners about the use of antipsychotic medicines in dementia care, and any changes to these following the pilot interventions
- 2. To identify factors that affect decision-making about the use of antipsychotic medicines for dementia, including barriers and enablers to reducing use of these drugs
- 3. To seek feedback on the usefulness of the pilot interventions in assisting health practitioners to apply best-practice guidelines in this area.

# Research method and participants

Telephone interviews were chosen as the most appropriate method given the scheduling constraints of busy residential care staff and the timeframe (pre-pilot interviews were held close to Christmas). In addition, telephone interviews can feel more anonymous and less threatening for participants and may promote more frank discussion of sensitive or difficult issues compared with a face-to-face approach.

A senior researcher experienced in qualitative interviewing carried out the interviews. Each interview was 20-30 minutes duration. Twenty-eight interviews were conducted in total – 14 prepilot and 14 post-pilot (with the same participants, apart from one case where a staff member had resigned). These were held across the two residential care settings, and comprised a mix of residential care staff (caregivers, nurses, managers) and general practitioners. Participants were selected by managers in the residential care facilities in consultation with the researcher.

Based in the Wellington suburb of Khandallah, Malvina Major provides rest home care as well as medical and geriatric hospital services, and has a total of 130 beds (80 hospital, 50 rest home). Sprott House, located in Karori, has a total of 95 beds (61 hospital, 34 rest home) and has a specialised dementia unit, rest home care and geriatric hospital services. Residential staff worked

in various units within the facilities (e.g. rest home, hospital unit, dementia unit). Each GP worked with patients inside one residential care setting (as well as other patients in the community).

Health practitioner group	Sprott House	Malvina Major	Total
Residential caregivers	2	2	4
Registered nurses	2	2	4
Clinical manager/s	2	2	4
GPs	1	1	2
TOTAL:	7	7	14

The breakdown of participant roles across the two aged residential care facilities is outlined in the following table:

The gender profile of participants was 11 females and 3 males. Ages ranged from 26 to 55 years, with a median age of 36 years. A range of ethnicities were represented. The most common ethnic groups were Filipino (6 participants) and NZ European (4 participants). The remaining ethnic groups (1 participant respectively) were Tongan, Tokelauan, Malaysian Indian and British.

One participant resigned from their job during the pilot period so could not be interviewed after the pilot. The aged care facility manager selected a new participant to replace this person, who was similar in terms of ethnicity, age, role and experience.

A semi-structured interview schedule and other materials for the interview (e.g. information sheet for participants) were developed in consultation with PHARMAC and members of the MMICC. The interview schedule included questions to assess participants' current attitudes and behaviour in relation to antipsychotic medicines use and the use of non-pharmacological interventions. It comprised two sections: the first section included questions for all four health practitioner groups; whereas the second comprised clinically-focused questions targeted to nurses, clinical managers and GPs.

The telephone interviews were recorded using a digital voice recorder (with permission of the participants), and the interviewer took notes during the interview as a back-up. The use of a voice recorder enabled direct quotes to be included in this report.

# Limitations of the study

This study had three main limitations. First, the extent to which the findings are attributable to the pilot cannot be determined, for a number of reasons. As noted, the non-experimental design means that other causes for the pre-post changes cannot be ruled out. Both aged care facilities also provided internal training on antipsychotic use and/or non-pharmacological strategies during the pilot period, so it is possible that changes noted may be attributable to this training rather than the pilot.

A second, and related, limitation is that the extent of participation in the pilot's training sessions was lower than anticipated. Only seven (out of 12) participants took part in the MMICC pilot training interventions (note that the two GPs were not expected to attend the training). There was particularly low participation among caregivers. Of the four caregivers in this study, only one attended the training.

The pilot included other components than the training, however. Participants said they received several other interventions in the MMICC pilot – including more proactive support from a psychogeriatric nurse, the provision of best-practice guidance information and the sharing of information from the MMICC monthly meetings (e.g. managers 'feeding back' information to staff). The GPs both carried out audits of antipsychotic use as part of the pilot. One GP regularly attended the monthly MMICC pilot meetings; the other had only attended one because the time didn't suit. This GP was regularly updated after the meeting by a residential care manager who attended.

Despite the uneven participation, the study's exploration of attitudes and behaviours before and after the pilot provides useful information to better understand the views and experiences of health practitioners working in aged residential care.

Finally, this study relies on self-reported information from a small number of participants. As noted in the Discussion section, there may be differences between reported information and actual practice.

# **Findings**

This section summarises the findings under three key headings, corresponding to the research objectives:

- 1. Attitudes and behaviours related to antipsychotics
- 2. Factors that affect decision-making about antipsychotics
- 3. Feedback on the pilot interventions.

# 1. Attitudes and behaviours related to antipsychotics

Before the pilot, most participants reported that antipsychotics were only used after a range of non-pharmacological strategies had been tried. They frequently described this medication as a "last resort," but also believed that antipsychotics "had a place." Antipsychotic medicines were generally considered helpful, particularly with managing aggressive behaviour – as long as they were used appropriately (see below). The following view on antipsychotic use was typical:

It's not something you want to use too often if you can help it. It's good that it's an option but I wouldn't want to use it just 'willy-nilly' (Registered Nurse).

Other themes were: a) the use of antipsychotics depended on the resident's needs and may vary greatly from one person to another and b) there is a need to avoid over-reliance on medication.

Before the pilot, a few participants said they had little knowledge of antipsychotic medicines or their effects. One nurse, for example, was new to working with antipsychotics and felt unfamiliar with the potential benefits and risks. After the pilot interventions, fewer participants reported being new to or unfamiliar with antipsychotics, and some reported increases in knowledge about the medicines and their effects (see the third section below).

#### Pros and cons of antipsychotic use

Participants identified a range of benefits of using antipsychotics for dementia. The main advantages, consistently identified in pre- and post-pilot interviews, were:

- Alleviates symptoms to some degree, particularly aggression, psychosis or anxiety helping to calm or settle the resident
- Benefits other residents, staff and/or family members through reducing problematic symptoms/behaviours.

Other stated benefits included: a) restoring quality of life and safety for the resident, b) preventing wandering or falls, c) enabling the resident to remain in their current facility (rather than being referred elsewhere), and d) relaxing the resident enough to allow personal care or participation in activities of daily living.

There was also strong agreement on the main disadvantages of using antipsychotics across both rounds of interviews. Sedative effects (e.g. increasing drowsiness or sleepiness) and an increased risk of falls were the disadvantages identified most often. A few participants reported that sedation could affect the resident's eating and drinking, because the resident would sleep so

heavily during the day that it was difficult to wake them for meals or drinks. Several mentioned problems with interactions between various medications.

Other drawbacks included adverse effects on blood pressure or quality of life, and increases in confusion, gastrointestinal problems or involuntary movements. One participant mentioned a higher risk of stroke. Another noted that risperidone could sometimes increase rather than decrease aggression.

#### Process of decision-making, monitoring and review of antipsychotics

Based on participants' accounts, the process of decision-making generally involved:

a) Trialling and monitoring a range of non-pharmacological strategies to manage challenging behaviours, particularly verbal or physical aggression, and if these don't work:

b) Communicating with the GP, psycho-geriatric staff, and family members (and/or the resident if possible) about the need to trial an antipsychotic medication

c) Trialling the agreed antipsychotic medicine in a small dose and monitoring closely the resident's reactions and behaviours.

Many highlighted the importance of communicating with the family and routinely involved them in decisions about antipsychotic use. One said that meetings with family members and staff are "time consuming but it's a big part of what we do." It was also common for staff and GPs to inform and involve specialist services, as appropriate.

Participants described broadly consistent monitoring and review processes, where caregivers and/or nurses closely monitored residents on antipsychotics throughout the day, and recorded observations of behaviour and possible effects of medication. This information was regularly communicated to the GP. In one case the GP monitored residents directly twice a week when visiting the facility. The other GP usually monitored residents once or twice a week initially, and then as needed, based on communication with staff. Both GPs said they reviewed residents after three months at a minimum, but often reviewed them more regularly than that, depending on the medicine's effects.

#### Use of non-pharmacological strategies

A wide range of non-pharmacological (e.g. behavioural, diversional, environmental) strategies were reported, consistent with the observation that resident needs often varied. As noted, staff routinely used these strategies in the first instance, before considering antipsychotics. The most common strategies were:

- Involving the resident in regular activities, based on what they prefer and enjoy. The most common specific activities cited were music/singing and walking or other physical exercise.
- Calming and reassuring the resident.
- Staff spending one-to-one time with the resident and engaging them in conversation where possible.

- Seeking input from the family on the best ways to support the resident.
- Checking for and addressing undiagnosed problems or basic needs (e.g. pain, UTIs, wound infection, hunger, thirst, incontinence). Solutions included: giving pain relief, changing their position, showering, offering a hot drink, and asking a nurse to assess them.

Other strategies included allowing time alone for the resident, reducing the level of noise, encouraging independence and choice, spending time outside, and ensuring the environment is as homelike as possible. A manager emphasised the importance of working to improve quality of care and the environment of the facility:

We are continually looking to develop the environment and improve quality of care...Our residential unit is designed as a home not a hospital, to have that homely feeling (Manager).

Most participants reported that they (and/or other staff) felt comfortable with using non-pharmacological strategies. Some, however, also qualified this by noting that:

- The level of comfort with using non-pharmacological strategies varied depending on residents' needs (high mobility and wandering, for example, were situations where staff felt less comfortable with relying on non-pharmacological approaches, particularly in facilities that were not secure as residents could roam outside of the facility).
- One-to-one time with residents was often hard for staff to achieve because of the busy workload and lack of staff capacity. Another noted that trying non-pharmacological strategies during the overnight period was more difficult because there were fewer options and less support available for staff.
- Caregivers needed more education and training to use non-pharmacological strategies.

One manager described an increase in their staff's comfort levels over the past few years. They said staff initially felt "very uncomfortable" about using the strategies "because they were quite used to working in a medical model" – for example, attributing behaviours to having dementia rather than looking at why that person might be unhappy. This participant said:

I did a lot of role-modelling work; I work a lot on the floor beside the staff to support them. And now I've got a lovely bunch of staff; they just initiate [non-pharmacological strategies], I don't have to tell them, they just initiate them naturally now, so they've really embraced that as well (Manager).

This manager said the new approach had improved the workplace culture, because "the more relaxed the staff are, the more relaxed the residents will be", which in turn made the staff's working day easier. The facility also offered an annual training session for staff on challenging behaviours, where there was an explicit strategy to "change the mind-set of a caregiver from a 'challenging behaviour' to an 'unmet need'". This encouraged staff to discover what a resident was trying to communicate, or what was needed, when they were upset or agitated.

Overall, the cited non-pharmacological strategies were similar before and after the pilot interventions, although the strategy of checking for undiagnosed needs was discussed more

frequently in the post-pilot interviews. A few more people reported feeling comfortable with using non-pharmacological strategies after the pilot.

#### Views on effectiveness

There were mixed views on the general effectiveness of antipsychotics. Participants felt that antipsychotics generally worked best for managing aggression, agitation or psychotic symptoms (e.g. delusions, hallucinations, paranoia), or when used early on in dementia progression or soon after admission to a new facility. A minority believed that antipsychotic medicines were helpful for people who were wandering.

Participants reported that sometimes residents were on antipsychotics for a longer-term, rather than short-term, basis. Several said this was legitimate at times, e.g. when the patient had a psychiatric illness as well as dementia or when regular use was considered more beneficial. Others suggested the goal was to reduce dosage and to avoid ongoing use. One participant said that sometimes family members had a strong view either way, which could influence the duration of antipsychotic use. Another felt that longer-term use was "not ideal", but was sometimes required and made life more "bearable and manageable for the resident."

#### Definitions of 'appropriate use' of antipsychotic medicines

Several themes were apparent in participants' definitions of what 'appropriate use' meant in this context:

- Only use antipsychotics as a last resort after trying various non-pharmacological strategies to manage behaviour
- If the resident is aggressive and potentially harming themselves or other people, then antipsychotics should be considered
- Use the lowest/minimum dose ("start small and go slow")
- Assess regularly (monitor signs and symptoms carefully) and readjust the dose as needed.

#### A typical definition was:

We have to use all other nursing cares first, e.g. diversional therapy, before we even think about reviewing whether a resident needs antipsychotics. As long as they are not harming anyone or themselves, as long as they are safe within the facility, then we try not to use it. But if it is causing distress to them, staff, other residents, families etc...then we go through to giving meds if needed (Manager).

Other considerations included: a) matching the 'right' medication to meet the person's particular needs, b) the age and cognitive competence of the resident, and c) getting to know the resident and their attitudes, interests and behaviours, and discussing this with the prescribing doctor to help them decide on the dosage.

Both GPs said they usually prescribed either risperidone or quetiapine. One noted that they generally trialled risperidone for aggressive or agitated behaviour, whereas if anxiety was a major problem, then they would be more inclined to try quetiapine.

#### Perceptions of the current level of antipsychotic use at your residential care facility

Almost all participants, both pre- and post-pilot, stated that the current level of antipsychotic use at their facility was appropriate; they did not think these medications were being overused or used without justification. Words like 'minimal', 'sensible', 'mildly used' or 'tolerable' were often used to describe the current level of use. Where given, numerical estimates of the level of use (in particular units within the residential care settings) were:

- Nine out of 24 residents in a specialised dementia unit (same estimate pre and postpilot)
- Three out of 60 residents in a rest home facility (post-pilot estimate only)
- 14 out of a total of 80 patients on one GP's caseload (similar pre and post, but two patients on antipsychotics had died during the pilot period).

In contrast, two staff in a hospital-level unit reported that most residents in their unit were prescribed antipsychotics to manage behaviour, whether 'PRN' (as needed) or more regular use.

After the pilot, one participant believed the level of antipsychotic use had decreased in the past six months; however, they also noted that several residents on antipsychotics had transferred or passed away during that time, so it was difficult to assess.

#### Perceptions of how feasible it would be to reduce antipsychotic use

This question was asked of all participants except caregivers (10 participants). Participants were asked to rate on a scale of 1 to 5 the feasibility of reducing antipsychotic use in their workplace, with 5 'very feasible.' The average rating was 3 out of 5, the midpoint, before and after the pilot.

In qualitative terms, there were mixed views on whether reducing use was feasible or not, across both interview rounds. Those who felt it would be feasible to reduce antipsychotic use said the ability to "swiftly access" support services was crucial in helping this to happen – and to ensure that individual needs were met.

Several participants felt it would be difficult to reduce the use further; one expressed concern that reducing the use would result in "chaos" in terms of managing the behaviour of residents. Another gave an example of a resident who arrived as a long-term user of antipsychotics. The staff and GP decided to taper off the medication but the resident became very aggressive and only settled again after the medication had been resumed. This participant felt that in cases like this, it would not be possible to stop antipsychotic use altogether. Finally, another participant believed the use was at an acceptable level now, so did not see the need for a reduction.

# 2. Factors that affect decision-making about antipsychotics

The main factors identified as influencing antipsychotic decisions were:

- The severity of behaviour/s and impacts on staff and other residents, and the use of alternative strategies (i.e. whether or not non-pharmacological strategies are effective)
- Recommendations and preferences of staff and family

- Whether the resident can be supported to stay at their current level of care, or whether they need a higher level (see below), and
- Organisational policies and best practice guidance.

**Severity of symptoms and their impact** was a major influence on decisions. As noted earlier, the presence of aggression was seen as a trigger for considering antipsychotic use. Mild or moderate symptoms tended to be reduced through non-pharmacological means.

**Staff and family** were routinely involved in decision-making, along with the GP and specialists as needed. Several participants reported that staff recommendations were based on assessing which behavioural, emotional or environmental factors could be contributing to the symptoms/behaviour, including family issues.

**Tensions or pressure:** In general, participants said families tended to accept the use of antipsychotics; however, some were reluctant, at least initially. Most participants hadn't felt or witnessed significant pressure to prescribe, but there were some examples of tensions or difficulties. In one example, a family member was strongly opposed to antipsychotic use. The staff suggested a range of options that could be tried and suggested the GP spoke with the family in more depth about these. Another participant emphasised the need to educate families about the dementia disease process and to consider ways to help them to accept their family member's health status, such as providing evidence, counselling or support services.

One GP reported experiencing some pressure in both directions – to prescribe and not to prescribe antipsychotics. Circumstances where they had felt pressure included when the resident was particularly angry and agitated or violent to the degree where they could not be managed in the residential care facility. In such circumstances the family didn't want the resident to be transferred to a specialist unit elsewhere – they preferred medication use over moving the resident. The other GP said they had not experienced any pressure. The GPs' views were the same before and after the pilot.

**Use of organisational policies:** Almost all the nurses and managers (GPs and caregivers were not asked this question) said they were aware of and used organisational policies on antipsychotic use. The level of awareness and use was the same after the pilot. Points made included the following.

- The policy is to assess the resident on an antipsychotic medicine, use behavioural management techniques, document the effects on a behaviour chart, and state clearly the assessment and outcome after giving medicine.
- The policy is to carry out close observation of residents who have been prescribed antipsychotics, involve and update the family, notify the GP of the effects, carry out a three-monthly review and the GP will review as often as needed.
- The stated policy/approach was considered to be well implemented by all staff. As well as the policy itself, there was weekly training for nurses and caregivers. As part of the orientation process, new staff were introduced to all policies. There was also good staff support in general.

**Use of best-practice guidance:** Following the pilot, more participants reported using bestpractice guidance on antipsychotic use (an increase from 6 to 9 out of ten participants). When asked for detail on which best-practice guidelines were used, participants cited guidance from PHARMAC (BPAC guideline provided by the pilot), Ryman, Joanna Briggs, and an internal medication guideline. After the pilot, staff in one facility said they kept a copy of the BPAC bestpractice guidance at the nurses' station so that staff could refer to it. In the pre-pilot interviews, there was a comment that such guidance needs to be supported by having "someone to talk you through it."

#### Enablers and barriers to reducing antipsychotic use

The ability of staff to cope was the most commonly reported factor that helped to reduce the use of antipsychotics. This was through the effective use of non-pharmacological strategies as well as general staff competence and ability to cope with challenging behaviour. Several participants highlighted the role of staff training and capacity, and the involvement of the family and GP in working to reduce use where possible. One GP felt a key barrier was limited training and staff capacity in dementia care specifically.

Other enablers were good management and psychogeriatric support. One manager described how the management and staff had worked proactively to change their approach to managing people with dementia:

We've worked hard over the past three years, with the staff, to change the philosophy of the unit from a very medical approach to – we now use a bio–psycho-social-medical approach. We look at physical health, obviously that impacts, and infections can impact significantly on somebody but really that's a small part of what we do, it's more about social interactions and integration; finding out what residents really like to do from their past. We do 'life profile' work on residents when they arrive" (Manager).

Psychogeriatric support could help or hinder attempts to reduce antipsychotic use, depending on the level and timeliness of support. A weekly clinic with a psychogeriatric nurse practitioner was seen as supportive and proactive – compared with a traditional reactive role. In the pre-pilot interview, one manager noted that specialist support was also important to assist the GP in prescribing the right medication. A comment from the post-pilot interviews was: "The psychogeriatric team and care coordination is very good".

On the other hand, some participants (including the GPs and several managers) identified problems with the level or timeliness of psychogeriatric support as a barrier to reducing antipsychotic use. Waiting times for assessment by a psychogeriatrician was a reported barrier, for instance, one GP said (after the pilot):

The psychogeriatricians are often slow to respond – we're waiting 4-6 weeks for them to see people. We're left with no other options other than to use antipsychotic medication (GP).

A common barrier to reducing antipsychotic use was concern that if managing behaviour became difficult (after lowering or stopping an antipsychotic medicine), residents may need to leave their current residential facility to receive a higher level of care. Many said it was preferable

for a resident to stay in a known environment rather than moving because it was the resident's home, families knew the current staff well, and families often wanted to try all options (including medication) before opting for a higher level of care.

Several participants noted that when residential facilities are not secure (locked), it can be harder to reduce or avoid the use of antipsychotics. At times, complaints from other residents about a person's behaviour also acted as a barrier to reducing antipsychotic use.

Related to this, a lack of specialised dementia beds in the community was a key deterrent to reducing or stopping antipsychotic use (i.e. antipsychotics medicines were used at times to avoid discharge or prevent a referral to specialist care). A GP, for example, stated:

I don't think we could reduce the use of [antipsychotics] much. If there were more dementia beds then we could [reduce it] – if there were more appropriate places for them to go. That's the really big issue in all this – there just aren't enough dementia beds in the community, so we're managing people that we shouldn't be having to manage in aged residential care...We're told on the one hand to try to reduce the use of antipsychotic medications, but there's nowhere to move the people to (GP).

Several others supported this view, including one manager who said there needed to be adequate staffing levels, better funding for community-based aged residential care, and more specialised and High Dependence Unit beds. An example was cited where hospital care was used as a temporary solution for two residents while waiting for an appropriate bed:

Actually we had to send two dementia patients into the public hospital because [the aged residential care facility] just couldn't manage them anymore and we couldn't get psychogeriatric support, there were no dementia unit beds available. It was very difficult – we had no option but to send them into the public hospital. And they spent several weeks in the hospital before they could find an appropriate bed in an appropriate facility. It's a real problem (GP).

# 3. Feedback on the pilot interventions

#### Views on the usefulness of the pilot

As discussed above, not all participants attended the pilot training interventions. This means the following findings should be treated with caution.

All seven participants who attended the MMICC training/seminar reported it was relevant and useful. A nurse who was new to aged care commented that the training helped them to recall and update their psychiatric knowledge from their initial nursing study, and managers saw the training as useful as a reminder for them. A caregiver said they learned about the effects of medication that they needed to give to residents, to make sure they gave the dose correctly, "and most importantly, documentation for the doctors, any effects we see, any problems."

Most attendees at the training/seminar said they didn't think there was any information missing from the session. Further training for caregivers was suggested, including reasons for

starting/trialling antipsychotics and more information on potential side effects. Caregivers may need more information on the implications of antipsychotics for managing people on a day-today basis. Several participants said they wanted more training but were not specific about the content.

Most participants said they were aware of the information resource for family members (distributed as part of the MMICC pilot); however, no one had received any feedback from family members about the resource.

#### Post-pilot changes to knowledge and work practices

More than half of participants (10 out of 14) said that taking part in the MMICC pilot had influenced their knowledge about antipsychotic use and their work practices. Reported impacts of the pilot on knowledge included:

- "It reminded me about the antipsychotics, to consider what to do and what to watch out for, to monitor [the resident] closely, especially in the first few weeks. And noting if there are any side effects" (Registered Nurse).
- "[The training] affected the way you look at the meds, and the way you deal with the resident themselves, its good training and it will help you, it will guide you" (Registered Nurse).
- "[The training covered] how we have to work together, with all the residents, things like that, just have to keep on with the communication...[It helped me] see how antipsychotics worked" (Caregiver).
- A manager felt that their staff came back from the training with greater interest in antipsychotics and which residents were on them. The manager said: "They were more engaged and wanted to learn more."
- A GP said the pilot "heightened my awareness of the reasons for prescribing, when not to prescribe, and potential side effects."

Reported impacts on work practices included:

- A GP said that taking part in the pilot "has made me more aware of prescribing, [I now] think twice before prescribing [I ask] is there a better way of doing it, can we manage with non-pharmacological means?"
- When asked whether the pilot had influenced their work practices, a nurse said: "Yeah, it definitely did. It widened my understanding of [residents'] behaviour. When I first came here [to this role] I didn't have much knowledge, my understanding was limited. The training really widened my understanding." This nurse also said they now worked harder to understand the resident better and were slower to use PRN doses of antipsychotic medication.
- A manager said they had noticed an increase in staff applying non-pharmacological strategies, such as "activity-based interventions", however they also said there had been internal training sessions on this which may have influenced the change.

• A manager said they felt their unit was handling challenging behaviour better since the pilot interventions:

Staff are getting to know residents more, and how to manage their behaviours. I pretty much know all their triggers for confusion or aggression...I remind nurses or carers when it may happen and to keep an eye on them. Getting to know them well, what could trigger the behaviours to flare up – I expect it and put in place strategies to handle that (Manager).

**Monitoring and review:** Almost half of participants (6 out of 14) said that taking part in the pilot had affected the monitoring of residents with dementia. Specific changes reported by managers included: closer and more regular monitoring and review of residents, increases in nurses' awareness of side effects and what they should look for when monitoring, and greater understanding of residents' behaviours and patterns. Some participants, in contrast, felt they were already monitoring and reviewing residents sufficiently or that their knowledge and practices in this area were simply reinforced.

There were varied reports on the uptake of a new monitoring form (developed by MMICC as part of the pilot), with some staff saying there was a new form in place and others saying it was not yet implemented or still to arrive (with discrepancies in both facilities).

One manager noted the need to keep the monitoring form with the GP's notes so that all information was in one place and could be easily accessed "at a glance." They felt the integration of monitoring with the GP's medical notes helped to draw the strands of information together. This manager also suggested the new monitoring form would need some "tweaking" to ensure it was user-friendly and allowed all relevant information to be recorded.

#### Ideas for future training

Participants generally said there was a need for further training to keep updated on changes in the field of dementia care including antipsychotics. Equally, several participants felt there was already good internal training provided in their workplaces (staff from both facilities said this).

Specific suggestions for future training included:

#### Content of training:

- General training on dementia, e.g. updates on what works in dementia care.
- Medications, e.g. new medications, effects, side effects and effectiveness of medications (i.e. keep up with research on medications).
- Identifying markers that would help indicate whether antipsychotic use should be considered.
- Behavioural issues and new non-pharmacological interventions / strategies to manage behaviours, for example: "Ongoing learning on things related to dementia that we can try here, to try to limit drugs" (Manager).
- New ideas for developing the environment and improving quality of care.

**Delivery of training:** There was a strong theme that interactive training was preferable to presentation-only training delivery. Participants agreed that interacting and being involved in discussion would improve learning. One nurse commented:

*If* [training] is interactive I find it goes more into my brain...I will retain that more. To be honest it's just boring if it is just a speaker up the front (Registered Nurse).

A manager said that their staff benefit from participatory, 'case study' style training, where staff members bring along issues to talk about. The group then discusses suggestions for trialling various strategies, and encourages staff to reflect on what they are doing in their work.

**Timeframe:** Participants expressed a clear preference for regular training rather than 'one-off'. The most common timeframe mentioned was once every 6 months; however, several also suggested once a month or once a year.

**Audience:** Participants felt staff in all roles would benefit from ongoing training, and caregivers in particular needed training in non-pharmacological strategies that could be easily applied in their work. Several participants noted the key role of caregivers as the people who spent the most time with residents, and who knew them best. Nurses, managers and GPs relied on the monitoring and reporting from caregivers to inform their decisions; therefore, it was seen as crucial that caregivers be well-trained.

The GPs mentioned a local peer review group for GPs who work in aged residential care. This had recently restarted and provided a forum for ongoing peer support and review of cases. One said the group may invite a clinical pharmacologist or pharmacist to the peer review group from time to time, to update their knowledge as needed. The GPs said this group did not arise from the pilot, but was relevant to the topic.

# Discussion

This section provides a brief reflection on the main findings:

#### a) Antipsychotics were generally used as a "last resort".

Participants' views on the role and trialling of antipsychotics were consistent with best-practice guidance, suggesting a good level of awareness of this guidance and clear organisational policies and communication from management.

It should be noted that this study relies on participants' reported views rather than evidence of actual practice. Reported information may not always be consistent with everyday practice. In this study, participants cited various constraints that affected their work and decision-making, such as busy workloads, staff capacity constraints and experiencing pressure from family or other residents when there were significant challenging behaviours. Such constraints may at times conflict with the stated goal of only considering antipsychotics as a last resort.

There was almost universal agreement among participants that the current level of antipsychotic use (in their aged care facility) was appropriate. This was consistent with numerical estimates suggested by a few participants. Again, the findings reflect participants' perceptions of the level of use, rather than direct measurement of actual use. However, actual use is being measured in a separate quantitative study (as part of the pilot), so the MMICC will be able to compare these findings.

The findings on perceived benefits and harms of antipsychotics were broadly consistent with those identified in best-practice guidance (BPAC, 2013); however, only one participant mentioned serious adverse effects such as the increased risk of stroke (several mentioned changes to blood pressure). It is interesting that no participant mentioned an increased risk of overall mortality or cardiac events, which are highlighted in BPAC's guidance as potential serious effects of antipsychotic use in older people. This may be due to the wording of the question posed to participants. It asked for the "main disadvantages" of using antipsychotics for dementia, which could (understandably) be interpreted as asking for the most common risks or disadvantages, rather than more serious, but rarer, adverse effects. Hence participants may be aware of, but did not raise, these serious potential effects.

#### b) There were mixed views on the feasibility of reducing antipsychotic use overall.

Opinions varied on whether further reducing antipsychotic use from current levels was feasible. The views expressed by participants were similar before and after the pilot, in both the scale rating (1 to 5) and in qualitative terms. Some who felt reduction was possible qualified this by emphasising that individual needs should still be met, and that timely access to support services was vital.

Indeed, a strong theme was that strategies to reduce antipsychotic use need to be considered on a case-by-case basis. Meeting individuals' clinical and other needs was seen as a fundamental priority. A population-level goal of reducing the overall use of antipsychotics may pose a tension for staff working with individual residents.

# c) Several enablers and barriers to reducing antipsychotic use were highlighted.

Staff training was a key contributor to staff members' ability and capacity to work to reduce antipsychotic use. Leadership and support from management was also vital. A deliberate change management process had occurred in one care setting which aimed to shift the workplace towards a more holistic model of care and to create a more 'homelike' environment.

Some positive views were expressed about psychogeriatric support and care coordination, particularly where this had been more proactive or regular than in the past, for example a weekly clinic with a psychogeriatric nurse practitioner. While timely psychogeriatric support was helpful, difficulties with accessing specialist services presented a barrier to reducing antipsychotic use for several managers and the GPs.

The most common barrier to a reduction in antipsychotic use was the desire to keep residents in their current living situation rather than moving them to a higher level of care. Related to this, a lack of higher-level dementia beds in community-based aged care was highlighted.

#### d) After the pilot, several changes to knowledge and behaviour were reported.

As noted, the extent to which reported changes are attributable to the pilot is unclear because of the research design, a lack of full participation, and the presence of other (internal) training.

Although more participants said they applied best-practice guidance on antipsychotic use after the pilot, this is reported use rather than evidence of actual use. The number who reported using such guidance rose from 6 in the pre-pilot interview to 9 (out of 10) participants post-pilot (the four caregivers were not asked this question).

# e) A need for further, regular training was identified.

This finding contrasts with the decision to hold only one education session as part of the MMICC pilot (as noted in the MMICC March meeting minutes). Participants in this study suggested there was a need to update knowledge and skills through additional training in future – whether internally or externally-provided.

Themes included a preference for interactive, activity-based training and a need for training of caregivers in particular. The low participation of caregivers in the MMICC pilot training and seminar sessions may relate to staffing constraints and busy workloads; however, from a management perspective it would be important to explore ways to ensure that caregivers can attend future training.

Participants' views were generally consistent with the presentation from pharmacists at the February training session. For example, the importance for residents of one-to-one interaction, music, and activity and recreation that is meaningful and enjoyable for the resident. Gaps in knowledge included a perception that antipsychotics were effective for wandering or shouting. In contrast, the evidence indicates that antipsychotics are usually not effective for various problems including shouting, wandering, social withdrawal and incontinence (BPAC, 2013).

# Conclusion

In conclusion, there was strong agreement that antipsychotics were usually a "last resort" after various non-pharmacological strategies had been trialled. A wide range of non-pharmacological strategies were used, consistent with the observation that resident needs often varied.

Overall, participants felt the current level of antipsychotic use at their facility was appropriate; they did not think these medications were being overused or used without justification. There were mixed views on whether reducing antipsychotic use was feasible.

Despite varying involvement in the MMICC pilot, there were reported impacts on both knowledge and behaviour, including more use of best-practice guidance and non-pharmacological strategies. Participants indicated a need for further, regular training to keep updated on changes in the field.

#### References

BPAC (2013). Managing patients with dementia: What is the role of antipsychotics? Best Practice Journal, Issue 57, December 2013. Available at: http://www.bpac.org.nz/BPJ/2013/December/docs/BPJ57-dementia.pdf