Perceptions around concordance – focus groups and semi-structured interviews conducted with consumers, pharmacists and general practitioners

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Abstract

Background Achieving concordance by identifying beliefs about illness, treatment and medicine-taking should impact positively on behaviour and consumer satisfaction with respect to treatment, and health outcomes may be improved.

Objective To explore, in the Australian context, beliefs and expectations of general practitioners (GPs), consumers and pharmacists in relation to concordance to allow further exploration of the implementation of principles of concordance in Australia.

Design Qualitative analysis of focus group and semi-structured interview data.

Setting and participants Focus groups were held with seven consumers and nine pharmacists and, in-depth, semi-structured interviews were held with 10 GPs between February and May 2003, in Brisbane (Australia).

Results This explorative study identified a variety of issues. Consumers expressed the need for more input from health professionals – being given more information on their treatments and conditions, more time spent in discussion, and establishing a system where harmonious relationships between health professionals could take place, which would result in a more consumer-friendly health care system. The main issues voiced by the pharmacists were about the idea of organizing the health care system in a way that would accommodate more quality information sharing between all partners. GPs' issues included better and unlimited information-sharing, having more time to promote quality in health care and receiving remuneration for increased verbal contact with other health care professionals. Suggestions were made about ways to achieve concordance by improved information-sharing and shared decision-making.

Conclusion The data from this study will lead to the development of models to explore and attempt to incorporate principles of concordance in Australian pharmacy and medical practice.

Introduction

Compliance with treatment recommendations describes the extent to which an individual's behaviour coincides with medical or health advice. The term implies and assumes positive behaviour – the patient is sufficiently motivated to adhere to the prescribed recommendations and treatments. The patient believes there is a self-benefit and a positive outcome (apparent or perceived) associated with being compliant with the treatment recommendations.^{1–5} It connotes a passive role for the individual patient, who then follows advice largely without question.⁶ A subsequent term, *adherence*, implies that people freely choose to undertake behavioural plans and have some input and collaborative involvement in developing and adjusting their plans.

Concordance is an agreement or partnership between patient and prescriber (including others, such as pharmacists and carers) about obtaining the best use of treatment, compatible with what a patient desires and is capable of achieving.^{7,8} 'Concordance', 'compliance' and 'adherence' are not interchangeable terms, concordance being the most recent development and depicting a more cooperative approach to health care decisions. However, there still appears to be confusion between these three terms in the literature. Even in a recent thematic issue of the *British Medical Journal*, devoted to the topic of concordance, in one of the articles the word concordance is used inappropriately – 'non-concordance with drug treatment', where the context implied that the authors meant 'non-compliance'.⁹

Achieving concordance between health professionals and patients by identifying beliefs about illness, treatment and medicine-taking and giving patients the opportunity to be involved in decision-making should impact positively on behaviour with respect to treatment, and thus health outcomes may be improved. Concordance is based on a premise that patients do not fail to comply – they choose to take another action.^{7,8} Patients make their own reasoned decisions about treatments based

on their own beliefs, personal circumstances and the information available to them.^{7,8} They have always made decisions about whether or not to accept health professionals' advice, take medications and change aspects of lifestyle – what is new is that researchers and health professionals are starting to formally acknowledge that patients can, and do, make such reasoned decisions.

Research suggests that health professionals often neglect patient's views.¹⁰ This has been identified as a significant limitation of contemporary health care.^{10–12} Most people hold complex and sophisticated beliefs about the maintenance of health, the treatment of disease and the role drugs play in both.¹⁰

Available research about patient preferences shows that, in terms of involvement in decision-making during consultation with their health care provider, patients most preferred a consultation in which they contributed but did not have sole responsibility for the decision taken (shared model).¹³ Least preferred were consultations where the doctor alone makes decisions. Significantly, the research shows that the actual experience of involvement and sharing of decision-making leads people to value it more.¹³

It is a challenge for doctors to match their consultation style to the decision-making preferences of their individual patients. A recent British study involving 171 general practice patients illustrated that there was a substantial mismatch between the stated preferences of patients for the role they wanted to have in decision-making during a consultation and what they felt actually took place in their consultation.¹⁴

A health care system based on principles of concordance would take these complexities into account and would allow the consumers to become and remain actively involved in their health management. Of course, to make the health care system financially viable and acceptable to the governments, any benefits gained by adopting the more interactive approach of increased patient participation in making key decisions in their health care would need to be weighed against the additional costs

of training of health professionals and consumers in order to achieve this goal.¹⁵

Researching concordance between all of the players involved in one person's health management is complex. There is a wealth of research into compliance measures and enhancing compliance and adherence, but there have been very few published comprehensive studies into concordance.^{7,8} Concordance is a relatively new phenomenon that is just beginning to be embraced by the scientific community. Research around concordance also has to be largely based on qualitative research, a form of research that is now beginning to be adopted more by health researchers of the modern, evidence-based, time. It is unlikely that evidence-based guidelines could incorporate the wide range of people's subjective preferences and values, and true dialogue and exploration is therefore necessary between clinicians and patients before starting treatments.¹²

The majority of work on concordance-related issues has been conducted in the USA and the UK, and some data are presented on a UK Government-funded website dedicated to concordance (<http://www.medicines-partnership.org>). The concordance models have not been fully developed and researched yet, and there remains a lack of a validated system of evaluation of concordance studies.

There are no pharmacy practice models yet based on concordance. There is also no available research addressing the Australian pharmacy practice in the context of concordance. One Australian study investigated the possibility of improving patient–doctor concordance in health problems and treatments by providing feedback to the doctor in a hospital-based primary care service.¹⁶ The only aspect of concordance that the researchers investigated was the actual agreement of patients' and doctors' views on the existence of particular health problems and treatment-associated issues. It is interesting to note that, at the end of the study, patient–doctor concordance, even as narrowly defined by the investigators, was still not even close to perfect, with 37% of patients still uncertain about the specific nature of their main health problem (improved from 69% pre-intervention).¹⁶

Another recent qualitative study of concordance aimed at developing a strategy for understanding suboptimal medication use and to seek concordance during extended primary care consultations in the UK.¹⁷ Three practitioners and 22 adult patients (who were explicitly given authority to make treatment decisions) took part in the study and most had improved clinical control or medication use 3 months after the intervention. Of course, this could be due to the 'Hawthorne effect', the effect of being in a study, but this is partly what concordance is about, the extra attention and catering to specific patient needs. Pragmatic interventions in that study were based on structured exploration of patients' beliefs about their illness and medication in extended consultations.¹⁷

The aim of the present study was to explore opinions, beliefs and expectations of general practitioners (GPs), consumers and pharmacists in relation to concordance. This will lead to development of initiatives for a subsequent study evaluating models to incorporate principles of concordance in Australian pharmacy and medical practice.

The hypothesis underlying this research is that concordance will be achieved, maintained, or improved by exploring and improving relationships between doctors, pharmacists and consumers.

Methods

Design

This is a qualitative exploratory study,¹⁸ investigating concordance issues from the perspectives of consumers, pharmacists and GPs. Focus groups were held with seven consumers and nine pharmacists and, in-depth, semi-structured interviews were held with 10 GPs between February and May 2003, in Brisbane, Australia. The original plan to conduct focus groups with GPs was changed to individual interviews to accommodate their work practices and time issues.

This study received ethics approval from the School of Pharmacy Ethics Research Committee of The University of Queensland, Brisbane.

Study sample

A combination of convenience and purposive sampling was used in this exploratory research. Purposeful sampling involved consciously seeking participants who could contribute to the subject area. This method of sampling, therefore, does not, and does not intend to, provide a statistically representative sample.^{18,19} In order to answer the study questions, it was important to recruit consumers who had sufficient interaction with GPs and pharmacists. In the consumer focus group, anyone 18 years or older who had taken at least one medication, and, in the pharmacist focus group, those who had practised for at least 1 year were eligible to participate. The sample sizes were estimated according to literature recommendations.^{18,19} Consumers and pharmacists were identified through contact and advertizing with patient community support and professional organizations.

Focus group format

Focus groups provided the opportunity for a group of people to share their thoughts, experiences and ideas on a wider range of issues than would arise in individual interviews.^{18–20} This allowed researchers to gain understanding of how people think about a certain subject and to obtain insight into their personal life situation.

Facilitation of the focus groups followed accepted methods.^{18,19} The focus groups were facilitated by one of the researchers (ST) with

experience in conducting focus groups, whose main role was to encourage an open and relaxed discussion, keep the discussion relevant and probe into areas that needed clarification.^{18–21} A relaxed atmosphere was created to enhance interaction and the free flow of ideas and opinions, essential for the success of focus groups.^{18–21} ‘Starter’ questions were used at the two focus group sessions to seed the discussions (Fig. 1). The ‘starter’ questions were derived from current literature about concordance, and structured in such a way as to not lead the participants to pre-defined ‘answers’. Open-ended questions/prompts were used and discussions were not led along pre-determined lines.

One researcher (JB) conducted the one-on-one in-depth interviews with 10 GPs. All of the GPs were asked the same series of questions (Fig. 1), again as open-ended questions/prompts to allow development of ideas as deemed relevant by the interviewees.

Analysis

All focus group discussions and interviews were audio-recorded with the permission of all participants and later fully transcribed by one of the researchers (JB). In addition, two researchers (LE, JB) recorded notes during the focus group sessions in an observational capacity. The transcriptions were examined by all three researchers independently, who analysed the information in order to identify emergent themes which were then agreed on by discussion.¹⁸ All data were

1. We are interested in hearing about your experiences with medicines, and either problems or good experiences with how and why you or others take medicines. What are your thoughts about consumers and concordance with medicines? What difficulties/barriers do you think consumers are facing and need to be overcome to improve concordance?
2. What are your thoughts on the current system with regards to medicines – what is wrong with the current system, what could be improved?
3. What difficulties/barriers do you think you (consumers in general) are facing and need to be overcome to improve concordance?
4. How do you visualize an ideal ‘therapeutic alliance’ between health professionals and the medicines’ consumer? (What is the room for improvement on current practice?)
5. What would be your roles and responsibilities in any proposed change? The pharmacists’ roles? The GP roles?
6. What do you think would be useful strategies for us to develop to improve concordance?

Figure 1 Starter questions used in focus groups with consumers, pharmacists and general practitioners.

then categorized, and agreement over classification was achieved by discussion amongst the three researchers. Data were tabulated into themes and comparisons were made within and between participant groups, and the emerging themes were reorganized.

Results

Subjects

Seven consumers (six females and one male) participated in the consumers' focus group. They were all elderly (65 and older) people with one or more chronic conditions.

In the pharmacists' focus group, there were nine participants (six males and three females). Two of the pharmacists were working in a public hospital and seven had community-based practices.

Ten GPs were interviewed in semi-structured in-depth interviews (four females and six males). Nine of the 10 GPs were practising in community-based general practices at the time of the interview, and one GP had an extensive experience in the community general practice, but was practising at a public hospital emergency unit.

Themes

Many issues relating to the current Australian health system and concordance were identified. All of the participants expressed support for the idea of more involvement by consumer, pharmacist and GP in order to achieve better understanding and exchange of information in health care, and as a result of this, better concordance. A number of more specific themes and categories in the focus group discussions and interviews were evident and are described below (Tables 1 and 2).

In general, consumers expressed the need for more appropriate input by the health professionals – being given more information on their treatments and conditions, more time spent in discussion with GPs, and establishing a system where harmonious relationships between health professionals could take place, which would result in a more consumer-friendly health care system (Table 1). The issue that raised the widest range of opinions was the issue of information-sharing between health professionals and consumers and the perceived lack of time and the lack of system that would support good quality information-sharing. The consumers agreed that

Table 1 Existing issues and initiatives valued by the participants

Consumers	General practitioners	Pharmacists
Spending more time with health professionals	Understanding patients better	Consumer Medicine Information [†]
Getting medication information, verbal and written	Pharmacists as back up to GPs	Home Medication Reviews [§]
Safety Net System*	NPS Services	Moderate counselling
Consumer Medicine Information [†]	Pharmacists advising patients	Webster-paks ^{®‡}
Having regular pharmacy	Honest GPs and consumers	
Self-care cards	GPs and pharmacists keeping up-to-date	
Webster-paks ^{®‡}	Harmonious relationship with pharmacists	
Pharmacists as back up to GPs	Consumers having regular GP and pharmacist	
	Incorporating alternative therapies	
	Avoiding polypharmacy	
	GPs controlling consumers	
	Lifestyle modification & preventative medicine	
	Home Medication Reviews [§]	

*Co-payment limit that allows consumers to get medicines at lower or no cost beyond a certain threshold.

[†]Medication information leaflets targeted at consumers, produced by the manufacturers and included in medication package.

[‡]Individual blister packaging into weekly cards, commonly undertaken in Australian pharmacies, primarily for nursing home residents.

[§]Medicines Review Program under which accredited pharmacists are remunerated for conducting medication reviews in both residential aged care (RMMR) and domiciliary (HMR – home medication reviews) settings.

Table 2 Issues and initiatives viewed by participants as those needing improvement or further development

Consumers	General Practitioners	Pharmacists
GP's lack of time spent with patients	Webster-paks ^{®†} (lag time, hard to use)	Misleading media
GP's lack of competence and reliable information	Lack of self responsibility in GPs and Government	Uninformed patients
Antagonism between GPs and pharmacist, inappropriate communication and liaison	Limitations of Privacy Act	Unclear patient consent and privacy issues
Safety Net* limit reached too late	Control by drug companies and their representatives influencing GPs	Generic medication confusion
High cost and unavailability of medicines	Economic barriers; economy instead of research influencing prescribing	Polypharmacy
Insufficient cover by private health insurance	Training level of pharmacists sometimes suboptimal	Medicines perceived as either too cheap or too expensive
Appropriate information on medicines and conditions	Insufficient communication with pharmacist (from both ends); having intercoms with pharmacists	Infrequent or short contact with consumers by pharmacists
Media panicking consumers	Pharmacists breaking level of trust by complaining about GPs in front of the patients	Webster-paks ^{®†} hard to use for some consumers
GPs and pharmacists disagreeing	Polypharmacy & too many therapies creating confusion	Carers omitted in counselling
	Antagonism and competition between GPs and pharmacists	Hospital discharges
	Complicated government initiatives for improvement	Removing social barriers and animosity with GPs
	Split health system (Federal and State) and pharmacists not part of the same system as GPs	Home Medication Reviews [§] in nursing homes
	S3s [¶] , generic medication, deregulation – all causing confusion	Information-sharing among health professionals
	Refusal of pharmacists to stock certain brands and dispense certain medication	Continuing education for pharmacists, GPs, and consumers
	Pharmaceutical Benefits Scheme** skewing prescribing – less private scripts prescribed when suitable	Formation of 'divisions of practice' for pharmacists & reducing isolation of pharmacists
	Media misinforming public on orthodox and complementary medicines	Government guidelines to facilitate concordance
	Health care inefficiencies and duplications, PBS wastage & stockpiling	
	Racking of narcotics	
	Home Medication Reviews [§] involving less paperwork	
	Consumer Medicine Information [†] to be made simple	
	Medicare rebates to be made available for counselling patients and communication with patients	
	Active education of consumers	

Table 2 Continued

Consumers	General Practitioners	Pharmacists
	Rational funding for prevention strategies	
	Partnerships within the same and different professions including complementary and alternative health practitioners and marginalized patients	
	GPs having holistic approach	
	Getting feedback on pharmacists' advice to patients	
	Educating GPs on essential primary care items ^{††}	
	Careful definition of roles and responsibilities of GPs, pharmacists and consumers	
	Pharmacy Guild to be more political and not to risk being 'crushed' by the AMA	
	Improving compliance	
	Central database to be created – links between GPs, pharmacists, patients, hospitals, labs; streamlining	
	Having regular ongoing focus groups between GPs, pharmacists and patients	

*Co-payment limit that allows consumers to get medicines at lower or no cost beyond a certain threshold.

[†]Medication information leaflets targeted at consumers, produced by the manufacturers and included in medication package.

[‡]Individual blister packaging into weekly cards, commonly undertaken in Australian pharmacies, primarily for nursing home residents.

[§]Medicines Review Program under which accredited pharmacists are remunerated for conducting medication reviews in both residential aged care (RMMR) and domiciliary (HMR – home medication reviews) settings.

^{*}Schedule three drugs – items available without prescriptions, only from pharmacies.

^{**}*Scheme* listing medicines subsidized by the Australian Government, and, therefore, available to patients at a lower cost.

^{††}In 1999, extended primary care items were added to the Australian Medical Benefits Scheme, they allow GPs to provide a more flexible service to the patients; they include extra re-imbursement for care planning (particularly suitable to incorporate concordance based interventions), health assessment, and case conferencing.

they could sense some sort of 'ill feeling' between doctors and pharmacists, and stated that this made them feel uncomfortable and that it should be resolved. The consumers' comments ranged from the consumers being happy with the amount of information on treatments and condition being provided by their doctor to being dissatisfied with both the amount of information given as well as with the amount of time spent in consultation. Consumers were generally happy with the accessibility of pharmacists and the amount of treatment information they could access in a pharmacy.

'Concordance' was an entirely new term for the consumer group and it was confused with the term 'compliance' throughout the discussion (although the term 'concordance' was redefined

by the facilitator as necessary, to clarify the 'starter' questions).

The main issues voiced by the pharmacists were concerned with the idea of organizing the health care system in a way that would accommodate more quality information-sharing between all players involved. Creating harmonious relationships with GPs was emphasized. The pharmacists had conflicting opinions about how much counselling they should provide to the patients. Some agreed that it should be kept to a minimum, while others thought that the patient should be given all the available information they can understand. Among other conflicting issues was the view that most consumers perceive medicines as too expensive (and, as a result, become non-compliant and not use

medicines appropriately), as opposed to the view expressed by other pharmacists that consumers perceive medicines as too cheap and too affordable (and, therefore, as something they can afford to waste and use inappropriately).

The importance of time spent with patients, more quality information-sharing and harmony between health professionals, and better, responsible, organization of the health care system at the government level were the broader issues mentioned by the GPs.

Similar to the pharmacists' opinions, some GPs thought that consumers were not taking medicines seriously enough because they were readily available and reasonably affordable in Australia, while others thought that medicines were too expensive and unaffordable for certain people.

Discussion

Focus groups were successfully held for consumers and pharmacists. Because of the work practices and time limitations of GPs, this group of participants was unable and/or unwilling to attend a focus group discussion session, so they were interviewed instead.

This is the first time that concordance issues have been explicitly explored in an Australian context for all three main players in medication management – consumers, GPs and pharmacists. The key issues elucidated by this research are:

- More time and effort would need to be applied to the interactions between the three groups (GPs, patients and pharmacists).
- Following on from this is the voiced need for more quality information-sharing between the three groups.
- There is a need for simplified paperwork in potential concordance-oriented government initiatives for GPs.
- The duality of funding (GPs vs. pharmacists) was considered a possible impediment on the path to achieving concordance and more productive health care.

- The cost of health care and medicines was seen as one of the main issues dictating the direction of the Australian health system.

This research successfully achieved its aim – to explore opinions, beliefs and expectations of GPs, consumers and pharmacist in relation to concordance. It provided insights into what the participants find important, what could be improved, and their views on concordance, which will enable development of future interventions to improve concordance. These preliminary data, together with relevant published research, are now being used to develop the first Australian study of concordance interventions involving GPs, pharmacists and consumers.

Spending more time in consultation

The consumers regarded spending more time with health professionals in consultations as being favourable. They perceived that specialists were spending more time with them in consultations than the GPs, the latter being perceived as much busier. This lack of time that health professionals and consumers spend together was identified as a main problem by all of the participants. This is in accordance with the recent reports that GPs in the USA spend, on average, 8 min in consultation with the patient.²² All of the participants in our study assumed that if they spent more time in consultations, the information flow would be facilitated. This finding also agrees with the same report that patients perceive spending more time with their health professional as favourable.²² Most GPs thought that there was too much paperwork involved in undertaking government initiatives. This finding agrees with a study undertaken by the Australian Federal Government's Productivity Commission,²³ which reported that GPs and others working in the practice consider that the administrative and compliance requirements associated with Australian Government programmes place considerable burden on GPs and detract them from the amount of time they can spend with patients in consultation.²³

The consumers also expressed a view that pharmacists are now spending more time with them than previously, which was seen as a positive trend, and that pharmacists are becoming more forward and approachable in comparison with a few years ago. This finding could have positive implications for developing concordance-enhancing initiatives. Not only are the pharmacists spending more time with their customers, but they are also perceived as health professionals who are adopting a trend of offering more time and services to their customers. This could enable pharmacists to assist with concordance-based interventions in the future.

Sharing of verbal and written information

Receiving as much verbal and written information as possible on medicines was valued highly by consumers, as illustrated by the quotation below:

I have been to a rheumatologist for several years now. She is marvellous as well – she's told me about scientific readings from journals, what to expect, what could or could not be. My GP now is very good – will tell me what to expect...but I went to a GP prior to that who did not tell me anything, did not give me an indication of what could or could not be. But I think that pharmacist was just marvellous – they are just incredible...they print out things to read, they tell me about side effects, so that you know exactly what's happening...I am not a long-term user of medications, but I think this is marvellous... (Consumers' focus group)

Similarly, quality information-sharing between health professionals and between health care providers and consumers was acknowledged as a positive goal to aim for by all of the study participants. This finding is consistent with the published evidence, which shows that modern consumers demand the supply of quality information.^{24–27} Improvements in information-sharing between all of the three groups were also perceived as being crucial for the future of health care – perhaps introducing a shared database between GPs, pharmacists, laboratories, hospitals, and even consumers, streamlining and avoidance of information doubling. Consumers

perceived that there was a lot more information-sharing between health professionals than there actually was, for example that GPs and pharmacists shared the same computer system and a database, which is not the case in reality. Both of these findings are similar to a study involving focus groups with patients and pharmacists, that illustrated that sharing of information between pharmacists and doctors was seen as essential by the patients.²⁸

It was suggested that pharmacists and GPs could have regular meetings and social gatherings in order to learn about each other's perspectives and agendas in order to facilitate information-sharing. However, at the same time, consumers, GPs and pharmacists all felt that, in practice, there was some antagonism and friction between GPs and pharmacists, which was confusing for the consumer, and pharmacists particularly wished this were not the case. The need to define roles of each player in the interaction was stressed by the GPs.

Consumers in the present study indicated that they needed more specific, accurate and unambiguous information with regard to their medicines and conditions, and, correspondingly, pharmacists and GPs felt there is the need to provide this information in more detail. This finding is supported by other research demonstrating that patients wanted both general and specific information about their medication and condition.²⁹ Consumer medicine information (CMI) leaflets were considered very useful by all three groups of participants. Some GPs insisted that information presented in CMIs should be more concise and must promote use of medication instead of providing long lists of side-effects that, GPs stated empirically, cause consumers to become fearful and refrain from taking the medication. One GP stated:

I know that often pharmacists hand out fact sheets about drugs...but I often find them unhelpful rather than helpful. Some of them are just stating what could go wrong, as opposed to some idea of how it's working and why it would be good to be on it, something that does not scare them to death... (GP interview)

Having a regular pharmacist was viewed as preferable by consumers. Pharmacists giving advice and information to patients were viewed positively by both consumers and GPs, both groups adopting the view that pharmacists' advice to patients should be backing up and double-checking information provided by the GPs. Both health professional groups emphasized the value of their own ongoing education, as well as education of consumers. GPs emphasized that the educational interventions directed towards consumers should be more proactive and should not just be reduced to leaflets in waiting rooms.

GPs thought that, in order to have a quality therapeutic relationship with consumers, understanding each other's agendas learning about each other's beliefs, expectations, and feeling comfortable with each other were all very important. This view is supported by research into relationships between health professionals and consumers and the effects of this relationship on physical and psychological outcomes. A systematic review showed that 10 studies involving health professionals taking the patient perspective were associated more with good physical health outcomes than another 10 studies where health professionals sought to 'activate' the patient.³⁰ Research has also shown that by using reflection to clarify their own values regarding health, the GP can gain access to patients' understanding of their health. This can be a valuable concept for the GP in patient-centred medicine and can contribute to bridging the gap between the patient's perspective and the doctor's understanding of the patient's health.³¹

GPs expressed a view that pharmaceutical company representatives should be encouraged to give only accurate information about medicines. This perception of inaccuracy is consistent with a US study that showed that GPs wanted the drug company representatives to provide them with information on medicines that is directly helpful to GPs caring for their patients, instead of only promoting their product.³²

Much criticism from all three sectors was directed at the media and their role in education

of consumers. The media portrayal of medicines and health in general was perceived as sensationalistic, incomplete and very often inaccurate. All groups agreed that the media should instead have an important educational role for consumers.

Government initiatives towards improving therapy

Medication management reviews (MMRs) were viewed as being very useful by both pharmacists and GPs. In Australia, there is a Medicines Review Program under which accredited pharmacists are remunerated for conducting medication reviews in both aged care residential home (RMMR) and domiciliary home medication review (HMR) settings.³³ GPs were of the view that the paperwork that GPs have to deal with in the existing MMR process is too time-consuming and should be made simpler. In addition, the GPs thought that not enough pharmacists are available to conduct MMRs.

GPs also valued highly the visits provided by the National Prescribing Service (NPS) facilitators, their information leaflets, and the NPS prescribing guidelines for GPs. The NPS is an Australian non-profit organization that, among other activities, provides funds for the Divisions of General Practice to employ a Quality Use of Medicines facilitator. These facilitators are involved in academic detailing to the GPs, as well as provision of other relevant services at the local level.³⁴ Being provided with the latest evidence-based medicine information is one of the essential requirements for a successful partnership between health professionals and consumers – one in which consumers make informed choices on the basis of good quality information offered to them by their health care providers.

Emphasis was placed by all groups on the value of preventative medicine and lifestyle modifications. It was suggested that prevention strategies should be more rational, e.g. money should be spent on preventing alcoholism (preventing thousands of deaths and significant morbidity in the community) instead of spend-

ing money on vaccines that save only a few lives per year. For example:

...and I think you've seen things like the meningococcal vaccine campaign where they're spending 170 million dollars to prevent a handful of deaths a year, and yet, you know, we have literally hundreds of adolescents being killed due to alcohol abuse, and cannot get money for education programs. There is a double standard and it's hard not to believe that drug companies are involved in creating and sustaining pressure moves to influence the government to put their drugs on the list, but there is no money for education programs... (GP interview)

Introduction of a rebate for patient counseling and contact with pharmacists was suggested by the GPs. Pharmacists expressed concern that the current Privacy Act³⁵ would need to be redefined and adjusted if there were more specific information-sharing between GPs and pharmacists about individual patients, but this is being investigated anyway in the context of electronic medication records for all Australians (MediConnect).

GPs admitted that, although widely available, the extended primary care (EPC) items are still not something with which the GPs are familiar enough. In 1999, these EPC items were added to the Australian Medical Benefits Scheme and they allow GPs to provide a more flexible service to the patients. They include extra reimbursement for care planning (particularly suitable to incorporate concordance-based interventions), health assessment and case conferencing.³⁶ These EPC items could improve partnerships between health professionals and consumers – that is, assist concordance.

All of the three groups suggested that use of generic drugs (to reduce costs) was causing confusion in the consumers' understanding of their therapy because the use of multiple names for the same medication was too much for the consumer to remember. It was unclear from this research why the generic name alone, for simplicity, was not being used in the community. It was also argued that deregulation of some medicines, for example, pharmacy-only medicines becoming available in supermarkets, could be a problem because consumers could access

medicines without being able to access the necessary information on appropriate use. Any activity or trend that could cause confusion, potentiate the risk of inappropriate medicine use, and lead to lack of necessary information for consumers would be working against the basic principles of concordance.

Cost of medicines

As expected, all of the consumers in the focus group were concerned about the cost of medicines, and the fact that private health insurance does not cover some rather substantial medication costs which are not covered by the public subsidy scheme. Interestingly, pharmacists were under the impression that many consumers perceived the prices of medicines to be too low and believed that was one of the reasons why consumers may not take using their medicines seriously. Similarly, some GPs assumed that, in order for the health care to be taken seriously by the consumers, it would need to cost money.

An interesting observation was made that the Pharmaceutical Benefits Scheme (PBS) approved medicines (listing medicines subsidized by the Australian Government, and, therefore, available to patients at a lower cost) was sometimes mistakenly used by the GPs as a drug formulary, i.e. as a complete list of drugs available to treat certain conditions. By using the PBS list as an ultimate source of prescribing availability, GPs can overlook other drugs that are available on the market, not subsidized by the PBS, but which can still be private prescription items. This illustrates a paradoxical situation, where the Australian PBS, intended to be used to improve use of medicines, can potentially skew rational prescribing.

Health system issues

Better funding by a unified health system (and not split into Australian Federal and State Government-funded areas, which is the current situation), and inclusion of pharmacists into this payment system, was suggested by the GPs. The

GPs commented that there was a lack of responsibility on the part of GPs, consumers and the government when it comes to health management, especially in terms of stockpiling, drugs being available to people without prescriptions, and measuring health outcomes and cost-effectiveness of our health system.

Some GPs criticized pharmacists for not stocking some brands of drugs preferred by the GPs, and for interfering with the prescribed regimens (in some cases pharmacists would refuse to dispense medicines as a result of perceived inappropriateness, or would substitute medicine brands that GPs did not want to be substituted).

The use of Webster-paks[®] (individual blister packaging into weekly cards, commonly undertaken in Australian pharmacies, primarily for nursing home residents) to improve compliance was considered very helpful by all of the participants, but the GPs added that these devices can sometimes complicate medication regimens because delays in implementation of any changes in medication regimens in the actual packs can occur because of the time it takes to organize a Webster-pak[®] preparation through a pharmacist.

The GPs also expressed the view that they would be keen to be trained and involved in treatments involving alternative and complementary therapies, which does not occur currently. This attitude is supported by research which shows that health professionals in Canada would be interested in acquiring knowledge and skills which would allow them to include complementary and alternative medicines in their repertoire.³⁷

Future directions

Some of the findings (e.g. the need for closer cooperation between health care providers and patients) will be further refined and used as a basis for the intervention to follow this qualitative research. For example, issues raised that are specific to Australia which could be used in future models to improve concordance include the availability of reimbursement for MMRs in the home by pharmacists, and for enhanced

primary care services (including longer consultations incorporating health care planning) by GPs. This will improve our understanding and the scientific significance of the previous findings and provide further data relating to improvements to health care delivery in Australia.

Limitations of this research

Several limitations diminish generalizability of our findings. First, although the number of participants in each focus group and the number of GPs taking part in the interviews were typical for focus group and interviews, respectively, opinions were elicited from only nine pharmacists, seven consumers and 10 GPs. This small sample size (with an age and gender bias in the consumer group) limits our ability to draw any conclusions with the aim of extrapolating data to the general population. In addition, all of the participants were volunteers from Brisbane, and the extent to which their opinions reflect those of people and professionals in other areas of country, or those of the people with a more passive approach to health care and less interest in concordance, is unclear.

Focus group discussions offer many research advantages, but their limitations should also be considered. This method offers insight into how people think and explores people's experiences. The purpose of focus groups and interviews is to formulate the hypotheses rather than to test them.¹⁸ Therefore, the findings of this study should be interpreted with care and should only be used to hypothesize. We plan to use these perceptions and insights to help develop specific interventions designed to achieve and improve concordance.

Conclusion

The aim of this research was to explore various issues related to concordance with consumers, GPs and pharmacists. This was undertaken successfully, and the study provided valuable information on the participants' perceptions of the Australian health care system and concordance issues.

These data, as well as the available literature on concordance, will inform the development of a concordance initiative and further research into its implementation in the Australian health care system.

The analysis of the data showed the importance of gauging feedback from the main players in the health arena. It also highlighted some important areas of disagreement (e.g. perceptions of cost of medicines among the three groups). The issues relating to concordance and medicine-taking that concern GPs, pharmacists and consumers are numerous and it is important to ascertain these and address them with specific tailored interventions. A health system needs to be encouraged to recognize that when it comes to dealing with consumers and health care providers 'one size does not fit all'.

It is imperative that future research continues to explore the subtle relationships between consumers, GPs and pharmacists and the ways in which these relationships could be improved in order to attempt to achieve better concordance among all of the groups participating in the health care system.

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Conflict of interest

None.

References

- 1 Martin K. Who will adhere? Key issues in the study and prediction of adherence in randomised controlled trials. *Controlled Clinical Trials*, 2000; **21**: 195s–199s.
- 2 Miller H. The multilevel compliance challenge: recommendations for a call to action. *Circulation*, 1997; **95**: 1085–1090.
- 3 Patton K, Meyers J, Lewis B. Enhancement of compliance among patients with hypertension. *American Journal of Managed Care*, 1997; **3**: 1693–1698.
- 4 Rossi S. Compliance or concordance. *Australian Prescriber*, 2000; **23**: 105.
- 5 Sellors J. Understanding and enhancing compliance with the second dose of hepatitis B vaccine: a cohort analysis and a randomised controlled trial. *Canadian Medical Association Journal*, 1997; **157**: 143–148.
- 6 Rogers W. Evidence-based medicine in practice: limiting or facilitating patient choice? *Health Expectations*, 2002; **5**: 95–103.
- 7 Roter D. The medical visit context of treatment decision-making and the therapeutic relationship. *Health Expectations*, 2000; **3**: 17–25.
- 8 Donovan J. Patient decision making – the missing ingredient in compliance research. *International Journal of Technology Assessment in Health Care*, 1995; **11**: 443–455.
- 9 O'Donnell C, Donohoe G, Sharkey L *et al.* Compliance therapy: a randomised controlled trial in schizophrenia. *British Medical Journal*, 2003; **327**: 834–837.
- 10 Nettleton S. *The Sociology of Health and Illness*. Cambridge: Polity Press, 1995.
- 11 Townsend A, Hunt K, Wyke S. Managing multiple morbidity in mid-life: a qualitative study of attitudes to drug use. *British Medical Journal*, 2003; **327**: 837–840.
- 12 Lewis D, Robinson J, Wilkinson E. Factors involved in deciding to start preventive treatment: qualitative study of clinicians' and lay people's attitudes. *British Medical Journal*, 2003; **327**: 841–845.
- 13 Thornton H, Edwards A, Elwyn G. Evolving the multiple roles of 'patients' in health-care research: reflections after involvement in a trial of shared decision-making. *Health Expectations*, 2003; **6**: 189–197.
- 14 Ford S, Schofield T, Hope T. Are patients' decision-making preferences being met? *Health Expectations*, 2003; **6**: 72–80.
- 15 Davis RE, Dolan G, Thomas S *et al.* Exploring doctor and patient views about risk communication and shared decision-making in the consultation. *Health Expectations*, 2003; **6**: 198–207.
- 16 Liaw S, Young D, Farish S. Improving patient-doctor concordance: an intervention study in general practice. *Family Practice*, 1996; **13**: 427–431.
- 17 Dowell J, Jones A, Snadden D. Exploring medication use to seek concordance with 'non-adherent' patients: a qualitative study. *British Journal of General Practice*, 2002; **52**: 24–32.
- 18 Rice P, Ezzy D. *Qualitative Research Methods – A Health Focus*. Melbourne: Oxford University Press, 2000.
- 19 Ashbury J. Overview of focus group research. *Qualitative Health Research*, 1999; **5**: 414–420.
- 20 Hassell K, Hibbert D. The use of focus groups in pharmacy research: processes and practicalities.

- Journal of Social and Administrative Pharmacy*, 1996; **13**: 169–177.
- 21 Smith F. Focus groups and observation studies. *International Journal of Pharmacy Practice*, 1998; **6**: 229–242.
- 22 Pollock K, Grime J. GP's perspectives on managing time in consultations with patients suffering from depression: a qualitative study. *Family Practice*, 2003; **20**: 262–269.
- 23 Australian Federal Government. *Red Tape Taskforce: Consultation Report*, 2003. Available at http://www.health.gov.au/redtape/documents/pdfs/consult_report.pdf. Accessed on 13 August 2004.
- 24 Ford S, Schofield T, Hope T. What are the ingredients for a successful evidence-based patient choice consultation? A qualitative study. *Social Science and Medicine*, 2003; **56**: 589–602.
- 25 Bensing J, van Dulmen S, Tates K. Communication in context: new directions in communication research. *Patient Education and Counselling*, 2003; **50**: 27–32.
- 26 Kreps G, Arora N, Nelson D. Consumer/provider communication research: directions for development. *Patient Education and Counselling*, 2003; **50**: 3–4.
- 27 Roter D. Observations on methodological and measurement challenges in the assessment of communication during medical exchanges. *Patient Education and Counselling*, 2003; **50**: 17–21.
- 28 Amsler M, Murray M, Tierney W *et al.* Pharmaceutical care in chain pharmacies: beliefs and attitudes of pharmacists and patients. *Journal of the American Pharmaceutical Association*, 2001; **41**: 850–855.
- 29 Nair K, Dolovich L, Cassels A, McCormack J, Levine M *et al.* What patients want to know about their medications. Focus group study of patient and clinician perspectives. *Canadian Family Physician*, 2002; **48**: 104–110.
- 30 Michie S, Miles J, Weinman J. Patient centredness in chronic illness: what is it and does it matter? *Patient Education and Counselling*, 2003; **51**: 197–206.
- 31 Baarts C, Tulinus C, Reventlow S. Reflexivity – a strategy for a patient-centred approach in general practice. *Family Practice*, 2000; **17**: 430–434.
- 32 Quinn R, O'Neill C. Attitudes of general practitioners to their interactions with a pharmaceutical companies: a qualitative study. *Irish Medical Journal*, 2002; **95**: 199–202.
- 33 Commonwealth Department of Health and Family Services. *Removal of Dangerous Medicines from the Home Protects Health and the Environment*. Australia: Commonwealth Department of Health and Family Services, 1998.
- 34 National Prescribing Service. *What We Do*, 2003. Available at <http://www.nps.org.au/>. Accessed on 13 August 2004.
- 35 The Office of the Federal Privacy Commissioner. *The Privacy Act*, 2003. Available at <http://www.privacy.gov.au/act/privacyact/>. Accessed on 13 August 2004.
- 36 Health Insurance Commission. *Medicare Allied Health and Dental Care Initiative*. Available at <http://www.hic.gov.au/providers/index.htm>. Accessed on 13 August 2004.
- 37 Montbriand M. Alternative therapies – health professionals' attitudes. *Canadian Nurse*, 2000; **96**: 22–26.