Prescribing and partnership with patients

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There have been widespread changes in society and the roles of professionals. This change is also reflected in health care, where there is now acceptance of the need to involve patients in decision making. In prescribing specifically, the concordance agenda was developed alongside these initiatives to encourage improved medication taking and reduce wastage. However the extent to which these partnerships are delivered in practice remains unclear. This paper explores some of the issues to be considered when preparing patients and professionals for partnership and summarizes the limited evidence of barriers to, and benefits of, this approach. Firstly patients must be given the confidence, skills and knowledge to be partners. They need information about medicines, provided in ways known to be acceptable to them. Likewise professionals may need new skills to be partners. They need to understand the patient agenda and may need training and support to change the ways in which they consult with patients. There are also practical issues such as the perceived increase in time taken when consulting in partnership mode, room layout, computer interfaces and record keeping. Health care professionals other than doctors are also expected to behave in partnership mode, whether this is as prescribers in their own right or in supporting the prescribing of others. Whilst much has been claimed for the benefit of partnership approaches, hard evidence is limited. However whilst there is still much more to understand there will be no going back to the paternalistic model of the mid 20th century.

Introduction

Changes in society and its relationships with the professions

Before considering the specific topic of the partnership between a health care professional and their patient, it is pertinent to reflect in general on the role of professionals in the 21st century. Historically, the professions developed alongside the Industrial Revolution when people migrated to the cities and were forced to buy services from strangers [1]. Thus a profession has to be linked to major human values (e.g. health or property), require a degree of knowledge, skill and understanding beyond those of a layman (e.g. accuracy of diagnosis or purity of a prescription) and be inherently personal and individualized and not readily standardized or mass produced. Freidson [2] in considering the profession of medicine has defined the core features of a profession, which are summarized here, as having a body of specialized knowledge, a monopoly of a field of work, autonomy, a code of ethics and an acknowledged status.

However since that time there have been intellectual challenges to the autonomy and primacy of the professional's knowledge. Firstly, taking an example from Public Health, Popay & Williams [3] have argued that 'lay people acquire an "expert" body of knowledge, different from but equal to' that of professionals, prompting the idea that the two sets of knowledge should be integrated in decision making.

Secondly, the information age in which we now live has enabled a rebalancing of the professional–client interaction. The internet, coupled with increasingly sophisticated search engines has made it relatively easy for lay people to access a wide range of information. Thus for both the above reasons technical knowledge about disease and the availability of treatments is no longer the sole preserve of health professionals.

Issues for health care

These societal changes have been reflected in the way health care professionals interact with patients. The

paternalistic perspective of the health care professional is no longer accepted as the best dynamic and patients are increasingly regarded as equals in the consultation and in decision making about the management of their health. This more equal role and involvement in decision making is reflected in policies promoting patient empowerment, patient centredness and the expert patient [4, 5]. There is also an increasing acceptance that self care and self management can be both clinically effective and cost effective approaches to care [6].

Furthermore demographic changes and treatment advances mean more people are living with chronic disease than ever before. This has effects on health service workload. It has been said that *'When acute disease was the primary cause of illness, patients were generally inexperienced and passive recipients of medical care. Now that chronic disease has become the principal medical problem, the patient must become a co-partner in the process'* [7]. Self management reduces the dependence people have on the health service and can improve clinical outcomes. Early research in the field [8] suggested that a chronic disease self-management programme can improve health status while reducing hospitalization. There is now a growing body of evidence of the benefit of a self care approach for condition specific interventions [9] including some evidence for the cost effectiveness of this approach [10].

Thus partnership at the individual level is now recognized, although not necessarily universally delivered, as a key tenet of health care. Partnership with patients and the public is also required at policy level affecting decisions about service planning and redesign. Public patient partnerships have increasingly been recognized and given formal roles and influence in determining policy. In the UK, the National Institute for Health and Clinical Excellence (NICE), the Scottish Intercollegiate Guideline Network (SIGN) and NSF (National Service Frameworks) groups include patient representatives to help inform their decision making and ensure lay summaries of documents are made available. Most recently the White Paper Equity and Excellence, Liberating the NHS [6] has further endorsed the need to keep the patient at the centre of decision making. Whilst the rest of this paper is primarily about the individual patient prescriber dynamic many of the principles apply to the wider population level partnership.

Implications for prescribing

In an initiative in the 1990s, recognition of the large amount of wasted resource associated with unused medicines prompted a wide ranging review of the process of the prescribing and taking of medicines. Increased understanding of the multifactorial nature of adherence led to the concept of an ideal concordant consultation which 'is based on the notion that the work of the prescriber and patient in the consultation is a negotiation between equals and that therefore the aim is a therapeutic alliance between them. This alliance may, in the end, include an

agreement to differ. Its strength lay in a new assumption of respect for the patient's agenda and the creation of openness in the relationship so that both doctor and patient together can proceed on the basis of reality and not of misunderstanding, distrust or concealment [11].

In the light of the subsequent broader emphasis on shared decision making in general, concordance emerged as an early pre hoc translation of the principle into recommendations for practice. However, the term was often misunderstood, with the use of phrases like 'patient non-concordance' where concordance was thought to be a synonym for compliance and adherence. Subsequently the terms 'medicines partnership' or 'partnership in medicine taking' have become more widely used than 'concordance'.

How to deliver partnership in practice

Professional consensus and policy papers do not necessarily change practice. Well over a decade on it is still unclear to what extent concordance is a feature of medical consultations, and indeed, if there has been any effect on the much sought after goal of reducing medicines wastage and realizing the theoretical beneficial clinical outcomes indicated in clinical trials when medicines are used in the wider patient population. The rest of this paper will consider what research tells us about preparing patients and professionals for shared decision making and partnership in medicine management, and summarize the limited evidence of barriers to, and benefits of, this approach. It will largely be focused on prescribing and implementing a partnership approach in the UK, but will mention some other health care interventions and draw on international evidence where relevant.

Patient readiness: what do patients need to be partners?

The best outcomes from prescribed medicines are only achievable with significant input from the patient. In order to be able to provide this input patients need to play an active part in the consultation including engaging in shared decision making, and patients also need understanding through provision of information which is understandable and accessible. Evidence from large UK surveys of patients over several years indicates that substantial numbers do not feel as involved as they would want to be in decisions about their care and do not receive as much information as they want, particularly about side effects of medicines [12].

Although much attention has been paid in recent years to increasing health professionals' consultation skills the same cannot be said for patients. The Expert Patient programme is an exception and its content includes communication skills with healthcare professionals and developing effective partnerships with healthcare providers [13].

The options for information provision include spoken information, written information and web-based information. Most spoken information provided during interactions with health professionals is forgotten [14] and there is often little time available for this in consultations. People also need to absorb information that they are given and questions may only arise later. The 'teach-back' method for the consultation, now advocated and taught widely in US medical schools, provides one way through which the professional can check that they have clearly communicated all the information the patient needs, and how well the listener has understood [15]. The role of written information is to provide subsequent support after the consultation. Thus written medicines information, despite the disadvantage that it is not tailored to an individual patient's need, can be taken away and referred to later as can referral to web-based information.

'Health literacy' is a term that has become shorthand for not only people's ability to read and understand health information, but also a wider ability to engage with the health care process, including medicines use [16]. Apparent low health literacy levels have increasingly been recognized as a cause for concern for both adherence to treatment Davis *et al.* [17] and patient safety. However, as so many people have difficulties, the concept of 'universal precautions' (i.e. making health information and health systems as accessible as possible for all) is gaining ground, notably in the US [18, 19].

A systematic review of written medicines information [20] showed that patients and the public do not see written information as a method for increasing adherence, contrasting with the findings of other research that some professionals view the purpose of medicines information leaflets to be an adherence tool. The review found that people want information that is readable and not containing complex language or poor visual presentation. They like information that is tailored and set in the context of their particular illness and containing a balance of benefit and harm information. Most people want to be fully informed about any side effects that could arise. Some question the credibility of pharmaceutical industry information. A critical finding related to the concept of partnership in medicine taking is that patients do not want written information to be a substitute for spoken information from their prescriber. As a result one of the recommendations arising from this review was that health professionals may find written medicines information useful to refer to in the consultation, to go through with the patient and highlight specific points.

Finally, the review showed that people would like written information for two reasons. First for initial decisions about whether to take a medicine or not. Hence people would value information about the range of treatments available before the prescribing decision is made. Second they need information for ongoing decisions about the management of medicines and interpreting symptoms. This suggests the need for two types of written information.

A consensus has been building that for written information to meet patients' needs, patients themselves should be involved at all stages of the information development process [21]. Since 2008 pharmaceutical companies are now legally required to have tested their patient leaflets to ensure that they are '*legible, clear and easy to use*'. Anecdotally, this is reported to have improved the fitness-for-purpose of these leaflets, with the Medicines and Healthcare Products Regulatory Agency (MHRA) featuring a 'Patient Information Leaflet of the month' page on their website [22].

Provision of usable information plays a key role in giving patients confidence to take part in decisions about their medicines. This can relate to very simple issues such as how to pronounce a medicine name. This is commonly used in leaflets supplied in the US and Australia. It is highly empowering to allow patients to be confident in saying the name of their medicines correctly. It is also important to tailor information (both spoken and written) according to patients' wants and needs. This can relate to the level or extent to which patients want information. It can also relate to taking account of physical impairments notably visual impairment in the elderly which may affect manipulation of written documents.

Web-based information is potentially a powerful tool in informing patients because of its availability before, during and after consultations. However enabling patients to find information that is trustworthy is an important task which health professionals can assist with. A key factor in effective information provision is ensuring that information obtained from different sources including spoken, written and internet is consistent and does not give differing advice. One option to help achieve this would be for health professionals to use the mandated patient leaflet supplied with all medicines as the basis for the information they give to patients about the medicines they prescribe for them. Almost all are available on the website of Medicines.org [23].

Particularly important to support the process of partnership in medicine taking is the provision of understandable and usable information about the likelihood of harm and benefit. The expression of the likelihood of side effects has been found to be optimum when natural frequencies are used, for example, 'affects less than one in a hundred patients' [24]. However, the best way to provide benefit information is not yet known, particularly numerical benefit information. Ongoing research by one of the authors (DKR) has so far shown that the use of a patient friendly version of 'numbers needed to treat' to describe benefits has significant drawbacks. Without equally understandable information about the likelihood of benefit and harm, patient leaflets cannot aid patients in making informed decisions about taking a medicine.

Formal decision aids are available to support decision-making by patients, with a directory of such aids available on the National Prescribing Centre (NPC) website [25]. At

present these are available for only around 30 medicines in particular circumstances. They are designed for use by health professionals to help patients make decisions about medicines. The National Institute for Health and Clinical Excellence highlighted the NPC statins decision aid in its lipid guidance in 2008 [26]. Most of the NPC aids use the 'smiley faces' format more formally known as Cates Plots [27].

Professional readiness: what do professionals need to be partners?

The role of the medical consultation in influencing subsequent patient outcomes has long been recognized especially in the general practice setting and research has informed recommendations for the way a consultation should be conducted. As long ago as 1957 Balint [28] and then Pendleton [29] systematically studied the patient–doctor interaction, and empirical research by Tuckett *et al.* [30] acknowledged the relevance of patients' own expertise for the medical consultation. More recently, Neighbour with the Inner Consultation [31], and ultimately Silverman with the Calgary–Cambridge model [32], have also now earned a defined place in the history of the evolving structure of the medical consultation. The Calgary–Cambridge model still dominates undergraduate medical teaching in the UK and includes five stages: Initiating the session, Gathering information, Physical examination (if needed), Explanation and planning and Closing the session. Their guidance on Gathering information highlights the three discrete areas to include under this heading: the biomedical perspective, the patient's perspective and the context.

However this is not just about asking the right questions. The move from a paternalistic consultation style to a partnership approach with shared decision making requires professionals to make a further paradigm shift. They must believe in the benefit of understanding the patient agenda, accept that it might mean endorsing a sub-optimal management option, and then undertake the necessary skills training to be able to operate in partnership mode. Critical here is professionals being able to accept the situation where they and the patient 'agree to differ', as described earlier in the definition of partnership in medicine taking. Related to this, they must truly accept and value patients' own expertise, experiential knowledge, legitimate concerns about the safety of medicines, and the ways in which these influence patients' use of medicines [33].

The culture has therefore slowly changed and it is no longer 'new' to promote the adoption of a patient centred approach. The DoH paper Equity and Excellence Liberating the NHS [6] states 'shared decision making will become the norm: no decision about me without me'. Reflecting the general move towards a more equal contribution to the consultation from the patient, the average length of

the medical consultation in general practice has increased over the years from a norm of 5 to now 10 min recognizing that it may take longer to adopt a patient centred approach. This longer investment of time should be compensated for by the benefits.

When asked many doctors believed they do consult using a shared decision or partnership approach [34], but studies where consultations have been recorded show that doctors overestimated the extent to which they discussed management issues with the patient [35]. A recent survey conducted by the Care Quality Commission showed that almost half of in-patients and almost a third of primary care patients would have liked to have been more involved in decisions about their care [12]. In a small in-depth study, Stevenson *et al.* [36] showed that in many consultations key aspects of medicines related information, e.g. the drug name, the dosage or the side effects, were not communicated making it difficult for meaningful shared decision to take place. Taken together these findings indicate a mismatch, for some patients, between consultation style and patient preference. Health professionals need to learn how to elicit quickly the extent of involvement that the patient wants.

As more health care professionals, such as nurses and pharmacists, take on the role of the prescriber, defined in this context in the UK as someone authorized by statute or regulation to prescribe medicines classified as Prescription Only medicines under the Medicines Act 1968, they too must learn the partnership approach to the prescribing consultation. In the UK non-medical prescriber training, a short post qualification course, communication skills are a key component and many providers also adopt the 'Calgary–Cambridge' guide, learning from the medical experience. However, unfortunately, training does not always translate into practice. A mixed methods study conducted by Latter *et al.* [37] showed that despite survey results indicating that 99% of respondents believed they were practising the principles of concordance, observation revealed that this was only partially the case, and that some aspects of a concordant approach, such as assisting the patient to make an informed choice, were practised in under half of the interactions.

Pharmacists and their staff have also long been responsible for the recommendation or prescribing of over the counter (OTC) medicines. In many ways the traditional model for many of these OTC consultations has been the reverse of the paternalistic medical model and they have been patient, rather than prescriber, led with the majority of interactions being dominated by a patient/customer request for a medicine which has been supplied by pharmacists or their assistant without shared understanding of the need for which the medicine is being taken [38]. With an increased number of more potent medicines available over the counter, in the UK and elsewhere, there has been a heightened awareness of the need to match the medicine to the patient, with both consumer group interest [39]

and professional interest [40] in achieving this. However for a true partnership approach in this increasingly important sector of medicines supply a lot remains to be done. Pharmacists and their staff must be more assertive in obtaining information from the patient to ensure optimal medicine supply. From the customer perspective, there is a need to change their understanding of the role of the pharmacist and his/her staff, the potency of and potential risk from taking some OTC medicines, and the need for OTC medicines to be considered as part of an individual's overall medicine regimen [41]. It has further been proposed that official online resources such as NHS Choices should support this by including information and decision support in their public facing websites [42]

In the next sections we consider how professionals are being supported to deliver partnership approaches.

Post qualification training

In 2007, the Royal College of General Practitioners included sections on negotiating a shared understanding of the patient's problem and its management in the curriculum for membership [43]. NICE guideline 76 on 'Medicines adherence' [44] and its associated 'Guide to resources' recognizes the importance of a partnership approach and joint decision making by prescriber and patient to optimize medicine taking as well as emphasizing the multifactorial nature of medication adherence. Ways to support the prescriber-patient partnership are described. The NICE guideline also emphasizes the onus on the prescriber to communicate risk to inform patient decision making in a balanced way, neither deterring people from taking medicines because of over estimation of the likelihood of an adverse event, nor lulling them into a false security. Decision aids have been discussed in an earlier section of this paper. The overview provided from the National Prescribing Centre [45] is particularly helpful.

A recent Cochrane review has summarized effective interventions to encourage health care professionals to adopt shared decision making [46]. Only five studies were identified that met the review criteria and all of these were randomized controlled trials. However in only two studies did the intervention improve shared decision making, with the larger effect of an OR of 2.11 (95% CI 1.3, 2.9) reported by Stacey *et al* [47]. This study involved a multifaceted intervention comprising educational materials distributed to physicians, an educational meeting, audit and feedback. Nonetheless the authors assert that there is evidence that shared decision making has the potential to reduce the use of less effective treatment options, increase the use of effective options (e.g. CVD risk management), reduce variation in practice, promote patients' rights and increase sustainability of health care systems.

As part of a general awareness of the need to maintain skills of the health care workforce a programme of post qualification training for all staff except physicians, the Knowledge and Skills Framework, has been implemented

Table 1

Common core principles to support self care [48]

Principle 1 Ensure individuals are able to make informed choices to manage their self-care needs
Principle 2 Communicate effectively to enable individuals to assess their needs, and develop and gain confidence to self care
Principle 3 Support and enable individuals to access appropriate information to manage their self care needs
Principle 4 Support and enable individuals to develop skills in self care
Principle 5 Support and enable individuals to use technology to support self care
Principle 6 Advise individuals how to access support networks and participate in the planning, development and evaluation of services
Principle 7 Support and enable risk management and risk taking to maximize independence and choice

across the UK supporting a programme of training called Skills for Health. As part of the resources underpinning this are common core principles to support self care [48]. Although self care is but one component of a partnership between the health care professional and the patient for the optimum use of medicines, the principles which are specified to support the implementation of self care, (see Table 1), are all very much those of partnership.

Undergraduate training

Reflecting the change in policy, consultation skills are now recognized as an essential clinical skill with an increasing presence in undergraduate curricula. Many medical schools use the 'Calgary-Cambridge' guide to the medical interview [32] which has specific items on providing the correct amount and type of information, aiding accurate recall and understanding, achieving a shared understanding, incorporating the patient's illness framework, planning and shared decision making. These, or similar, approaches are also adopted in the training of other health care professionals

Other supportive partnerships

In hospitals, and increasingly in primary care and the community pharmacy setting, pharmacists and specialist disease specific nurses, may be called upon to advise prescribers on appropriate medicine choice, or to review existing medicines and make recommendations for change, to either reduce likelihood of adverse events or to optimize therapy in line with best practice. Here partnership with the prescriber is increasingly apparent and evidence shows the benefit in terms of early detection of errors and preventing them reaching the patient, improved drug regimes in line with current best practice [49, 50] and avoidance of adverse drug reactions [51].

Finally pharmacists in their role as the main suppliers of prescribed medicines, and to a lesser extent other health care professionals, have a role to play in reinforcing the directions of the prescriber to the patient. In the absence of much, if any, information about what has been discussed between the prescriber and the patient this can be challenging. There is a professional responsibility to identify any possible safety issues associated with a particular medicine, for example an unexpectedly high dose, and to discuss these with the prescriber. There is also a responsibility to provide patients with an opportunity to ask questions and to answer these. Both these roles require excellent communication skills to ensure that a fellow professional is not undermined and that doubts about the appropriateness of the prescription are not conveyed to the patient. Either of these could potentially make the patient query the wisdom of taking the medicine.

Barriers

Many barriers have been cited to the delivery of a partnership based approach in prescribing. The most common is that of time, although Stacey *et al.*'s study [47] showed no increase in consultation time when shared decision making was successfully adopted. Other barriers include facilities such as the traditional room layout (prescriber and patient facing each other across a desk), the more recent issues around the computer interfaces, record keeping and managing conflicting agendas. Another barrier might be that in agreeing to a patient opting for a suboptimal treatment, or no treatment, the GP would not fulfil the requirements of the UK Quality and Outcomes Framework [52], which could have implications for their remuneration. Alternatively the patient might request a new expensive treatment or an inappropriate treatment, e.g. an antibiotic, when it may not be considered to be clinically indicated. In these last two examples there is the ethical conundrum of meeting both patient and population need, and specific skills are required of the professional to try and fulfil these mutually contradictory goals [53]. Furthermore for patients to engage meaningfully in the process they need to be able to have access to understandable information, along with both cognitive skills and appropriate attitudes.

None of the training described above addresses these, yet in many cases they are the rate limiting step in implementing change. Tools and skill frameworks must not be developed in isolation but should be done in a context with the express intention of fitting within existing routines and clinical workflows. The management of change literature has useful step by step guides to achieving these.

Outcomes of a partnership approach

Godolphin, a leading proponent of shared decision making, asked: 'What would happen if "We have some choices and they are ..." was in the doctor's habitual script and "What's the evidence for that, doctor?" was in the patient's?' [54]. The evidence of improved patient experience and satisfaction is stronger than that for improved health outcomes. There is general agreement that further work is needed to create appropriate outcome measures: 'Patient-centred care is prominently positioned on the political agenda, but our measures are not yet up to the challenge of ensuring that it is happening' [55]. A recent systematic review has identified and brought together measures and tools [56]. Using existing measures, shared decision making is consistently absent or minimal in studies of consultations between physicians and patients [57] and studies show a gap between patients' perceived level of involvement and their actual involvement in treatment decisions [58]. Nevertheless patients who felt more involved were more positive and satisfied with the consultation. Dowell argues that the prescriber must create 'a suitable climate for patients to feel able to discuss openly their views and allow the clinician to explore and potentially challenge them'. Thus the nature and tone of the interaction may perhaps be as important as the level of shared decision making.

In terms of outcomes, we need to remember firstly that an informed patient is not necessarily an obedient patient. Then that the patient has the final say, and there may need to be an agreement to differ. Hence, measuring the outcome of patient partnership in medicine taking through the level of adherence is arguably not appropriate.

Conclusion

In summary, despite true partnership not yet being universally delivered a lot has changed since the publication of 'From compliance to concordance'. One stark illustration of a major shift in cultural norms is that the From compliance to Concordance working group had no true lay representative on the group which would certainly not be the case for similar initiatives today. Public patient partnerships are recognized as an important component of decision making and research programmes, with a resultant strengthening of the relevance of decision making and its communication to the public.

To date there is still much more to understand in relation to a partnership approach as has been summarized in this overview. However one thing is certain, there is no going back to the paternalistic model of the mid 20th century and together patients and professionals will work together for the benefit of individuals and populations.

Competing Interests

DKR is co-founder and academic advisor to Luto Research Ltd, which develops, refines and tests patient information materials.

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