Medicines management in mental health


Abstract

This article provides evidence to suggest that mental health nurses may not be as competent in medicines management as they believe themselves to be. A psychological model of skills awareness is used throughout the article to offer a theoretical explanation of this putative deficit and provide discussion of the possible causes. Training directed towards improving medicines management skills will be introduced. Training such as this is essential if mental health nurses are to offer the best care to those in receipt of their services and make best use of the opportunities provided by prescribing legislation.

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SOME MENTAL health nurses consider themselves to be competent de facto prescribers (Hemingway and Ely 2009). This means they feel able to advise junior doctors on what to prescribe. As such, they presume that the prescribing qualification will simply formalise an existing skill (Oldknow et al 2010), a view challenged by Jones et al (2010) who noted that only one in three mental health nurse prescribers practise once qualified. Jones et al (2010) suggested that the prescribing course actually generates uncertainty rather than confidence, possibly because it is generic rather than specific to mental health. However, there is a considerable and unexpected jump in competence from de facto prescribing, which involves minimal personal accountability, to actual prescribing, which involves being responsible for complex clinical decisions. It appears that some mental health nurses begin the prescribing course unaware of the level of competence required.

This is a multifaceted matter, but there is a putative psychological mechanism at work relevant to the issue of competence. It is this mechanism that provides the theoretical aspect of this article. In their seminal work, Unskilled and Unaware of it, Kruger and Dunning (1999) examined the relationships between perceived and actual performance by psychology students in a variety of domains, such as logical reasoning, grammar and humour. They found that with the exception of the highest performers, most students overestimated their abilities. The worst performers showed the largest gap between perceived and actual ability. If this is a transferable finding, most people lack insight into their performance, and that the least skilled have the least insight. These results have been replicated elsewhere (Ehrlinger et al 2008).
The Nursing and Midwifery Council (NMC) (2007, 2010a) emphasised the requirement for nurses to understand the limits of their competence. This article considers the importance of this in relation to medicines management in mental health nursing. Evidence is presented in this article from a previous study that suggested that mental health nurses may not be as competent in medicines management as they believe themselves to be (Snowden and Martin, 2010a, 2010b). The Kruger and Dunning (1999) model of skills awareness offers two strategies for tackling this issue: improving insight and improving skills. These two aspects are related, and this article concentrates on improving skills as a method of improving insight.

**Background**

The Department of Health (DH) (2010) defined medicines management as patients getting the ‘maximum benefit from their medicines while at the same time minimising potential harm’. All registered nurses have a duty to perform safe medicines management, which depends on competence. The NMC (2010b) uses the term competence to describe ‘the skills, knowledge and attitudes, values and technical abilities that underpin safe and effective nursing practice and interventions’. It is important to recognise that there remains disagreement about how competence is developed and demonstrated (Bradshaw and Merriman 2008). These positions broadly divide into two camps:

- Those who believe competence can be best assessed by measuring individual skills and tasks. The NMC (2010b) takes this approach.
- Those who believe competence depends on the application of connections made between individual tasks and skills. This approach is considered more holistic (Cowan et al 2005).

**BOX 1**

**Standards of proficiency for nurse and midwife prescribers**

Prescribers must have sufficient knowledge and competence to:

› Assess a patient or client’s clinical condition.

› Undertake a thorough history, including medical history and medication history, including over-the-counter medicines and complementary therapies, and diagnose where necessary.

› Decide on management of the presenting condition and whether or not to prescribe.

› Identify appropriate products if medication is required.

› Advise the patient or client on effects and risks.

› Prescribe if the patient or client agrees.

› Monitor response to medication and lifestyle advice.

(Nursing and Midwifery Council 2006)

The problem with the first approach is that it is simplistic, mechanistic and reductionist. The problem with the second approach is that it is difficult to measure objectively. To contextualise the issue, the authors examined the process of developing competence in mental health nurse prescribing (Snowden and Martin 2010a). The assumption behind this choice was that these practising prescribers were expert practitioners (Bradley et al 2007), and would therefore be able to articulate or demonstrate a coherent process of becoming competent in a new skill.

The Medicines and Human Use (Prescribing) (Miscellaneous Amendments) Order 2006 states that non-medical prescribers in the UK can prescribe almost any drug for any condition, provided that they are trained appropriately and are competent to treat that condition (DH 2006). There is therefore a considerable onus on individual nurses to understand what they are competent to treat. The NMC (2006) specified standards of proficiency for prescribers (Box 1), meaning that knowledge and skills can be demonstrated against measurable outcomes. However, developing competence in mental health nurse prescribing has been shown to be more in line with Cowan et al’s (2005) interpretation of competence, in that it requires a level of reflection and skills development unsuited to mechanistic explanations of competence (Snowden and Martin 2010a). For example, successful prescribing entails getting to grips with issues of concordance (Snowden 2008), an essentially normative concept difficult to articulate in reductionist terms.

The next section briefly reviews Snowden and Martin’s (2010a) research into competence in mental health nurse prescribing. This is important as the research reveals previously unknown deficits in competence in medicines management more generally. A solution is then proposed to address the deficits, grounded in the latest NMC (2010c) guidance.

**Evidence**

Mental health nurse prescribing has grown slowly in the UK (Hemingway and Ely 2009). While many mental health nurses saw prescribing as an opportunity to offer more holistic care and offered evidence in support of this position (Murray 2007, Laird-Measures 2010, Grainger and Keegan 2011), others had concerns about keeping their practice safe and in line with their competence (Bradley et al 2007, Kwentoh and Reilly 2009). Organisational barriers continue to be a problem in many areas, for example delays in obtaining prescription pads and confusion about the role of the mental health nurse...
prescriber (Ross 2009). In general, disagreement remains on whether or not mental health nurses should be prescribing (Patel et al 2009, Wells et al 2009). As discussed, against this background only one in three mental health nurse prescribers practise once qualified (Jones et al 2010).

Snowden and Martin (2010a) studied 40 practising mental health nurse prescribers in the UK over four years, and analysed concurrently the mental health nurse prescribing literature (Snowden and Martin 2010b), integrating practical examples of mental health nurse prescribers' competence from 13 peer-reviewed case studies.

To summarise the results, where the prescribing qualification improved quality of life for individual users of medicines and the prescriber felt supported, prescribing was more easily integrated into practice. The prescribers had to go through a distinct learning process to become competent, tailoring advanced knowledge of pharmacotherapy to the individual needs and understanding of their patients. This was all reasonably predictable.

However, an unexpected corollary of this investigation was that these competent prescribers came to realise on reflection that they had not previously been as competent in medicines management as they had believed themselves to be.

Increased understanding would be expected and hoped for as a result of undertaking any higher education. However, a consistent theme emerged that on reflection many had been unaware of the limits of their previous knowledge (Snowden and Martin 2010a) (Box 2). The commonality is that the prescribers recognised the leap in competence required to practise safely as mental health nurse prescribers.

Jones (2008) subsequently highlighted the need for specific mental health medicines management training for prescribers, with Leppard (2008) recommending more training to fill this newly perceived deficit in knowledge. Wright and Jones (2007) created mental health specific prescribing modules to address their finding that the generic non-medical prescribing course did not sufficiently prepare mental health nurse prescribers.

However, while these approaches were aimed at enhancing expert knowledge, none addressed the wider issue that if these nurses recognised that they had not previously known as much about medicines as they thought they did, this may also be true of other nurses.

**Discussion**

There is some evidence that medicines management has not been prioritised to the extent that it needs to be in pre-registration training or in practice (Hemingway et al 2011). The credibility of medication in mental health has been challenged by the deconstructions of the medical model (Bentall 2004, Moncrieff 2009), criticism of the classification of mental illness (Kutchins and Kirk 1997, Fleming and Martin 2009), increasing recognition of the limits of reductionist biology and hence pharmacology (Noble 2002, 2006), and the parallel rise of evidence-based alternatives to medicines such as cognitive behavioural therapy (Hall and Iqbal 2010). These points are all given further credibility through their general association with the ethics of human rights (Barker 2011).

Skingsley et al (2006) argued that the prominence now given to psychosocial interventions in mental health nursing education has led to the neglect of biological approaches in pre-registration education. This is an important observation given that psychotropic prescribing has continued to rise

**BOX 2**

*Quotes from the literature indicating prescribers’ awareness of their previous lack of knowledge*

> "...as the nurse prescriber becomes aware of this lack of knowledge on informed prescribing, they are then reluctant to practise upon qualification" (Jones 2008).

> "The prescribing course generated, rather than allayed, uncertainty in some nurses about their prescribing ability (‘you don’t know what you don’t know’)" (Bradley et al 2007).

> "If anything, since undertaking the prescribing course I was even more aware of the dangers in prescribing..." (I have since undertaken a specific course in psychopharmacology, which has been invaluable’ (Leppard 2008).

> "It’s learning around medication that changes. The classic thing that [nurse prescribers] say is that they used to understand medication and now they really understand. They didn’t previously take on the responsibility. That seems to change the way they act’ (Snowden and Martin 2010a).

> "I am concerned that some nurses are moving into a field they are not competent in’ (Snowden and Martin 2010b).

> "The [nurses previously] advised and informed doctors on prescribing issues and the effectiveness of prescribing decisions, but without having to accept any real responsibility for this advice. Many students clearly felt very anxious about having their advisory role formalised..." (Wright and Jones 2007).

> "The [prescribing qualification] is just the first step; I’ve got so much more to learn’ (Earle et al 2011)"
It requires thought and the exercise of professional judgement...

Professional judgement requires knowledge and insight into the limits of that knowledge. Snowden and Martin (2010a) hypothesised that this insight is incomplete. It is fair to acknowledge that some higher education institutions have recognised that medicine management has not been sufficiently prioritised in undergraduate training and take a highly structured approach to medicines management in mental health (Hemingway and Ely 2009). However, there is no explicit directive for them to do so.

The NMC (2010c) requires competence in medicines management to be assessed as one of the skills clusters. Table 1 shows the relevant conditions of entry to the register. There is evidence to suggest that this training would be best managed in clinical practice (Reid-Searl et al 2010), and therefore it makes sense for these skills to be assessed in practice. However, if as suggested in this article clinicians do not understand medicines as well as they think they do, they are unlikely to be able to assess accurately competence in others. This is compounded by the finding that clinicians may lack the insight to recognise these limitations.

**TABLE 1**

<table>
<thead>
<tr>
<th>Essential skills clusters: medicines management</th>
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<td>People can trust the newly registered graduate nurse to ensure safe and effective practice in medicines management through comprehensive knowledge of medicines, including their actions, risks and benefits.</td>
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<tr>
<td>First progression point</td>
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<tr>
<td>1. Uses knowledge of commonly administered medicines to act promptly in cases where side effects and adverse reactions occur.</td>
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<td>4. Safely manages drug administration and monitors effects.</td>
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<td>(Adapted from Nursing and Midwifery Council 2010c)</td>
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Pharmacotherapeutics (the therapeutic actions of certain medicines). Risks versus benefits of medication.

Pharmacokinetics (what the body does to the drug, including absorption, distribution, metabolism and excretion) and how doses are determined by dynamics and systems in the body.

Role and function of bodies that regulate and ensure the safety and effectiveness of medicines.

Knowledge on management of adverse drug events, adverse drug reactions, prescribing and administration errors, and the potential repercussions for patient safety.
Medicines management course

This article suggests, in agreement with Hemingway et al (2011), that there should be an explicit academic component to developing competence in medicines management. The authors agree with Hemingway et al (2010) that a stepped approach to medicines management is sensible. This would reflect the approach signposted by the essential skills clusters in Table 1. In practice, this means introducing and developing the principles of medicine management in a structured manner over the term of the undergraduate course. In line with the ideas developed in this article, it also makes sense to offer dedicated medicine management training to postgraduate registered mental health nurses. Successful completion of this course could then act as a springboard for successful and insightful entry to the prescribing course.

The University of the West of Scotland, along with its clinical partners in NHS Ayrshire and Arran, and Greater Glasgow and Clyde, developed a level 9 (final year undergraduate or postgraduate) module designed to improve knowledge and skills in medicines management for registered nurses. The content of the course matches the indicative content of the skills cluster in Table 1, with specific focus on psychotropic medicines. In terms of delivery, theory on pharmacokinetics and pharmacodynamics, for example, is presented alongside case studies. These show where such theoretical aspects are applied in practice by clinicians. These case studies use the situation, background, assessment, recommendation (SBAR) format to provide a familiar structure for students. It is known that students understand theory best when applied coherently to clinical practice (Wright and Jones 2007, Ndosi and Newell 2009). The authors therefore asked students to present a case study from their own clinical experience by way of assessment. The assessment again follows the SBAR format. The first iteration of the course was oversubscribed, highlighting the clinical relevance of this education to local practitioners at both undergraduate and post-registration level.

Evaluation of the course

The main aim of the course is to integrate critical evidence of psychopharmacology with critical evidence of the importance of concordance and the therapeutic relationship between the nurse and patient. The wider hope is that raising the skills of these nurses will lead to better support for those they are supervising, for example other nurses and students. A secondary aim of the course is to better prepare mental health nurses to become prescribers, where appropriate.

The course may act as a stepping stone by improving insight into the depth of knowledge required for safe prescribing. If nurses then go on to the prescribing course understanding their limits instead of erroneously believing they are competent to make prescribing decisions (Oldknow et al 2010), this may go some way to offset the lack of prescribing practice evident in previous cohorts (Bradley et al 2007, Jones 2008, Jones et al 2010).

To establish whether these aims are achieved in practice the effect of the training is being evaluated. As discussed, Kruger and Dunning (1999) provided a psychological model of competence grounded in empirical correlation between estimated and actual performance. If, as they predicted, the poorer performers overestimate their competence, this will lend further support to the hypothesis that some mental health nurses are not as competent in medicines management as they believe themselves to be. It will also go some way to identifying those in need of greater support.

Self-reported measures of confidence, perceived competence, knowledge and understanding are being recorded. This is to ascertain whether any of these constructs may be correlated with objective evidence of actual performance. These measures will be repeated at various points to investigate changes over time and establish links between these factors and demographic data such as age and experience. Follow-up measures of the effect on clinical practice will be recorded.

It will be of relevance to future educational provision to establish whether this course goes any way towards aligning students’ actual competence with their self-reported estimates of competence. If it does, this will be a significant step towards improving the knowledge and skills of the workforce, and will better prepare them to assess competence in others and become prescribers where appropriate.

Conclusion

This article has introduced the Kruger and Dunning (1999) psychological model of skills awareness. It provides a theoretical model to explain putative deficits in medicines management skills in mental health nursing. Instead of attempting to adjust people’s insight into their actual competence, which is difficult, focusing on skills improvement should theoretically have a similar effect on aligning understanding with insight.

To this end, a medicines management module has been developed for undergraduate and postgraduate nurses in NHS Ayrshire and Arran, and NHS Greater Glasgow and Clyde. This module is delivered by academics and clinicians.
with the aim of integrating pharmacology theory with practice. Students are assessed on a similar basis. They need to incorporate a critical understanding of psychotropic pharmacology with the person-centred principles of mental health nursing. The effect of this module on performance and insight into that performance will be evaluated systematically.

References


