Obedience to Collaboration – compliance, adherence, concordance

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Introduction

Prescribing rights were initiated in the UK with the first Crown Report in 1989 and a pilot group of community nurses and health visitors started prescribing in 1994 from a limited formulary. Attitudes of and language used by clinicians is significant. Critical thinking is expected from professionals; nurses, midwives, pharmacists and Allied Health Professionals are working as advanced clinical practitioners due to their experience and education. Task orientation is now a dirty word in nursing, rejected in favour of individualised care, now espoused in education and clinical expectations. It is curious that experienced clinicians attending prescribing courses use unsympathetic and paternalistic language, talking about their patients being compliant/non-compliant. This article will give an overview of opinions and use of the terms 'compliance,' 'adherence' and 'concordance' in relation to prescribing practice. These will be discussed in terms of informed consent, the standards set by *A Competency Framework for all Prescribers* (RPS, 2016) and partnership in care.

Literature

A review of literature was done to gain an overview of the use of the terms 'compliance,' 'adherence' and 'concordance' and the meanings that have been attached to them. A search of English language literature was conducted through the on-line databases Academic Search Complete, CINAHL Complete, MEDLINE, SocINDEX and Google Scholar. Twenty-four papers were selected, with publication dates from 2001 to 2019. These are a range of papers researching aspects of compliance, adherence and concordance, and editorials and articles that discuss the use of these terms. It was deemed appropriate to include non-research papers for expressed attitudes and understanding of the terms.

The review provides an overview of changing approach and attitudes and current recommendations. It includes literature from UK, Switzerland, Europe and east European countries, Canada, Australia, Malaysia, and India. The literature was assessed for definitions and uses of the three terms, attitudes and opinions. There is agreement that compliance in relation to patient behaviour is inappropriate, and a change is recommended in prescribing practitioners' outlook and approach, not merely a change in vocabulary.

Defining the terms

Compliance.

Box 1: Definitions of Compliance

"The extent to which the patient's behaviour (in terms of taking medications, following diets, or executing other lifestyle changes) coincides with medical advice" (Sackett et al, (1976) cited in Anderson, 2013).

"The extent to which the patient's behaviour matches the prescriber's recommendations." Horne *et al.* (2005 pp4).

Vermeire et al. (2001) conducted a systematic review of papers published over 30 years. They explored patient adherence, how it is defined, reasons why patients do not adhere to treatment regimes. In defining their terms, they point out that the term compliance was so ingrained that very few authors thought to offer a definition. Vermeir et al. (2001) state that in reviewing the literature they felt obliged to use the language of the papers to represent them accurately. There is agreement that the use of 'compliance' in relation to patient behaviour is outdated and inappropriate. Compliance has been noted to convey the expectation of obedience in following directions (Gray et al, 2002; Treharne et al, 2006), passivity from the patients (Cushing & Metcalf, 2007; McKinnon, 2013; Kaufman, 2014; EPF, 2015) and displays a paternalistic approach (Aronson, 2007a; Lally, 2011; Felzmann, 2012; Hemmingway & Snowden, 2012).

Compliance is entirely appropriate when used in relation to keeping the law, or upholding professional standards. These are not optional; the consequences would be imprisonment, professional disciplinary action, and/or being struck of the professional register. This is clearly not applicable to patients who do not take their medication as prescribed. In a culture that values patient centred care, it does not ring true to speak of compliance in relation to patient behaviour.

Adherence.

Box 2: Definitions of adherence

"The extent to which a person's behaviour – taking medication, following a diet, and/or executing lifestyle changes, corresponds with *agreed* recommendations from a health care provider." (WHO, 2003). (My italics)

"The extent to which the patient's behaviour matches *agreed* recommendations from the prescriber." (Horne, 2005). This has been adopted by NICE (2008). (My italics)

There is not a complete consensus in the literature about adherence; some use it as though it is synonymous with concordance, using the terms interchangeably. While authors from UK, Europe, USA and Malaysia have adopted the WHO (2003) definition of adherence (Cushing and Metcalf, 2007; Lee et al, 2008; Whalley et al, 2008; Brown and Bussell, 2011; Vrijens et al, 2016) others report adherence as synonymous with or only slightly removed from compliance (Cramer et al, 2007). For example, Treharne et al (2006) Hemmingway and Snowden (2012), Kaufman (2014) and Randall and Neubeck, (2016) all write that adherence is slightly less paternalistic than compliance, but only because the clinician gives information before the patient passively complies. However, although information giving is necessary to informed consent, it is insufficient alone to achieve a platform for adherence.

Huyard et al (2019) conducted qualitative research, involving 48 semi-structured interviews with hospital patients in the Netherlands. They define adherence as repeatedly taking medication as prescribed but do not equate this with agreement or informed consent. Metcalfe (2005) and Alpert (2014) both view adherence as a politically correct move rather than appreciating the fundamental rationale. Alpert (2014) talks about the virtue of giving detailed information to patients and then laments the fact so many of his own patients do not take their medication as prescribed.

Aronson (2007b) says that adherence and "compliance" can be estimated through noting patient prescription claims, medicine dispensation and (where appropriate) blood serum levels. However, such estimation may well be inaccurate as often as not. Patients claiming prescriptions and stockpiling or taking medication haphazardly will not be indicated in prescription claims or dispensed medicines. Serum blood levels are used to assess efficacy and safe therapeutic levels of some pharmacological treatment but will not describe adherent/non-adherent behaviour. The level of non-adherence in the UK is estimated to be 30-50% of medicines not taken as prescribed (NICE, 2009) which has enormous implications for enormous financial cost of wasted medicines.

Considering the definitions given by WHO (2003) and Horne (2005) the crux of the difference between compliance and adherence is that adherence acknowledges the necessity of patient involvement in the process by emphasising the patient's *agreement* to the plan of care. Agreement can only be reached through informed consent. Informed consent requires relevant, not generic, information and discussion, not information-giving alone. Discerning what relevant is requires listening to and understanding the patient - not giving advice about change without understanding the baseline. For example, lifestyle advice for a constipated patient should come from an understanding of that patient's current level of exercise, fluid intake and diet before blandly advising more of each. One of the tenets of adherence is to remove blame and focus more *why* a patient is non-adherent, and how understanding their circumstances and perspective can increase adherence (Brown and Bussell, 2011).

Concordance.

Box 3: Definition of concordance

"Concordance is not synonymous with either compliance or adherence. Concordance does not refer to a patient's medicine-taking behaviour, but rather the nature of the interaction between clinician and patient." (Bell, et al, 2007 pp710)
"Concordance describes the relationship between health professionals and patients." (Whalley et al, 2008)

Horne et al. (2005) are explicit that concordance is not synonymous with adherence. Hemingway and Snowden (2012) affirm that concordance is not a behaviour, Whalley et al (2008) agree it is a relationship and that relationship has been accepted as a partnership (Latter et al, 2007; Lee et al, 2008 and McKinnon, 2013; EPF, 2015).

In their action research with three GPs and 30 patients, Dowell et al (2002) do not give definitions for concordance or adherence but they make a good point that a relationship (concordance) is harder to assess than a specific behaviour (adherence). In Canada, Wahl et al (2004) wonder what the benchmark for concordance is. Their qualitative study looked at a cohort of patients who had sub-optimal clinical outcomes. They concluded that a patient centred approach, involving their beliefs and expectations, is conducive to improved outcomes.

Hemmingway and Snowden (2012) discuss concordance and adherence in the context of mental health. Snowden states that the concept of adherence assumes the clinician knows best and he is unable to support that, saying that aligning treatment and the patient's health beliefs is the most effective way to proceed and this necessitates listening to the patient. Hemmingway states that concordance is a principle, and he feels it is unrealistic. However, he then goes on to say that it is necessary to consider the patient's health beliefs and talks about a respectful, trust-based relationship.

Snowden and Marland (2013) argue concordance makes adherence redundant. They declare adherence is confusing because it does not "presuppose shared care" (pp1354). While adherence does not pre-suppose, it *does* facilitate agreement to the treatment plan (Horne et al, 2005; NICE 2008). Howard, in Whalley et al (2008 pp137) affirms that adherence is intended to redistribute the power and that clinicians 'have a responsibility to form a therapeutic relationship.' Snowden and Marland (2013) decry NICE (2009) for missing a crucial step in defining adherence and in the next sentence acknowledge the guideline *does* provide the defining clarity. While Snowden and Marland (2013)

acknowledge concordance is a relationship, not a behaviour, they maintain adherence (patient behaviour) is redundant. Finally, they state that confusion exists due to using the terms 'compliance,' 'adherence' and 'concordance' interchangeably in the literature and this does appear to be the case. They go on to use the term compliance themselves (pp1355) in a case study when concordance was described, according to their own definition. Their own definition of adherence does not acknowledge the principle of agreement which may account for why they feel it is a redundant term.

Informed Consent

The Montgomery v Lanarkshire (2015) case changed the understanding of informed consent. Although Montgomery v Lanarkshire (2015) was not about prescribing, the principle is clear and applicable. Despite asking whether her baby's size could be a problem for her delivery, Mrs Montgomery was not advised that, because she has insulin dependent diabetic mellitus there was significantly greater risk of shoulder dystocia, posing increased risk of morbidity or mortality to herself and her child. Unfortunately, shoulder dystocia did occur and resulted in life-changing injury to baby Montgomery. To determine if there had been negligence, Bolam v Friern Hospital Management Committee (1957) relied on what clinicians would do in the same circumstances. Montgomery v Lanarkshire (2015) effectively removes the focus from clinicians' opinions to what is specifically relevant to the patient.

The take-home principle is that failure to inform and discuss significant risks with the patient is a failure to achieve informed consent and may therefore be deemed negligent. If a prescribing practitioner does not discuss appropriate information there is a chance the patient who experiences an adverse drug reaction (ADR) will have grounds to say they would not have agreed to take that drug had they known.

Competency Framework

The competency framework (RPS, 2016) sets the required standards for all prescribing clinicians in the UK and has been adopted by the three regulatory bodies (NMC, HCPC and GPhC). It gives 65 individual competencies that are now implemented in the education of prescribers and are to be upheld throughout their prescribing life. While the Framework is due to be updated soon, and will be periodically, the underlying principles will remain relevant. Picton, the lead author of the competency framework, (RPS, 2016) points out that the competencies are in place to support prescribing practitioners and their development, not as concrete 'assessable targets' (Hall & Picton, 2020 pp123). These are not minutely defined tasks, but principles, making them accessible to all prescribing clinicians, whatever their profession and area of practice. McKinnon (2014 pp678) discusses concordance in respect of a therapeutic relationship with children and relies on the child-centred values of the clinician, as well as capacity, age, family, legality and clinical circumstances. This means it is nuanced and skilled, not unachievable.

Box 4: Competencies from *A Competency Framework for All Prescribers* (RPS, 2016)*

1.7 Reviews adherence to and effectiveness of current medicines.
3.4 Routinely assesses adherence in a non-judgemental way and understands the different reasons non-adherence can occur (intentional or non-intentional) and how best to support patients/carers.
3.5 Builds a relationship which encourages appropriate prescribing and not the expectation that a prescription will be supplied.

*Competencies reproduced by kind permission of Royal Pharmaceutical Society

Aligning adherence and concordance with the *Framework* (RPS, 2016) is required of prescribing practitioners (note that compliance is not included anywhere in the Framework). Competency 1.7 asks the prescriber to review adherence and effectiveness. This review can take several directions. Is the medication effective? If medication is taken as prescribed, is it at an optimal dose/correct choice? Is the set goal achieved despite of poor adherence? However, if there is non-adherence (whether the medication is effective or not) it is preferable clinician does not automatically instruct the patient why they *should* take it, but instead ask, "Why?". Without understanding the cause, there is possibly small chance of changing the medicine–taking behaviour. Competency 3.4 revisits reviewing adherence. This is not an identical competency to 1.7, it focusses more on the prescribing practitioner's intent and approach. 3.5 builds on this, highlighting the therapeutic relationship. Arguably, this is about concordance, the wider relationship that provides the bedrock that facilitates adherence. How prescribing practitioners develop and demonstrate these principles is dependent on their experience and scope of practice.

Partnership in care

If there is genuine effort in working in partnership with patients, as encouraged by NICE (2008) the implication is that both parties have responsibility in that partnership, and something to bring to the partnership. The patient is coming to the consultation, not only with their presenting problem and symptoms, but their lived experience of their condition, how it affects their ability to function, and expectations coloured by previous health care encounters. Whatever the presentation, however serious or trivial, the patient is seeking a therapeutic intervention.

Medication taking behaviour is complex and multi-faceted (Brown & Bussell, 2013) and prescribing is one of the most common therapeutic interventions, therefore there are enormous implications for patients' health. Causes of non-adherence are varied and can be multi-factoral (Hughes & Ortiz, 2005; WHO, 2016) and the reasons are not always predictable. In seeing where adherence fails, lack of pertinent information,

misunderstanding, unconvinced the medicine is needed, intolerable side effects are just some of the culprits (Jimmy & Jose, 2011).

In a partnership, the implication is that the clinician, and not only the patient, can manifest non-concordant behaviour. Examples include failing to advise the patient appropriately that there may be risks which might mean the patient would not otherwise have entered the agreed plan of care; failure to communicate with other involved parties or refer when indicated; failure to implement therapeutic tests/monitoring; failure to review in a timely manner.

Applying to Practice

Reviewing the changing language and attitudes does raise the question: does it matter what term is used as long as the process is effective? Arguably, level of non-adherence suggests that there is scope for improvement (NICE, 2009). The terms do have different meanings and parameters in practice. Hemmingway and Snowden (2012) caution against merely swapping terms and renaming the same behaviour in lieu of meaningful change.

Although concordance may be difficult to assess, attention to the relationship between prescribing practitioner and patient will show its fruits in engagement and communication. As Latter et al (2007) discuss, the principles of concordance were adopted in the competencies of the day, and this continues in the current Framework (RPS, 2016). Randall and Neubeck (2016) concur that this is not just a matter of semantics. Consideration needs to be given to how the language used shapes attitudes and the details of engagement with patients. This has been demonstrated in nursing with the rejection of task orientation as an acceptable approach to patient care. The labelling of individualised blister packs and dossette boxes as “compliance aids” is perhaps, not helpful in adopting more appropriate language and behaviour.

Human beings are resistant to being told what to do. Vrijens (2012, pp695) illustrated this with an historical timeline demonstrating “non-compliance” from the eating of the forbidden fruit in the Garden of Eden onward. This may be slightly tongue in cheek, but it is a reminder that people do not neatly adopt what is considered recommended wholesome and healthy behaviour. Who is unaware smoking is predictably and relentlessly harmful? Yet people still choose to smoke. The skill is not just providing accurate information, but in making it accessible and relevant to the individual. Until there is personal meaning, information can be abstract. Staying with the smoking example, a smoker is most likely to quit when the motivation has originated form or connected to something personal in them – influence of loved ones, concern for their own health, a recent health scare, pregnancy (Buczkowski et al, (2014). It is accepted that understanding a smoker’s motivation is important to facilitate their success. It is time to apply this to everyone who has prescribed medication.

Conclusion

Usage and definitions of the terms ‘compliance,’ ‘adherence’ and ‘concordance’ have changed over time, but there is still some misunderstanding and variation. There is general agreement in the literature that compliance used in relation to patients and their engagement with their healthcare is inappropriate. There is a historical precedent in the rejection of task orientation and moving to patient-centred care, which has influenced delivery of healthcare. Partnership in healthcare recognises the clinician’s experience and expertise, and the patient’s own experience and right to engage with and understand the offered healthcare in relation to their lived experience of their condition. This article advocates clarity of ‘adherence’ in terms of behaviour, ‘concordance’ in terms of therapeutic relationship, and recognising that it takes a change in perspective and attention to clinician-patient relationship to remove the expectation of patient compliance, not just a change of vocabulary.

Key words: adherence; behaviour; compliance; concordance; partnership; prescribing; relationship.

Key Points:

- Compliance is inappropriate in language and attitude toward patient behaviour and medicine-taking
- Concordance is the relationship between clinician and patient. It is the bedrock of successful engagement, whether medicines are prescribed or not
- If adherence fails, ask why.

Reflective questions

- Thinking about your own practice, can you identify the skills you use to develop a therapeutic relationship with your patients?
- How does your practice support concordance? Identify ways in which you, as a prescribing practitioner, could be non-concordant within that therapeutic relationship.
- How do you assess adherence in your practice? What reasons have patients given for non-adherence? Are there ways in which you could modify your approach?
- Consider how you might feel if you saw in your medical records, or heard yourself or your loved ones described by a health care professional as “complaint” or “non-compliant.”

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