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The health professional experience of using antipsychotic medication for dementia in care homes: a study using grounded theory and focussing on inappropriate prescribing

Article

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Title: The health professional experience of using antipsychotic medication for dementia in care homes: A study using grounded theory and focussing on inappropriate prescribing

ABSTRACT

Introduction: Treating the behavioural and psychological symptoms of dementia with antipsychotics can cause detrimental side-effects but their use in care homes remains problematic with the views of professionals not fully explored.

Aim/question: To develop an in-depth explanatory model about inappropriate prescribing of antipsychotics in dementia within care homes.

Methods: Twenty-eight participants from eight different professional groups with a role in shaping treatment decisions in dementia care were recruited and interviewed. The audio-recorded interviews were transcribed and analysed using constructivist grounded theory.

Results: When patients with dementia present with behavioural and psychological symptoms, the prescribing of antipsychotics allows the multitude of work in a care home to be managed; the effectiveness of antipsychotics is more perceptible than their side-effects. This perceived usefulness strengthens beliefs that these medications *ought to* be prescribed again in future situations, generating a self-fulfilling prophecy.

Discussion: Our findings may partly explain why the launch of the national dementia strategy in England has been found not to have reduced antipsychotic prescribing in care homes.

Implications for practice: Positive perceptions based on past experiences with antipsychotics should be challenged through future interventions that tackle inappropriate prescribing using a behaviour change technique for example better highlighting adverse consequences of prescribing.

Accessible Summary:

What is known on the subject

- People with dementia can experience symptoms that upset them and upset the people who care for them
- To cope, care homes sometimes use strong medicines called antipsychotics but these can make people with dementia become more ill
- We don't know just why doctors and nurses caring for people with dementia still use these strong medicines more than they need to

What the paper adds to existing knowledge

- Giving antipsychotics can make it easier to care for residents within busy care homes, so people tend to see and remember the benefits of antipsychotics
- The harm of antipsychotics is noticed less, meaning carers will use them again, in a 'vicious circle'

What are the implications for practice

- If these medicines worked before it doesn't make them the right choice again
- It might help to show carers very clearly the harms from using these medicines, to stress the dangers

Relevance statement: This paper is significant to mental health nursing because it systematically investigated and highlights the psychology behind the inappropriate use of antipsychotic medication in dementia. Rather than demonising health professionals who use antipsychotics for patients who exhibit the behavioural and psychological symptoms of dementia, this paper demonstrates that it is the personal framing of antipsychotics as useful and safe, based on subjective experiences, that contributes to their inappropriate usage. To change practices, behaviour change interventions could emphasise the consequences of antipsychotic use

in a way that makes these more memorable than merely informing health professionals about the risks.

Keywords: dementia, prescribing, antipsychotics, care home, grounded theory.

The health professional experience of using antipsychotic medication for dementia in care homes: A study using grounded theory and focussing on inappropriate prescribing

Alzheimer's disease and a number of other conditions (e.g. vascular disease) affecting the brain can impair cognition (e.g. loss of memory, mental agility, language, judgement) resulting in a syndrome known as dementia. There is no cure for dementia, although the acetylcholinesterase (AChE) inhibitors are recommended options for managing mild to moderate Alzheimer's and the drug memantine for moderate Alzheimer's intolerant to AChE inhibitors or for severe disease in the UK (National Institute for Health and Care Excellence, 2006). Dementia is progressive and can eventually lead to non-cognitive symptoms such as hallucinations, delusions, anxiety, and behavioural symptoms such as agitation, aggressive behaviour, wandering, hoarding, sexual disinhibition and vocal disruption, collectively known as the behavioural and psychological symptoms of dementia (BPSD). The National Institute for Health and Care Excellence (NICE) recommends an early assessment of likely contributing factors and provision of non-pharmacological interventions (e.g. aromatherapy, therapeutics use of music) as first step for patients showing signs of BPSD (National Institute for Health and Care Excellence, 2006).

In the UK, in very specific circumstances, it is permitted for antipsychotic medication to be prescribed as first-line treatment for BPSD, that is, if patients are severely distressed or there is an immediate risk of harm to them or others, and only after a range of other conditions have been met (National Institute for Health and Care Excellence, 2006). Even then, the only antipsychotic licensed for use in dementia is the drug risperidone, where the licence covers short-term use only (up to 6 weeks) for ‘persistent aggression in patients with moderate to severe Alzheimer's dementia unresponsive to non-pharmacological approaches and when there is a risk of harm to self or others.’ Prescribing risperidone for longer than 6 weeks or prescribing other

antipsychotics for the treatment of BPSD constitutes 'off label' use, meaning the prescriber takes additional responsibility for any adverse consequences. Antipsychotics can normally eliminate or reduce the intensity of symptoms such as aggression, psychosis, and agitation (Cerejeira, Lagarto, & Mukaetova-Ladinska, 2012). However, prescribing them in dementia is controversial; as well as causing a range of side-effects that include sleep disturbance, blood pressure changes, anticholinergic effects (e.g. dry mouth, urinary incontinence, constipation, blurred vision), Parkinsonism, and weight gain, antipsychotics increase the risk of cerebrovascular disease and death (Ballard, Creese, Corbett, & Aarsland, 2011; Huybrechts et al., 2012).

From a regulatory perspective, in the UK the Medicines and Healthcare Products Regulatory Agency (MHRA) has warned about the increased risk of stroke and death associated with antipsychotic usage for over a decade: 'There is a clear increased risk of stroke and a small increased risk of death when antipsychotics are used in elderly people with dementia' (Medicines & Healthcare Products Regulatory Agency (MHRA), 2005). The stance is the same with the European Medicines Agency (European Medicines Agency (EMA), 2008). In the US too there are regulatory warnings against the use of antipsychotics for the treatment of BPSD in patients with dementia (Food and Drug Administration (FDA), 2008); and even though US prescribing guidelines on the subject (Alzheimer's Association, 2011; Reus et al., 2016; Samuel, 2015) are in line with UK ones (i.e. sanctioning use in limited circumstances), it is worth mentioning that no antipsychotic is formally approved for the treatment of dementia-related psychosis in America. In the UK a landmark report on antipsychotic prescribing in dementia concluded that usage was too high and that the associated risks outweighed the benefits in most patients (Banerjee, 2009). According to the report only 20% of 180,000 patients with dementia prescribed an antipsychotic medication may actually benefit from taking them (Banerjee, 2009). In response, a UK

government initiative was launched to reduce prescribing to older people with dementia (Medicines and Healthcare Products Regulatory Agency, 2012).

Certainly there is some evidence that the mean prevalence of antipsychotic medication use among patients with dementia in the UK might be decreasing, reported to have decreased from 19.9% in 1995 to 7.4% in 2011 (Martinez, Jones, & Rietbrock, 2013). But this downward trend in the use of antipsychotic medication in dementia, while promising, does not represent prescribing in care homes where psychotropic medication usage is reported to be higher than in general community settings. Care homes in the UK are accommodation that provide 24-hour nursing care (i.e. nursing homes), personal care only (i.e. residential homes) or a combination of both to older people. A study based in Northern Ireland in 2009 for example found that 20.3% of those in care homes were dispensed an antipsychotic, compared with 1.1% in the community (Maguire, Hughes, Cardwell, & O'Reilly, 2013) and another looking at data for England and Wales between 2008-9 reported antipsychotic prescribing for patients with dementia to be 30.2% in care homes and 10.1% in the community (Shah, Carey, Harris, DeWilde, & Cook, 2011). In fact, a 4-year English study found that the launch of the national dementia strategy had not resulted in a reduction of antipsychotic prescribing *in care homes* at all (Szczepura et al., 2016).

Despite there being an abundance of literature on the safety and efficacy of antipsychotic medication in dementia (Carson, McDonagh, & Peterson, 2006; Schneider, Dagerman, & Insel, 2006) as well as interventional studies that aim to optimise prescribing (Alldred, Kennedy, Hughes, Chen, & Miller, 2016) or reduce antipsychotic usage (Richter, Meyer, Möhler, & Köpke, 2012) in care homes, qualitative studies explaining the high prevalence of their prescribing for BPSD are largely absent from the literature. Studies that do exist have examined the treatment culture within care homes (Shaw, McCormack, & Hughes, 2016), the standalone

views of old age psychiatrists (Wood-Mitchell, James, Waterworth, Swann, & Ballard, 2008) or nurses (Simmons et al., 2017) and the combined views of nurses and physicians (Smeets et al., 2014) or families and nurses (Kerns, Winter, Winter, Kerns, & Etz, 2017). No qualitative study has systematically investigated the views of a combination of different health professional groups to produce an all-encompassing theory about the inappropriate prescribing of antipsychotics for the management of dementia within care homes. The purpose of this qualitative study was to create an explanatory theory about the inappropriate prescribing of antipsychotics by exploring the views and experiences of those prescribing and providing care for residents with dementia, within a constructivist grounded theory approach. Grounded theory has its roots in sociology and is based on a philosophy that theory is developed by inductively examining concepts and analytical categories grounded in the data, which are then integrated into a core category (Corbin & Strauss, 2008). The constructivist approach is a modern slant which aims to offer an *interpretive* portrayal of the studied phenomenon by recognising that the analyses result in constructions of reality (Charmaz, 2014).

METHOD

Design and sampling

The prescribing of antipsychotic medication for people residing within care homes can be initiated or continued by consultants working within secondary-care settings and by general practitioners (GPs) working within the primary-care sector. In addition, in the UK, community psychiatric nurses (CPNs), and care-home managers (CHMs) can also be reasonably expected to know about and influence such prescribing decisions. These groups of professionals prescribing or providing healthcare for people with dementia residing in care homes were initially recruited to the study using purposive sampling. Participants were recruited either directly or indirectly.

Direct recruitment was pursued by posting invitation letters (enclosing a detailed information letter and consent form) to publicly available addresses for recruitment of CHMs and GPs; 40 local care homes and 70 GP practices were contacted in this way. In addition, the first author (SA) attended two separate monthly meetings of secondary-care consultants (with around 20 attendees at each) for recruitment of psychiatrists, CPNs, social workers, and geriatricians. Only one GP responded after receiving the posted letters, feasibly because of the exploratory nature of having been contacted in this way. GPs were subsequently mainly recruited indirectly via a (then) Primary Care Trust, a local research office, and a GP Consortium. The other method used for recruitment was the 'snowball' technique whereby already-recruited participants passed on an invitation letter to colleagues with experience of prescribing for people with BPSD. The invitation letter provided would-be participants with detailed information about the study including the researcher's reasons for undertaking the research and the supervisory arrangements for his PhD.

In wanting to construct an in-depth grounded explanatory theory of how and why antipsychotic prescribing in dementia takes place we began our research with a broad research question setting out to investigate 'what happens when residents in care homes show signs of BPSD?' One author (SA) carried out in-depth semi-structured face-to-face interviews using interview schedules focussing on descriptions of dementia and BPSD, referral and diagnosis processes, before considering beliefs, personal experiences, and views of antipsychotic taking/giving and specifically inappropriate prescribing. The interview schedule was constructed by reflecting on the literature and it refined after piloting with three volunteer interviewees. Written consent was obtained from each participant prior to interviews, with participants keeping a copy of the signed consent form and the accompanying information letter. Participants signed a separate line to

consent to audio-recording of their interview, as well as being contacted again to review their interview transcript and to receive a summary of the study results. The interviews were audio-recorded and contemporaneous field notes were made by the interviewer either during the interviews or on the same day. All interviews were conducted in a private room but within a public building such as a GP practice, a care home or a hospital. There were no repeat interviews and each interview lasted between 30-60 minutes.

Theoretical sampling is a technique of data collection that is based on the concepts and themes emerging from the data with the purpose of verifying or refuting new themes or gathering additional ideas to illuminate and define the properties, boundaries and relevance of the emerging categories through focussed questions (Charmaz, 2014). In line with this, other participants were recruited in order to develop the concepts and the themes and to obtain new perspectives about the concepts and themes that had developed at the earlier stages of analysis. This meant that as the work progressed, additional questions were asked in the interview process around guidelines on the prescribing of antipsychotics in BPSD and the importance of adhering to these. We continued to collect data until the properties of our theoretical categories were saturated with data – i.e. gathering fresh data no longer sparked new theoretical insights nor revealed new properties of the core theoretical categories (Charmaz, 2014). Once recruited, no one dropped out of the study.

Data analysis

The interviews were transcribed verbatim, password protected, and made anonymised/de-identifiable. All participants were given the option to receive their own interview transcript and nine who took up this offer reviewed and approved their transcript before it was finalised. One author (SA) ensured data integrity in consultation with the senior author. Constructivist grounded

theory methodology was used for analysis (Charmaz, 2014). The software programme NVivo (version 10) was used to facilitate the analysis of the interview responses. The process of analysis involved moving backwards and forwards from one level of abstraction to another using coding and constant comparison, hand-in-hand with theoretical sampling. Constant comparison was within interviews, within participant groups, then between participant groups. Data were coded by SA in close consultation with PD at open, axial, and selective levels to develop categories. In addition, using the paradigm model (Corbin & Strauss, 2008), *causal conditions*, *actions/interactions* and *consequences* were identified for each category. An overarching theoretical scheme inter-related the categories, identifying a core category to explain the participants' experiences (see Figure 1). The findings were discussed with the participants whose feedback was incorporated into the model. Data validation was demonstrated in triangulation (collecting data from eight groups of people), prolonged engagement with the data, description of study procedures, peer and participant debriefing, and audit trails.

Researcher characteristics and reflexivity

The research topic was selected for investigation by the researchers, all pharmacists, who believed it to be an area with unanswered questions. SA, a Saudi male pharmacist and doctoral student conducted the interviews, while the senior author provided guidance and supported the analyses. SA undertook specific training during his PhD according to an annual Learning Needs Analysis. The senior author is a female pharmacist academic and a psychologist with a PhD who was able to bridge the clinical (antipsychotic prescribing) and investigative (social psychology using grounded theory) domains during analysis. A secondary-care female pharmacist with a MSc, KM provided further contextual support and is co-author of this paper.

Ethical considerations

The Chair of the local NHS Research Ethics Committee (REC) advised that the research did not require NHS REC review because it involved interviews with NHS staff and not patients. The University's Research Ethics Committee (REC) (UREC 1217), and the local NHS Research & Development office (letter of access granted 22/06/2012) and Primary Care Research Partnership (reference TV85) reviewed and approved the research. We alerted the University REC through protocol amendments and received supplementary ethical approvals when theoretical sampling led us to interview a social worker and a memory-clinic nurse not in the original sampling plan.

The ethics application which was approved made clear the ethical safeguards that were put in place. For example, a full information letter accompanied the invitation to would-be participants, which made clear that participation in the study was voluntary. Participants reserved the right to withdraw their involvement at any time, and were given at least 48 hours to read the information letter before arranging the interview. The anonymity of the participants was fully maintained by using non-identifiable codes instead of names and other personal data and by altering other identifying information on the interview transcripts.

This paper follows the Consolidated Criteria for Reporting Qualitative research (COREQ) (Tong, Sainsbury, & Craig, 2007).

RESULTS

Altogether five psychiatrists, two geriatricians, five GPs, five CHMs, seven CPNs, two primary-care pharmacists, one memory-clinic nurse and one social worker took part in the study with 17 participants being female and 11 male. The participants included members of the community mental health team.

Three main theoretical categories were constructed to represent the views and experiences of the participants about the inappropriate prescribing of antipsychotics for the management of residents with dementia in care homes as described below. The core category 'Antipsychotic prescribing: a self-fulfilling prophecy?' encapsulates these findings from a grounded theory perspective.

Theoretical category 1: The many challenges of BPSD: needing a solution

This category explains the progression of dementia, and the experience of BPSD and its effect on the patient and on those around them (see Figure 2).

Causal conditions: Generally speaking, patients in care homes are likely to have a more advanced form of dementia than those living in their own homes. Disease progression can result in further cognitive decline, for example affecting speech:

> *'And they want to say something but the perception what is saying is not coming out.' CHM-2*

Added to this, there may be a decline in physical health, for example constipation or a urinary tract or chest infection. For residents with dementia, the environment and staff may seem unfamiliar, their family absent, their routine disrupted, they may lack stimulus, the space may seem enclosed and there may be disruptive patients around. Patients might experience boredom, sleep disturbance, they might disengage with activities and have difficulty adjusting. In addition, they can lose the ability to look after themselves:

> *'They really don't know why they're here, where they are, you know. They have difficulty with choosing between two items of clothing.' CHM-1*

Actions/interactions: A number of events might ensue. Patients can experience communication difficulties because they cannot speak, understand or make themselves understood:

> *'After that their language goes. So when their language goes they're not able to communicate. They're not able to say what they want to say and because of that they actually get really worked up.' Psychiatrist-14*

Because their sleep has been disrupted, patients might be asleep in the day and, for other reasons too, they might refuse to let staff cater for their personal needs:

> *'They don't necessarily recognise the people dealing with them, not recognising family members or their own home so they'll resist somebody helping them because they don't recognise them.' CPN-21*

In turn, patients' basic physiological needs might be unmet, so they may be thirsty, hungry or incontinent:

> *'Because can't voice that they're hungry and they can't voice that they want to go to the toilet.' CHM-4*

Patients may suffer from psychological symptoms of dementia such as distress, anxiety, fearfulness, disorientation as well as paranoia, delusions, hallucinations and bizarre thoughts:

> *'Sometimes they can't even watch the television because they think the television is, because that might have been an enjoyment for them and because the television is speaking to them they no longer use the television.' CHM-5*

Consequences: There are consequences for the patient and those around them. The patient can experience behavioural symptoms of dementia. This can range from behaviours that affect them more personally, such as crying, self-harm, repetitive behaviour. There can also be aggression

and harm to others for example by biting, scratching, spitting, swearing, hitting, and damage to property:

> *'But the majority of the difficulties are with their challenging behaviours when they're aggressive towards the other residents in the home.' CHM-3*

There may be disruption through calling out. Patients can also wander outside, putting their safety at risk and worrying staff:

> *'Let me think of an example recently, there was one lady who's in a nursing home, one gentleman who likes to wander, does a lot of wandering, and some of the staff were restricting him from wandering.' CPN-12*

Patients' behaviour can disrupt mealtimes and other residents' sleep, and staff and residents can suffer from physical and psychological harm because of the patient's behaviour. There is also an impact on the care home at an operational level as described below which means that ultimately the many challenges of BPSD need a solution.

Theoretical category 2: The balance of work: having to manage it all

This category encapsulates the impact of a patient with BPSD on the care home at an operational level and with it, the prescribing of antipsychotics (see Figure 3).

Causal conditions: Care homes can experience a high workload, especially if there are many residents with resource-intensive needs, such as dementia needing one-to-one care:

> *'I think the care homes have a responsibility for ensuring that they are providing the adequate care and one to one time and if they're saying they can't, to give a specific reason and maybe they need to seek additional funding... but there aren't adequate resources to do what's ideal.' Psychiatrist-25*

There can be a range of resource deficiencies within care homes including low staff numbers, high turn-over of staff, having an unsuitable/unsafe environment, unavailability of non-pharmacological options for the management of BPSD and lack of investment in the home:

> *'The difficulty we have is things that we know might help, music therapy, things like that, most care homes don't have access to at all.' Psychiatrist-18*

There may not be a sufficient number of staff with expertise to understand dementia and BPSD and staff may be unmotivated or lack compassion:

> *'The reality in the care homes is very different. Staffing ratio levels, staff to patients ratios are very poor, staff sometimes poorly motivated. In the nursing homes there's a lot of rotating staff, staff don't generally stay too long in those jobs, so you have, you don't have consistency of approach…So obviously ideally better staffing ratios, better training, but it all comes down to funding.' CPN-12*

Culturally too, there may be a reluctance to adhere to prescribing guidelines, a lack of knowledge about them and the usage of antipsychotics as part of routine management of patients with BPSD may be seen as acceptable:

> *'Right they're guidelines, that's all they are, guidelines. You have to look at your individual patient and treat that patient within the confines of the guidelines so. But primarily that's all they are, it's not a case of you cannot and you should not, it's what you feel is appropriate for your individual patient. So I will treat as I find, if I think a patient needs these, then I can justify it.' GP participant 26*

Actions/interactions: Patients can enter a care home already on an antipsychotic but in these instances there may be problems with information exchange, for example the rationale for prescribing or the intended course of treatment may be unknown:

> *'What tends to happen with antipsychotics are. People come in with delirium and I put them on an antipsychotic, not for BPSD, this is for delirium. And then they get discharged after about say seven, ten days. I think the problem arises when the antipsychotic never gets stopped because the GPs just let it continue.' Psychiatrist-14*

Alternatively when symptoms of BPSD are displayed, staff within care homes can call for medical attention where it might not be necessary:

> *'And the only time this woman was being aggressive was when she was woken up in the middle of the night to have her incontinence pad changed. Well have you thought about putting her in a different incontinence pad?' Psychiatrist-18*

Or doctors might be called, sometimes urgently, without the home trying non-pharmacological options, for example because these are not available or are perceived to be ineffective for the situation:

> *'Never. Never ever. It's never been addressed. No, not at my experience. Care home patients get medication full stop.' GP-28*

> *'I worked with a nurse who was doing a degree in homeopathy and she brought in massage, incense, bathing, aromatherapy and she did a study and we found that we could reduce blood pressure tablets, sleeping tablets, but anti psychotics I can't say we addressed.' CHM-5*

> *'I mean a lot of people aren't really open to psychological interventions.' CPN-11*

'Care homes probably don't manage people that need antipsychotics very well, they don't, because quite often there's not a lot going on in a care home to stimulate people's minds other than sitting there with their minds ruminating.' CPN-22

'And I think there has to be resource to provide alternative as well because unless there's resource to provide trained carers who can manage behavioural symptoms the default scenario will often be medication.' Geriatrician-8

Where the GP is involved they in turn may take advice from care home staff, rely on their own heuristics about antipsychotics and act on their authority to prescribe:

'They should always be justified but I think it's still used as the easy option. Because it's something as doctors, we do, we just prescribe a medicine.' GP-7

'Well, reaching for a prescription pad and a pen is very easy to do. And you're in a hurry, and the nurse on the ward says, oh Mrs X is terrible. Fine, let's give her some quetiapine. That's very, very easy to do and maybe not much thought has gone into it.' GP-10

'I think the recommendation is that we shouldn't be using antipsychotics for patients with dementia, but I don't think we should take that as absolute. It may be a relative contra-indication.' GP-23

'I think sometimes NICE guidance, I think sometimes they don't really live in the real world. I mean, you have a big nursing home, you have someone going potty, you know.' GP-10

There are circumstances where once prescribed, medication needs to be reviewed but there are barriers to this; for example when GPs lack time, do not prioritise care homes, and show reluctance to change a prescription initiated by someone else:

> *'I think the problem with dementia is that, I would have to say I don't think that they do a lot of reviews of this type on patients with dementia.' GP-23*

> *'But if you're busy, somebody in a nursing home gets low priority because you know that if there's a problem you will be called, so they can get stuck on the medicines for a long time.' GP-7*

Consequences: Patients within care homes who are prescribed antipsychotics can remain on these for prolonged periods:

> *'We still get an awful lot of referrals where the GPs have started them on an antipsychotic for things that we would never have started them on, so there is that.' Psychiatrist-18*

> *'Because of the medicines that I see people on when they come into us are often far more than they need. One lady came in on three different antipsychotics so I really don't know why she was on them.' CHM-1*

> *'But I'm sure there are patients still on antipsychotics that have slipped through the net, so there probably are people that shouldn't be on them.' Psychiatrist-14*

The medication is perceived to bring symptomatic and personal relief to the patient such that as well as helping reduce the psychological symptoms of dementia, the patient reportedly becomes more relaxed, sleeps better, eats better, is more comfortable, communicates with others, can perform personal functions, and wanders less:

'The antipsychotics certainly have a calming effect and really allow that individual to stay in the nursing home, rather than them become unmanageable and have to be moved back to hospital.' GP-26

'I think there, it can also reduce the risk of wandering and can improve safety.' GP- 23,

As a result, it is perceived that the patient can be managed within the care home, does not need to be admitted to the hospital, staff do not have to worry about the patient wandering off, and a big difference to the environment is perceptible making it difficult to upset this balance:

'If their behaviour is such that they're going to need an antipsychotic, they're obviously behaving at a level that's distressing for them as well as difficult for the people around to manage. So, even in eating, drinking, personal care, basic living skills aren't there, then obviously you've got to, in some way, introduce a tablet that's going to make that person's life liveable again and make it possible to care for them.' CPN-21

'And sometimes the staff will say, the nurse in charge will say, no, don't stop that person, she'll just go. And I would listen to that.' GP-10

Ultimately balance is brought back to the care home which has to manage the multitude of responsibilities.

Theoretical category 3: The heuristics of antipsychotics: a remedy that works

This category sums up prevailing views about antipsychotic medications (see also Figure 4).

Causal conditions: When patients are prescribed antipsychotics, they are visibly seen to be better managed and antipsychotics are seen to provide a speedy and effective remedy. As described in the previous category, the patient is thought to be calmer, happier, more manageable, is seen to

look after themselves better, interacts with others in a more positive way and can remain within a care home setting:

> *'But we're trying to make sure they have the happiest life they can. That they enjoy things, that's it's not sitting in tears or shouting at people or, and we find that it quite quickly works if you have just a mild prescription of something.' CHM-4*

> *'Again it depends on the individual but the majority of our residents have benefitted hugely from them because they've been much more relaxed and able to interact with the staff, the other residents and been able to enjoy a more normal structure to their day.' CHM-3*

Action/interactions: Discussion of the side-effects of antipsychotics can be played down by staff. This includes a belief that small doses can be used safely, that adverse effects observed are due to other causes or that all drugs have side-effects that should be tolerated, with, importantly, prescribers questioning the incidence of detrimental antipsychotics effects in the absence of personal experience:

> *'And it often just needs a very, very mild dose of something just to keep the balance, and we find that it quite quickly works if you have just a mild prescription of something.' CHM-4*

> *'But I have to say bearing in mind I've been using these drugs in this frail elderly age group, I don't recall any of my patients being on an antipsychotic actually dying from stroke disease. So it's in the books.' GP-26*

> *'But then the other drugs all have risks in their own right, they just as yet haven't been plastered all over the news.' Psychiatrist-18*

Consequences: Ultimately, the perception of antipsychotics' usefulness is reinforced. These are considered to be the best option available, their benefits outweighing any risks meaning the heuristic associated with antipsychotics is that these are remedies that work with relative safety:

> *'We know that they can have strokes or heart attacks and that is a definite risk but the benefit is it is going to reduce this distress.' Psychiatrist-14*

> *'And yeah, I feel the benefits sometimes do outweigh the risks.' GP-10*

The core category: 'Antipsychotic prescribing: a self-fulfilling prophecy?'

The core category was labelled 'Antipsychotic prescribing: a self-fulfilling prophecy?' (See Figure 1). Care homes for older people are expected to provide a safe, effective, caring, environment, be responsive to all residents' needs and be well led. These expectations have to be met even when the available resources fall short of the demands. Patients, who can be already vulnerable upon entering a care home, may well suffer further progression of their condition resulting in a worsening of their dementia. Compounded with other conditions in a care home, the patient might show various psychological and behavioural symptoms which can affect other residents, the staff and the functioning of the home. Where symptoms become problematic for the care home and GPs are persuaded to prescribe, antipsychotics can return a sense of balance to the workplace. Improvements in indicators of BPSD, and a relatively tolerant attitude to side-effects, result in a perception that the benefits of antipsychotics outweigh any risks. This heuristic reinforces the idea that antipsychotics *ought to* be prescribed for BPSD. A self-fulfilling prophecy is arguably at play; 'a *false* definition of the situation evokes a new behaviour which makes the originally false conception *true*. It perpetuates a reign of error' (Hedstrom & Bearman, 2009). The case being made here is that because a range of health professionals believe that antipsychotic medication *ought to* be prescribed in BPSD, these medications are routinely

prescribed and because these medications are routinely prescribed, it is believed that they *ought to* be prescribed in BPSD. In this sense, the prescribing of antipsychotics in dementia is in principle a self-fulfilling prophecy.

DISCUSSION

The central basis of a self-fulfilling prophecy is that rather than belief about something *following* reality, it is people's belief that creates reality about that something (Hedstrom & Bearman, 2009). In the current study, it is hypothesised that because antipsychotics have been prescribed routinely for the management of patients with BPSD, this has led to the belief that they *ought to* be prescribed in this condition. This may partly explain the finding that the launch of the national dementia strategy in England has not resulted in a reduction of antipsychotic prescribing in care homes (Szczepura et al., 2016). The veracity of a self-fulfilling prophecy relies on its universality, or at least its predominance therefore it supports this study that a number of the thematic categories found are in line with those of other studies. For example, Wood-Mitchell, James, Waterworth, Swann, & Ballard (2008) also reported pressure on psychiatrists to prescribe, a belief on their part that there was a lack of feasible alternatives, an inability to consistently apply guidelines and lack of trained staff within care homes to deal with problematic behaviour. Kerns et al. (2017) too reported care-giver beliefs about systemic barriers for non-pharmacological therapies, few barriers to medication prescribing and also that antipsychotic medication might be necessary and appropriate as second-line treatment for palliation of patient distress. Simmons et al. (2017) examining barriers to stopping or reducing their usage reported concerns about the return or worsening of symptoms, inability or unwillingness to implement non-pharmacological treatments, and risk aversion of staff / environmental concerns.

Smeets et al. (2014) also suggest that the mind-set of doctors and nurses toward symptoms and psychotropic drugs, lack of skilled nurses, knowledge of effectiveness and side-effects of medication as well as familiarity with guidelines and prior experience, are linked to the prescribing of these medications for care home residents with dementia. These authors found access to consultants and the nursing home setting to be relevant. Interestingly, a more recent quantitative analysis by this group, questions the extent to which non-resident-related factors are associated with psychotropic drug prescription (Smeets et al., 2017). There is already strong evidence that the unit size, spatial layout, homelike character, sensory stimulation, and environmental characteristics of social spaces effect the behaviours and well-being of people with dementia living in care facilities (Chaudhury, Cooke, Cowie, & Razaghi, 2017). In addition, when Shaw, McCormack, & Hughes (2016) examined the prescribing of psychoactive drugs in care homes, they found that staff working in *resident-centred* homes were more amenable to recognising that these medications were not always needed, compared to those working in *traditional* homes; meaning the self-fulfilling prophecy described in this study may be more relevant to some settings and not to others. There is robust quantitative evidence from the US that facility-level characteristics play a role in increasing the use of antipsychotic medication in the nursing home population (Cioltan et al., 2017). Of relevance, an increase in the use of antipsychotics was found to be associated with a decrease in registered nurse staffing, which led the authors to express that antipsychotics act as a cost-saving alternative to hiring additional nurses (Cioltan et al., 2017).

Another strand of evidence supporting the legitimacy of the self-fulfilling prophecy described in this study comes from a paper using content analysis which quantified reasons people gave for the use of antipsychotic medications in nursing-home residents with dementia (Bonner et al.,

2015). The authors found a host of indications were cited for the prescribing of antipsychotics including patients' emotional states such as anger, agitation, distress and sadness, resistance to care and cognitive diagnoses or symptoms, none of which are supported by guidelines. Significantly, they expressed that nursing home teams poorly articulated and understood the rationale for the prescribing of antipsychotics medications for patients with dementia, which lends support to the idea that these medications are continued to be prescribed simply by virtue of having been used routinely for this condition in the past.

As a limitation it has to be noted that the current study was based in one English county only, although the sample size and method of data collection is in line with other qualitative studies utilizing in-depth interviews and specifically constructive grounded theory. The in-depth theory developed in this study is that the inappropriate prescribing of antipsychotic medication can become a self-fulfilling prophecy. Recognising the inappropriate prescribing of antipsychotics as a self-fulfilling prophecy means future studies could focus on people's past experience with these medications. As such, interventions can focus on breaking the effect of the self-fulfilling prophecy, by diminishing the influence of past experiences in perpetuating inappropriate prescribing for example, by highlighting the 'salience of consequences'. Thus an intervention could be specifically designed to emphasise the consequences of inappropriate prescribing for BPSD with the aim of making the side-effects more memorable (beyond merely informing prescribers about the potential for side-effects).

CONCLUSION

This is a unique study that examines the views of a range of staff about the inappropriate prescribing of antipsychotic medication for the treatment of dementia in care homes using grounded theory analysis. The case presented in this paper is that the inappropriate prescribing of

antipsychotic medication may be a self-fulfilling prophecy, the idea that because antipsychotics have been used in dementia, this practice comes to be regarded as correct, perpetuating the situation, as follows. Within busy care homes, the many challenges of BPSD need a solution and the prescribing of antipsychotics provides a mechanism through which the multitude of work can be managed. These medications come to be regarded as a remedy that works and this in turn feeds into the belief that these medications in fact *ought to* be prescribed for the management of patients with dementia living in care homes. The theory presented, which is strongly grounded in the data and its themes in line with existing research, provides a plausible explanation as to why the prescribing of antipsychotic medication for dementia within care homes has continued despite an active drive to reduce this behaviour. The findings could help policy makers, practitioners and researcher to construct interventions that attempt to diminish the power of the self-fulfilling prophecy in perpetuating the inappropriate prescribing of antipsychotics in dementia.

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Figure legends

Figure 1: Diagrammatical representation of the Grounded Theory ‘Antipsychotic prescribing: a self-fulfilling prophecy?

Figure 2: The paradigm model for the theoretical category ‘The many challenges of BPSD: needing a solution’

Figure 3: Paradigm model for the theoretical category ‘The balance of work: having to manage it all’

Figure 4: Paradigm model for the theoretical category ‘The heuristics of antipsychotics: a remedy that works’