

**TOWARDS CONCORDANCE IN HEALTH CARE: PERSPECTIVES OF GENERAL  
PRACTITIONERS, COMPLEMENTARY AND ALTERNATIVE MEDICINE  
PRACTITIONERS AND PHARMACISTS IN AUSTRALIA**

**SHORT TITLE: Towards concordance in health care – Australian perspectives**

**AUTHORS:**

Jasmina Fejzic BPharm(Hons) PhD  
Lynne Emmerton BPharm(Hons) PhD \*  
Susan E Tett BPharm(Hons) PhD

\*  
Author contact

Lynne Emmerton BPharm(Hons) PhD \*  
The University of Queensland  
School of Pharmacy  
St Lucia Qld 4072  
Australia  
Phone: 07-336-58280, Fax: 07-336-51688  
Email: L.Emmerton@pharmacy.uq.edu.au

The work was carried out at The University of Queensland, School of Pharmacy, Brisbane, QLD 4072, Australia

Word count: Body: 3269 words

Abstract: 230 words

## **ABSTRACT**

Partnerships and concordance are desirable concepts for optimal health care. The concept of concordance is based on negotiation between equals in a therapeutic relationship, forming a therapeutic alliance between all partners. One field of healthcare in which concordant relationships may be particularly desirable is complementary and alternative medicine (CAM). CAM is increasingly used by consumers worldwide, and provider-patient relationships are important across the spectrum of CAM-to-conventional medicine; thus it was considered useful to research CAM and concordance in parallel. The objective of this problem-detection study (PDS) was to investigate practitioners' (general practitioners', pharmacists' and CAM practitioners') views on their relationships and reaching concordant partnerships with consumers in the areas of both conventional medicine and CAM. Focus groups and semi-structured interviews guided the development of the PDS instrument. The questionnaire consisted of 36 items corresponding to seven thematic units deduced from the preliminary data. The differences in perceptions between the surveyed groups indicated that achieving concordance relies on mutual respect and communication and understanding of roles, responsibilities and limitations, and differences in opinion may be compromising the formation of partnerships. Potentially problematic issues identified by this research could be addressed by educational interventions and enhancement of communication between all parties involved, as information loses value when not shared, and may be prone to contradiction and confusion. Further research is warranted in order to facilitate positive changes in the health system.

Key words: concordance, complementary and alternative medicines, therapeutic alliance, problem-detection study (PDS), partnerships, perceptions.

## INTRODUCTION

The terms used to describe complementary and alternative medicine (CAM) can have significant impact on its credibility, application and regulation in the medical profession (1, 2). CAM is defined as a “broad range of healing philosophies, schools of thought, approaches, and therapies that mainstream Western (conventional) medicine does not commonly use, accept, study, understand, or make available” (3). The current definitions and divisions of CAM and conventional therapies are largely politically and culturally determined, which often gives therapies and societal politics precedence over individual patients’ needs (4, 5). This potentially confuses the roles of various health care providers with whom the patient consults. There is also evidence that some practitioners are integrating CAM and conventional services (6). Many community pharmacists in Australia supply and advise on CAMs, and are in a unique position to be involved in CAM treatments as the ‘first port of call’ (7) and to promote the correct use of CAMs (8). Some conventional medicine practitioners have argued that bringing CAM into the mainstream is a way of transforming medicine and reinstating focus on the patient, not the disease (9, 10). This perspective is also consistent with the increasing focus on ‘concordance’ in relationships with patients in conventional health care (9).

Most concordance initiatives have originated in the UK, and examined only one aspect of the concordance spectrum, the patient-doctor agreements, with focus on the complexities and multifaceted nature of consumers’ and health professionals’ interactions (11-14). There are no defined concordance models operating in Australia. Research into integration of health disciplines is required, the focus being the consumer.

## **OBJECTIVE**

The objective of this study was to investigate health practitioners' (general practitioners' (GPs), pharmacists' and CAM practitioners') views on their relationships and reaching concordant partnerships with consumers regarding use of CAM.

It was hypothesised that health care providers (general practitioners, pharmacists and CAM practitioners) shared the majority of perceptions with respect to their mutual relationships, concordance and to the use of conventional medicines and CAM.

## **METHOD**

Problem-detection study (PDS) methods were used. PDS allows investigation of similarities and differences between what different groups of people consider to be significant issues (15-19). Focus groups are generally used to develop a survey instrument (usually a self-completed questionnaire), which is then applied in relevant target groups as versions worded appropriately to those groups (15-19). This facilitates identification and comparison of similarities and differences between the views and perceptions of different groups (15-19).

The groups of interest in this study were GPs, pharmacists, CAM practitioners (such as naturopaths, homoeopaths, herbalists) and consumers, as the key parties involved in establishing concordant relationships. This paper reports on the responses from the GPs, pharmacists and CAM practitioners to investigate issues surrounding the consumer-centeredness and perceived

relationships of the respective health care practitioners. The PDS enabled examination of their views, beliefs, perceptions and experiences, and identified differences and similarities between the groups. Consumers were the fourth group who took part in this study; these data will be reported elsewhere

The study was granted ethical approval (number 2005/6) by the Human Research Ethics Committee of the School of Pharmacy, The University of Queensland.

### **Development of Survey Instrument**

The themes for the PDS survey instrument were derived from focus groups involving, as separate groups, nine CAM consumers, seven conventional medicine consumers and nine pharmacists, and personal interviews with 10 GPs in Brisbane, Australia, between February and December 2004. These data were obtained under a previous research protocol (and ethics approval). Practical limitations precluded the conduct of focus groups of GPs and CAM practitioners.

Manual thematic analysis of the transcribed focus group and interview data identified 32 issues consistent between GPs, conventional medicine consumers, pharmacists and CAM consumers. Independent review of these themes by the three researchers indicated that they were sufficiently broad to be considered representative of the relevant health practitioner groups, so further involvement of CAM practitioners was not pursued. The 32 issues were then summarised through a systematic process of data reduction by the principal researcher (JF), resulting in seven themes. This process was reviewed independently by the other two researchers (20, 21). No particular number of themes was sought in this analysis. The seven consolidated themes were:

1. Communication and information sharing;
2. Harmonious partnerships through understanding individuals' agendas;
3. Consumer empowerment through accurate/timely information;
4. Empirical beliefs about efficacy;
5. Beliefs about acute, as distinct from chronic, therapy;
6. Continuum of conventional to complementary and alternative health care;
7. Concordance.

These themes were presented in the questionnaire via 36 statements, to which respondents were invited to indicate their level of agreement. The 36 statements were developed by the principal researcher (JF), with validity checked independently by the other two researchers (ST, LE). The concepts were worded as statements referring to specific relationships and situations, and not as issues or problems. (15-19). Each statement was presented against a five-point Likert scale: 'strongly agree', 'agree', 'neutral', 'disagree' and 'strongly disagree'. A sixth option ('not applicable/don't know') was included to discriminate between neutral and absence of opinion (20, 22) and identify the relevance of each statement to the respondent groups. The statements were randomised to reduce response bias within themes (20, 22). The questionnaires were anonymous and uniquely coded by respondent group.

Pre-testing of the questionnaire was conducted with six pharmacists, five CAM practitioners, and five GPs recruited through personal contact. A pre-paid return envelope was attached to the questionnaire. All of the pilot questionnaires were completed and returned. The respondents indicated that the questionnaire took around 10 minutes to complete and the statements were

comprehensible. These responses were included in the final analysis, since no changes were made following the trial.

## **Recruitment of Participants**

The sole aim of recruitment was to allow exploration of the relevant research questions, with differences assessed using chi-square analyses for the ordinal-level data. It was aimed to have at least 50 participants in each group. Further analysis was originally planned for the pharmacist group, and it was intended to exceed the minimum sample requirement for this group. Self-selection/participation bias was expected to influence response in all groups.

Data collection took place over three months, as follows:

**A. The pharmacists** were recruited through distribution of questionnaires by the researcher to a convenience sample (pharmacists in community pharmacies, a private hospital pharmacy, attendees of an education seminar, and pharmacist participants' contacts) in Brisbane, Australia. In the absence of guidance from previous studies, a return rate of 50% was estimated (23-26). In total, 300 questionnaires were distributed.

**B. The GPs** were recruited via distribution of questionnaires through two Brisbane and one Gold Coast<sup>1</sup> Divisions of General Practice (DGP<sup>2</sup>). The DGPs acted as agents for the researchers to retain confidentiality of members' contact details. A total of 250 GPs were mailed the questionnaires. A response rate of up to 30% was expected due to the documented challenges in recruiting GPs into sociological research (27-32).

**C. The CAM practitioners** were recruited through mailing of the questionnaires to a randomly selected sample of CAM practitioners identified from the *Yellow Pages* telephone directory in five inner-city Brisbane suburbs. In the absence of previous research, a response rate of approximately 50% was estimated, necessitating distribution of at least 100 questionnaires. Two hundred questionnaires were distributed. All of the CAM practitioners were telephoned one week after mailing to prompt response (21).

The survey was closed at 12 weeks after distribution, when ongoing returns, via the postage-paid, addressed envelopes, from each respective group of participants were negligible (20, 22).

## **Analysis**

The data analysis involved:

- 1. Face validity checks of the data:** checking of all of the returned questionnaires for completeness by the principal researcher (JF). Only one questionnaire was returned blank.
- 2. Random check of the data entry accuracy:** performed by independent systematic comparison of every fifth row entry in the Excel<sup>®</sup> spreadsheet with the original questionnaire. Six erroneous data entries were corrected. The check of data entry was repeated using every fifth entry commencing at a different row, and found accurate.

3. **Data screening and analysis** of the demographic (categorical) data. Checks for out-of-range values and missing data revealed no errors.
4. **Descriptive analysis** of the demographic data. These data included years in practice (practitioners), gender, and practice settings of health practitioners reported descriptively as frequencies. No weightings were applied in the case of under-representation of particular groups, as wider extrapolation of data was not intended.
5. **Data screening and analysis** of the 36 statements (ordinal data): checking for out-of-range values, missing data, and the proportion of ‘don’t know/not applicable responses’.
6. **Descriptive statistics** of the 36 statements. These data were analysed descriptively, with medians and frequencies of response options (33, 34), and compared between respondent groups. The data presented here are descriptive summaries of the trends.

## **RESULTS**

### **Description of Samples**

Response rates varied by group: 23% for GPs (57/250), 30% for CAM practitioners (60/200) and 57% for pharmacists (172/300), meeting the minimum requirements for cell sizes for chi-square analyses. The ratio of female:male respondents was approximately 3:2 for pharmacists and CAM practitioners, while more male than female GPs participated (Table 1). The majority of GPs

reported more practice experience than the pharmacists, while the CAM practitioner sample had a somewhat even distribution across the range (Table 2).

## **Opinion Statements**

Statements relating to the ‘communication and information sharing’ theme indicated that all three groups broadly agreed with importance of information sharing between consumers and health providers and the time spent together. Variation was noted between the groups in their views on the amount of information being shared (Table 3).

The three groups of participants recognised the importance of harmonious partnerships and understanding. Each group believed that their partnership with consumers to be more empowering for consumers than those of the other practitioners (Table 4).

Most participants recognised the need to include consumers’ views and responsibilities when considering treatment choices. CAM was perceived as empowering to the consumer only by the CAM practitioners (Table 5).

There was a pronounced difference in opinion between conventional and CAM practitioners with regards to the effectiveness of CAM, their regulation, and the nature of their use (acute as distinct from chronic use of CAM) (Tables 6 and 7).

Although the majority of participants from all three groups perceived their mutual communication as important, they reported differences in opinion in the areas that should facilitate this communication (e.g. trust in others' knowledge capacity) (Table 8).

Most participants reported that their partnerships with consumers were the strongest, while the other two parties disagreed. All three groups agreed that consumers were comfortable discussing medical issues with pharmacists.

## **DISCUSSION**

### **Discussion of the Methods**

This study provided a novel extension of PDS methods to a topic of increasing importance – relationships between health professionals and their relationships with consumers, groups of respondents not traditionally allied in sociological research.

There are few reports on PDS methodology, and response rates in the available PDS reports are variable and low (15-19). For example, a PDS recently conducted in Australia successfully recruited only 287 of 1500 consumers, 51 of 210 pharmacists, and only 18 of “several hundreds” of doctors (19). GPs' participation in the present study was acceptable, compared to other studies with and without incentives (27-32). In addition, it is well documented in the literature that response rates to mailed surveys are low, variable and highly unpredictable (19-21, 27, 28, 30-32, 35, 36). Techniques to enhance response (return postage and reminder calls) (36-38) were

applied here. Only the CAM practitioners received a reminder about the survey, as contact details of other participants were not collected.

Respondent bias is inherent in survey research, and it is assumed that the more opinionated or interested members of a population will participate (20, 21). Purposive sample methods were applied here as seeking opinions from those who have an active interest in the topic is desirable to address the research question. (20, 21).

The samples of respondents were not matched for demographic characteristics. One notable trend was towards less experienced pharmacists (predominantly seminar attendees). Due to the sample sizes and approaches involved, the findings from this study may not be generalised to other populations. However, as discussed below, a number of logical consistencies were noted between *groups* of respondents, suggesting profession-oriented opinions rather than opinions relating to age or experience.

### **Observed Similarities**

There were numerous statements on which the majority of participants across all three groups agreed. These issues are less likely to cause ‘problems’ in the relationships between these groups. Common beliefs were that:

- *Consumers share the same type of personal health information with different types of health care practitioners;*

- *Insufficient information is exchanged between consumers and conventional health practitioners;*
- *Consumers would lose confidence in treatment if they did not spend enough time with their health care providers;*
- *Consumers prefer making treatment choices by themselves when they receive enough information on treatments from their health care practitioners;*
- *Consumers' direct involvement in treatment decisions is always valued;*
- *Consumers would like to take more responsibility for their treatments by becoming more involved in their treatments;*
- *It is important to inform the consumer on their treatment even if it is working for them;*
- *Medical doctors are not comfortable with their patients seeing CAM practitioners;*
- *There is a need for all practitioners to communicate, although the treatments they provide may differ;*
- *Consumers' choice to use CAMs is not respected by all health practitioners involved in their care.*

These concepts suggest that there is a degree of goodwill between the three groups of participants, and communication and consumers' direct involvement in their treatment were perceived as important. Many of these statements are indirectly related to concordance.

Some of the statements on which the majority of respondents agreed defied logic. For example, there was a majority opinion across all groups that there is a '*need for CAM practitioners and conventional practitioners to communicate*', but also that '*medical doctors are not comfortable with their patients seeing CAM practitioners*'. This disparity suggests the need for research into

bridging gaps and resolution of differences. While ‘professionally desirable’ responses might be suspected in such a survey, it should be remembered that these responses were anonymous.

A related perception is that consumers’ choice to use CAM was not respected by all health practitioners involved in their care. It has been reported that around 60% of people fail to disclose their CAM use to their doctor (even less likely if they perceived a participatory style of consultation from their doctors) (39, 40). Other studies show that the use of CAM is not discussed sufficiently between doctors and patients, despite the doctors’ awareness of the widespread CAM use and, at times, positive attitudes towards CAM (40-43). This places consumers in a position of either managing their own rights and responsibilities, ignoring those who do not respect their choices, or, perhaps, withholding information from those who may be disapproving, all of which could compromise patient care.

### **Observed Differences**

Numerous differences in perceptions were identified in the PDS:

- CAM practitioners had distinct opinions on their information exchange with consumers in terms of quantity and clinical content. GPs and pharmacists generally disagreed with these views. This discrepancy can diminish mutual respect between practitioners and directly or indirectly compromise consumers’ disclosure of their use of all medicines.
- CAM practitioners perceived that they were more adept at acknowledging consumers than were doctors, and held the most empowering and satisfying partnerships with consumers.

The GPs and pharmacists tended to oppose these views. It would be useful to observe channels of communication between the groups and learn about their effectiveness and public portrayal. Pronounced divisions have been reported between CAM and conventional paradigms in mainstream medicine (44-47).

- The finding that CAM practitioners perceived GPs to encourage less consumer input into treatment decisions than themselves is somewhat unusual. However, the majority of pharmacists and GPs themselves also agreed. It could be valuable for the conventional practitioners to further elucidate what exactly are the perceived ‘positives’ of the CAM paradigm that are so appealing to the consumer.
- CAM users were perceived as more empowered than non-users by CAM practitioners (opposed by the GPs and pharmacists). How this can be used to the advantage of all parties, and how lessons could be learned from these perceptions in the conventional health care arena by adopting CAM-related consumer empowerment strategies, could be explored. In addition, it has been suggested that perhaps there are not only alternative therapies, but ‘alternative patients’ as well (people more inclined to use CAM), and identifying them early would help health providers establish better relationships (48).
- Participants’ misperceptions regarding ‘*only effective CAMs being sold in Australia*’ were potentially the most dangerous, since this statement is not true. CAMs are usually marketed without any assessment of efficacy reviewed by the Therapeutic Goods Administration (49). Education on the benefits, risks and marketing regulations on CAMs should be directed to these health practitioners to improve their therapeutic judgement.

- CAM practitioners were the only group who perceived that CAM could be used as emergency treatment, which raises questions about their underlying education. Further, the majority of GPs and pharmacists thought that CAM practitioners did not know when CAM was not enough, a view opposed by the majority of CAM practitioners. The obvious mistrust towards the CAM practitioners is not conducive to professional relationships. However, positive findings have been noted elsewhere; for example, 96% of 105 Australian naturopaths reported effective knowledge about possible issues associated with natural products (50).
- GPs were perceived by pharmacists and CAM practitioners as not creating a comfortable environment for discussion with consumers. This identifies some areas of concern, especially with the GPs' opinions tending towards neutrality on this issue. In contrast, recent American findings suggest that health professionals are becoming more sensitive to patients' use of CAM, some even calling themselves 'holistic' in order to attract more clients (51, 52).
- Pharmacists were perceived by the majority of the other participants as insufficiently informed about CAM, and pharmacists' own opinions tended towards neutrality. This identifies some concerns for the Australian pharmacy profession, given the ready availability of CAMs in pharmacies. This concurs with findings that pharmacists desire further education on CAM (53-56). The majority of pharmacists had neutral views on consumers' comfort with regard to discussing side effects and medicine problems with pharmacists - somewhat unusual, since pharmacists would be expected to portray more confidence. Professional educational initiatives for pharmacists may go some way to improving this situation.

## **CONCLUSION**

The PDS provided an insight into a range of health practitioners' perceptions and beliefs on concordance and conventional and CAM paradigms. Most of the potentially problematic issues could be minimised by targeted professional education interventions and opening of the channels of communication between health practitioners, and, ultimately, between consumers and health practitioners. Policy makers should be aware of the potential for and consequences of differing opinions between the key health practitioner groups, and trials of new policies are recommended in wider populations.

It was hypothesised that health care providers shared the majority of views and perceptions with respect to concordance and had similar views and perceptions with respect to the use of conventional medicines and CAM. The data presented here rejected this hypothesis. The various comparisons within this PDS identified potential challenges in achieving concordant relationships between GPs, pharmacists, CAM practitioners and consumers, promoting mutual respect, communication, and understanding of each others' and own roles, responsibilities and limitations. The differences in opinion on important aspects of concordance may be compromising the formation of partnerships in current practice, and therefore warrant further research initiatives in order to promote understanding of the underlying issues and facilitate positive changes in the health system.

## **NOTES**

<sup>1</sup> Approximately 100km south of Brisbane.

<sup>2</sup> Budget-holding group of general practitioners; there are 18 Divisions of General Practice in the state of Queensland, Australia.

## REFERENCES

1. Coulter ID, Willis EM. (2004) The rise and rise of complementary and alternative medicine: a sociological perspective. *Medical Journal of Australia*, 180, 587-589.
2. Panel (no authors listed). (1997) Panel on definitions and descriptions: defining and describing complementary and alternative medicine. *Alternative Therapies in Health and Medicine*, 3, 49-57.
3. Cohen MH. (2003) Complementary and integrative medical therapies, the FDA, and the NIH: definitions and regulation. *Dermatologic Therapy*, 16, 77-84.
4. Caspi O, Sechrest L, Pitluk HC, Marshal CL, Bell IR, Nichter M. (2003) On the definition of complementary, alternative, and integrative medicine: societal mega-stereotypes vs. patients' perspectives. *Alternative Therapies in Health and Medicine*, 9, 58-62.
5. Leckridge B. (2004) The future of complementary and alternative medicine - models of integration. *Journal of Alternative and Complementary Medicine*, 10, 413-416.
6. Barrett B, Marchand L, Scheder J, Appelbaum D, Plane MB, Blustein J, et al. (2004) What complementary and alternative medicine practitioners say about health and health care. *Annals of Family Medicine*, 2, 253-259.
7. Adams J. (2004) Examining sites of interface between CAM and conventional health care: extending the sociological gaze. *Complement Therapies in Medicine*, 12, 69-70.
8. Sclavos K. (2006) Shopping for therapy and advice. *Journal of Complementary Medicine*, 5, 7.
9. Smith R. (2001) Restoring the soul of medicine (Editorial). *British Medical Journal*, 322, 117.

10. Snyderman R, Weil AT. (2002) Integrative medicine: bringing medicine back to its roots. *Archives of Internal Medicine*, 162, 395-397.
11. Bissell P, May CR, Noyce PR. (2004) From compliance to concordance: barriers to accomplishing a re-framed model of health care interactions. *Social Science and Medicine*, 58, 851-862.
12. Chen J, Britten N. (2000) 'Strong medicine': an analysis of pharmacist consultations in primary care. *Family Practice*, 17, 480-483.
13. Dowell J, Jones A, Snadden D. (2002) Exploring medication use to seek concordance with 'non-adherent' patients: a qualitative study. *British Journal of General Practice*, 52, 24-32.
14. Liaw ST, Young D, Farish S. (1996) Improving patient-doctor concordance: an intervention study in general practice. *Family Practice*, 13, 427-431.
15. Eriksson T, Henricson K, Stenberg P, Arrhenius K, Hoglund P, Hedner K. (1999) Perceived problems of pharmacotherapy: a problem detection study among physicians and nurses at a Swedish University Hospital. *Pharmacy World and Science*, 21, 190-193.
16. Hammarstrom B, Wessling A, Nilsson JL. (1995) Pharmaceutical care for patients with skin diseases: a campaign year at Swedish pharmacies. *Journal of Clinical Pharmacy and Therapeutics*, 20, 327-334.
17. Lisper B, Nilsson JL. (1996) The asthma year in Swedish pharmacies: a national information and pharmaceutical care program for patients with asthma. *Annals of Pharmacotherapy*, 30, 455-460.
18. Rosenquist U, Hoglund P, Nilsson JL. (1995) Diabetes mass education for patients, their educators and the general public by the pharmacies of Sweden. *Drug Information Journal*, 29, 609-616.

19. Wade A, Weir DN, Cameron AP, Tett SE. (2003) Using a problem detection study (PDS) to identify and compare health care provider and consumer views of antihypertensive therapy. *Journal of Human Hypertension*, 17, 397-405.
20. Potter J. (1996) *An analysis of thinking and research about qualitative methods*. New Jersey: Lawrence Erlbaum Associates.
21. Rice P, Ezzy D. (2000) *Qualitative research methods - A health focus*. Melbourne: Oxford University Press.
22. Hurley R. (1999) Qualitative research and the profound grasp of the obvious. *Health Services Research*, 34, 1119-1136.
23. Kamal K, Madhavan SS, Maine LL. (2003) Pharmacy and immunization services: pharmacists' participation and impact. *Journal of the American Pharmacists Association*, 43, 470-482.
24. Kansanaho H, Puumalainen II, Varunki MM, Airaksinen MS, Aslani P. (2004) Attitudes of Finnish community pharmacists towards concordance. *Annals of Pharmacotherapy*, 38, 1946-1953.
25. Li W, Kendler DL. (2004) Pharmaceutical care and community pharmacists' understanding of bisphosphonate dosing information. *Journal of Clinical Pharmacy and Therapeutics*, 29, 531-536.
26. Rossing C, Hansen EH, Krass I. (2003) The provision of pharmaceutical care in Denmark: a cross-sectional survey. *Journal of Clinical Pharmacy and Therapeutics*, 28, 311-318.
27. Dalnevo C, Abutemarco DJ, Steinberg MB. (2004) Physician response rates to a small survey by specialty and timing of incentive. *American Journal of Preventive Medicine*, 26, 234-236.

28. Donaldson G, Moinpour CM, Bush NE, Chapko M, Jocom J, Siadak M, et al. (1999) Physician participation in research surveys. A randomized study of inducements to return mailed research questionnaires. *Evaluation & the Health Professions*, 22, 427-441.
29. Edwards P, Roberts I, Clarke M, DiGiuseppi C, Pratap S, Wentz R, et al. (2003) Increasing response rates to postal questionnaires: systematic review. *British Medical Journal*, 324, 1168-1169.
30. Halpern S, Ubel PA, Berlin JA, Asch DA. (2002) Randomized trial of 5 dollar versus 10 dollars monetary incentives, envelope sizes, and candy to increase physician response rates to mailed questionnaires. *Medical Care*, 40, 834-839.
31. Leung G, Ho LM, Chan MF, Johnston JM, Wong FK. (2002) The effects of cash and lottery incentives on mailed surveys to physicians: a randomised trial. *Journal of Clinical Epidemiology*, 55, 801-807.
32. Malin J, Rideout J, Ganz PA. (2000) Tracking managed care: the importance of a cash incentive for medical director response to a survey. *American Journal of Managed Care*, 6, 1209-1214.
33. Bryman A, Cramer D. (2001) *Quantitative data analysis with SPSS release 10 for Windows - A guide for social scientists*. East Sussex: Routledge.
34. Pallant J. (2001) *SPSS - Survival manual*. Canberra: McPherson Printing Group.
35. Kalantar J, Talley NJ. (1999) The effects of lottery incentive and length of questionnaire on health survey response rates: a randomized study. *Journal of Clinical Epidemiology*, 52, 1117-1122.
36. Shaw M, Beebe TJ, Jensen HL, Adlis SA. (2001) The use of monetary incentives in community survey: impact on response rates, data quality, and cost. *Health Services Research*, 35, 1339-1346.

37. Hoffmann S, Burke AE, Helzlsouer KJ, Comstock GW. (1998) Controlled trial of the effect of length incentives and follow-up techniques on responses to a mailed questionnaire. *American Journal of Epidemiology*, 148, 1007-1011.
38. Pernegar T, Etter JF, Rougemont A. (1993) A randomized trial of use of monetary incentive and reminder card to increase the response rate to a mailed health survey. *American Journal of Epidemiology*, 138, 714-722.
39. Sleath B, Callahan L, De Vellis RF, Sloane PD. (2005) Patients' perceptions of primary care physicians' participatory decision-making style and communication about complementary and alternative medicine for arthritis. *Journal of Alternative and Complementary Medicine*, 11, 449-453.
40. Giveon S, Liberman N, Klang S, Kahan E. (2004) Are people who use 'natural drugs' aware of their potentially harmful side effects and reporting to family physician? *Patient Education and Counselling*, 53, 5-11.
41. Consumers' Health Forum. (1999) *Choosing your medicine - Making an informed decision about complementary and non-prescription therapies*. Canberra: Consumers' Health Forum.
42. Giveon S, Liberman N, Klang S, Kahan E. (2003) A survey of primary care physicians' perceptions of their patients' use of complementary medicine. *Complementary Therapies in Medicine*, 11, 254-260.
43. Wynia M, Eisenberg DM, Wilson IB. (1999) Physician-patient communication about complementary and alternative medical therapies: a survey of physicians caring for patients with human immunodeficiency virus infection. *Journal of Alternative and Complementary Medicine*, 5, 447-456.

44. Naidu S, Wilkinson JM, Simpson MD. (2005) Attitudes of Australian pharmacists toward complementary and alternative medicines. *Annals of Pharmacotherapy*, 39, 1456-1461.
45. Robinson A, McGrail MR. (2004) Disclosure of CAM use to medical practitioners: a review of qualitative and quantitative studies. *Complementary Therapies in Medicine*, 12, 90-98.
46. Saks M. (2000) Professionalization, politics and CAM. In: Kelner M, editor. *Complementary and alternative medicine: Challenge and change*. Amsterdam: Harwood Academic Publishers.
47. Saks M. (2003) Bringing together the orthodox and alternative in health care. *Complementary Therapies in Medicine*, 11, 142-145.
48. Caspi O, Koithan M, Criddle MW. (2004) Alternative medicine or "alternative" patients: a study of patient-oriented decision making processes with respect to complementary and alternative medicine. *Medical Decision Making*, 24, 64-79.
49. Therapeutic Goods Administration. (2006) Australian Regulatory Guidelines for Complementary Medicines (ARGCM). [updated 2006; cited 2006 Sept 5]; Available from: <http://www.tga.gov.au/docs/html/argcm.htm>.
50. Smith C, Martin K, Hotham E, Semple S, Blustien G. (2005) Naturopaths practice behaviour: provision and access to information on complementary and alternative medicines. *BMC Complementary and Alternative Medicine*, 5, 15.
51. Brems C, Johnson ME, Werner TD, Roberts LW. (2006) Patient request and provider suggestions for alternative treatments as reported by rural and urban care providers. *Complementary Therapies in Medicine*, 14, 10-19.
52. Winnick T. (2006) Medical doctors and complementary and alternative medicine: the context of holistic practice. *Health*, 10, 149-173.

53. Brown C, Barner JC, Shah S. (2005) Community pharmacists' actions when patients use complementary and alternative therapies with medications. *Journal of the American Pharmacists Association*, 45, 41-47.
54. Koh H, Teo H, Ng H. (2003) Pharmacists' patterns of use, knowledge, and attitudes towards complementary and alternative medicine. *Journal of Alternative and Complementary Medicine*, 9, 51-63.
55. Nathan J, Cicero LA, Koumis T, Rosenberg JM, Feifer JM. (2005) Availability of and attitudes toward resources on alternative medicine products in the community pharmacy setting. *Journal of the American Pharmacists Association*, 45, 734-739.
56. Welna E, Hadsall R, Schommer J. (2003) Pharmacists' personal use, professional practice behaviours, and perceptions regarding herbal and other natural products. *Journal of the American Pharmacists Association*, 43, 602-611.

Table 1: Gender of participants

<b>Respondent Group</b>	<b>Female</b>	<b>Male</b>	<b>Total</b>	<b>%</b>
Pharmacists	106	66	<b>172</b>	<b>59.5%</b>
General Practitioners	26	31	<b>57</b>	<b>19.7%</b>
CAM Practitioners	36	24	<b>60</b>	<b>20.8%</b>
<b>Total</b>	<b>168</b>	<b>121</b>	<b>289</b>	<b>100%</b>
<b>%</b>	<b>58.1%</b>	<b>41.9%</b>	<b>100%</b>	

Table 2: Self-reported years in practice

<b>Respondent Group</b>	<b>Years in Practice</b>							<b>Total</b>
	<b>0-5</b>	<b>6-10</b>	<b>11-15</b>	<b>16-20</b>	<b>21-25</b>	<b>26-30</b>	<b>31+</b>	
Pharmacists	97	17	9	10	15	12	12	172
GPs	3	9	8	4	15	7	11	57
CAM Practitioners	15	15	11	8	7	2	2	60
<b>Total</b>	<b>115</b>	<b>41</b>	<b>28</b>	<b>22</b>	<b>37</b>	<b>21</b>	<b>25</b>	<b>289</b>
<b>%</b>	<b>39.8%</b>	<b>14.2%</b>	<b>9.7%</b>	<b>7.6%</b>	<b>12.8%</b>	<b>7.3%</b>	<b>8.9%</b>	<b>100.0%</b>

Table 3: Theme 1 – Communication and Information Sharing

<b>STATEMENTS*</b>	<b>SUMMARY OF FINDINGS</b>
<b>1.</b> Consumers are encouraged to share the same type of personal health information with their doctor as with their CAM practitioner.	All 3 groups acknowledged the importance of information sharing. 50% of GPs agreed with the statement, exceeding the other respondents.
<b>3.</b> There is sufficient information exchange between consumers and their <i>conventional medicine</i> practitioners at present.	Although the majority of all 3 groups indicated insufficient information exchange between <i>conventional</i> practitioners and consumers, GPs shared this view to a lesser degree. CAM practitioners indicated that enough information was being exchanged between themselves and consumers (69%), the pharmacists were largely undecided (35%), while GPs opposed this view (76%).
<b>36.</b> There is sufficient information exchange between consumers and their <i>CAM</i> practitioners at present.	
<b>15.</b> Consumers lose confidence in the success of their treatment if they cannot spend enough time in consultation with their health care practitioners (conventional and/or CAM).	All 3 groups agreed (around 80% in each group).
<b>11.</b> Enough information is given to consumers about <i>benefits</i> of their <i>CAM</i> treatment for them to feel confident about the treatment(s).	The majority of CAM practitioners reported that consumers were sufficiently informed about benefits and risks of CAM treatments to feel confident (72% on benefits, and 66% on risks), while the majority in the other two groups disagreed with this view. 27% of CAM practitioners remained neutral regarding consumers being informed about risks of CAM.
<b>18.</b> Enough information is given to consumers about <i>risks</i> of their <i>CAM</i> treatment for them to feel confident about the treatment(s).	
<b>14.</b> Enough information is given to consumers about <i>benefits</i> of their <i>conventional</i> treatment for them to feel confident about the treatment(s).	GPs and pharmacists (60% and 56%, respectively) agreed that the consumers were given enough information about conventional treatments to feel confident, while 75% of CAM practitioners disagreed.
<b>24.</b> Enough information is given to consumers about <i>risks</i> of their <i>conventional</i> treatment for them to feel confident about the treatment(s).	

\* (number refers to the order of statements in the instrument)

Table 4: Theme 2 – Harmonious Partnerships through Understanding of Individuals’ Agenda

<b>STATEMENTS*</b>	<b>SUMMARY OF FINDINGS</b>
<b>9.</b> Consumers’ choice to use CAM is respected by all health professionals involved in their care.	All 3 groups tended towards disagreeing with the statement (including particularly 88% of CAM practitioners).
<b>31.</b> Consumers are better acknowledged by their CAM practitioner than by their medical doctor.	While 71% of CAM practitioners agreed with the statement, 62% of GPs disagreed, and pharmacists’ opinions were largely distributed between disagreement (43%) and neutrality (34%).
<p><b>12.</b> Consumers’ partnership(s) with their <i>pharmacist(s)</i> empowers them as consumers more than their partnership(s) with their CAM practitioner(s).</p> <p><b>26.</b> Consumers' partnership(s) with their medical <i>doctor(s)</i> empowers them as consumers more than partnership(s) with their CAM practitioner(s).</p> <p><b>34.</b> Consumers' partnership(s) with their pharmacist(s) empowers them as consumers <i>more than</i> their partnership(s) with their medical doctor(s).</p>	<p>Each group considered their partnership with consumers to be more empowering for consumers than those of the other practitioners. 46% of GPs and 41% of pharmacists were neutral on the issue of comparison between consumer partnerships with GPs and CAM practitioners. Substantial proportions of neutral responses were noted in GP (34%) and pharmacist (37%) groups for Statement 12, and in pharmacists (44%) and CAM practitioner (54%) groups for Statement 34.</p>

\* (number refers to the order of statements in the instrument)

Table 5: Theme 3 – Consumer Empowerment through Accurate/Timely Information

<b>STATEMENTS*</b>	<b>SUMMARY OF FINDINGS</b>
<p><b>4.</b> Consumers prefer to make treatment choices by themselves when they receive enough information on the treatment from their health care practitioner (CAM and/or conventional).</p> <p><b>22.</b> Health practitioners (conventional and/or CAM) have all the necessary information to make decisions about treatment without the consumer's direct involvement.</p> <p><b>25.</b> Consumers would like to take more responsibility for their treatments by getting more involved in every aspect of it (lifestyle and drug treatment).</p>	<p>Most participants (76% of CAM practitioners, and 59% of GPs and pharmacists, respectively) agreed that consumers should be directly involved in decision making and take more responsibility and share responsibility if and when they are given enough information by their health care provider.</p>
<p><b>10.</b> The medical doctor encourages consumer input into treatment decisions more than does their CAM practitioner.</p>	<p>GPs (41%) and pharmacists (37%) were largely neutral on this issue. 91% of CAM practitioners stated that they encouraged more input than medical doctors.</p>
<p><b>29.</b> Consumers who use CAMs are more empowered in their treatment than the consumers who use solely conventional medicines.</p>	<p>90% of CAM practitioners agreed with the statement, while 45% of pharmacists and 67% of GPs disagreed.</p>

\* (number refers to the order of statements in the instrument)

Table 6: Theme 4 – Empirical Beliefs about Efficacy

<b>STATEMENTS*</b>	<b>SUMMARY OF FINDINGS</b>
<b>30.</b> Informing consumers about the treatment is not important if the treatment is working.	All 3 groups (90% of CAM practitioners, 92% of GPs and pharmacists, respectively) strongly indicated that consumers should be informed regardless of the treatment’s effectiveness.
<b>32.</b> CAMs have been used for hundreds of years, which shows that they must be effective.	53% of CAM practitioners agreed with the statement, while GPs (91%) and pharmacists (77%) largely disagreed.
<b>27.</b> The Australian Government only allows sale of CAMs that have been shown to be effective.	The majority of GPs (85%) and pharmacists (80%), and, marginally, CAM practitioners (52%) disagreed with the statement. 27% of CAM practitioner responses were neutral.

\* (number refers to the order of statements in the instrument)

Table 7: Theme 5 – Beliefs about Acute as distinct from Chronic Therapy

<b>STATEMENTS*</b>	<b>SUMMARY OF FINDINGS</b>
<b>2.</b> The most effective use of CAM is as long-term therapy.	Most GPs (63%) disagreed. The pharmacists and CAM practitioners' opinions were divided.
<b>13.</b> CAMs are best used to <i>prevent</i> rather than <i>treat</i> disease.	CAM practitioners (77%) largely disagreed, as well as GPs (48%) and pharmacists (37%), although with high proportions of neutral answers (34% and 36%, respectively). Further, 29% of the GPs declined to pass opinion.
<b>20.</b> Conventional medicines are the only ones to use as emergency treatment.	GPs (69%) and pharmacists (61%) commonly agreed and CAM practitioners (57%) disagreed with the statement.

\* (number refers to the order of statements in the instrument)

Table 8: Theme 6 – Continuum of Conventional to Complementary and Alternative Health Care

<b>STATEMENTS*</b>	<b>SUMMARY OF FINDINGS</b>
<b>21.</b> Medical doctors feel comfortable with their patients seeing CAM practitioners.	63% of pharmacists, 66% CAM practitioners and 51% of GPs disagreed.
<b>6.</b> Pharmacists are knowledgeable about both conventional medicines and CAMs.	72% of CAM practitioners disagreed. In contrast, 53% of the pharmacists agreed, while 20% remained neutral. Over 40% of the GPs remained neutral and 10% declined to give an opinion.
<b>17.</b> CAM practitioners are sufficiently trained to recognise when CAMs are not enough and conventional medicines need to be used.	78% of CAM practitioners agreed, while most pharmacists (56%) and GPs (75%) disagreed. 25% of pharmacists and 21% of GPs remained neutral.
<b>8.</b> There is no need for a patient's CAM practitioners and conventional practitioners to communicate, since the treatments they provide to the patient are completely different.	The majority of participants (37% of CAM practitioners, 88% of GPs and 92% of pharmacists) in all three groups disagreed.

\* (number refers to the order of statements in the instrument)

Table 9: Theme 7 – Concordance

STATEMENTS*	SUMMARY OF FINDINGS
<p><b>23.</b> It is easier for consumers to feel satisfied with their partnership with their CAM practitioner than it is to feel the same about their partnership with the <i>pharmacist</i>.</p> <p><b>28.</b> It is easier for consumers to feel satisfied with their partnership with their CAM practitioner than it is to feel the same about their partnership with their <i>medical doctor</i>.</p>	<p>72% of CAM practitioners indicated that consumers had more satisfaction in partnerships with them than with GPs or pharmacists. 66% of pharmacists and 40% of GPs thought their own partnerships with consumers were superior. There were notable neutral and non-committal responses to statement 28.</p>
<p><b>16.</b> It is easier for consumers to feel satisfied with their partnership with their medical doctor than it is to feel the same about their partnership with their pharmacist.</p>	<p>Most pharmacists (60%) stated that consumers had better partnerships with them than with their medical doctors. GPs (47%) thought their partnerships were superior, while 44% of CAM practitioners and 37% of GPs remained neutral.</p>
<p><b>33.</b> Consumers feel more comfortable discussing their concerns about medicine side effects with their CAM practitioner than with their medical doctor.</p> <p><b>5.</b> Consumers feel more comfortable telling their medical doctor that they are not happy with taking a medicine the medical doctor prescribed than they do telling the same to their CAM practitioner.</p>	<p>Around 30% of all respondent groups reported neutral views to statement 33. 18% of GPs were non-committal, and were the only group who viewed consumers as being more comfortable with them than with CAM practitioners (55% in agreement). The majority of CAM practitioners (70% averaged between these statements) stated the converse.</p>
<p><b>35.</b> Consumers feel comfortable discussing with their <i>pharmacist</i> all of the issues they might have with their medicines.</p> <p><b>7.</b> Consumers feel comfortable discussing with their <i>medical doctor</i> all of the issues they might have with their medicines.</p> <p><b>19.</b> Consumers feel comfortable discussing with their <i>CAM practitioner</i> all of the issues they might have with their medicines.</p>	<p>All three groups of participants, more for pharmacists, agreed that consumers were comfortable discussing medicine issues with pharmacists. 62% of pharmacists and 70% of CAM practitioners indicated that consumers were <i>uncomfortable</i> with their GPs, while GPs considered their relationships with consumers to be most comfortable out of the three. CAM practitioners (85%) thought consumers were comfortable with them (40% of GPs and 35% of pharmacists remained neutral).</p>

\* (number refers to the order of statements in the instrument)