# Visiting family physicians and naturopathic practitioners

## *Comparing patient-practitioner interactions*

Heather Boon, PHD Moira Stewart, PHD Mary Ann Kennard, MLIS Jessica Guimond


### ABSTRACT

**OBJECTIVE** To explore similarities and differences in patient visits with family physicians (FPs) and naturopathic practitioners (NPs).

**DESIGN** Exploratory study combining quantitative and qualitative methods.

**SETTING** Southern Ontario.

**PARTICIPANTS** A purposeful sample of 10 practitioners (five FPs and five NPs matched for age, sex, and number of years in practice): each agreed to recruit three consecutive patients with new complaints to participate in the study.

**MAIN OUTCOME MEASURES** Patient and visit characteristics; qualitative (content analysis of audiotaped interactions) and quantitative (ie, patient-centred care scores) information was gathered and analyzed.

**RESULTS** Qualitative analysis revealed that information gathering and treatment planning were very similar whether patients were visiting FPs or NPs. Most important differences were length of interaction (mean 54 minutes for NPs and 16.5 minutes for FPs) and patients' reasons for visits. Naturopathic practitioners were more likely to recommend medications (usually natural health products) than FPs. Quantitative data suggested that patients perceived no differences in patient-centred care from FPs and NPs.

**CONCLUSION** Overall, there were more similarities than differences in visits to the two types of practitioners.

### RÉSUMÉ

**OBJECTIF** Comparer les consultations effectuées auprès des médecins de famille (MF) et des médecins naturopathes (MN).

**TYPE D'ÉTUDE** Étude pilote combinant des méthodes quantitatives et qualitatives.

**CONTEXTE** Sud de l'Ontario.

**PARTICIPANTS** Un échantillon représentatif de 10 médecins (cinq MF et cinq MN jumelés pour l'âge, le sexe et le nombre d'années de pratique), chacun acceptant de recruter trois patients consécutifs présentant des symptômes nouveaux.

**PRINCIPAUX PARAMÈTRES MESURÉS** Caractéristiques des patients et des consultations; recueil et analyse de données qualitatives (analyse des enregistrements des entrevues) et quantitatives (i.e scores obtenus sur l'aspect « soins centrés sur le patient »).

**RÉSULTATS** L'analyse qualitative révélait que les deux groupes utilisaient des méthodes très semblables pour recueillir l'information et planifier le traitement. Les différences les plus importantes concernaient la durée des entrevues (en moyenne 54 minutes pour les MN contre 16,5 minutes pour les MF) et les raisons de consulter. Par rapport aux MF, les MN prescrivaient plus volontiers des médications (habituellement des produits de santé naturels). Les données quantitatives suggéraient que les patients ne voyaient aucune différence entre MF et MN quant à l'aspect « soins centrés sur le patient ».

**CONCLUSION** Dans l'ensemble, les visites effectuées chez les deux types de médecins présentaient plus de ressemblances que de différences.


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Approximately half of all Canadians report using some form of complementary or alternative medicine (CAM),[1] and experts suggest that a "special" relationship with practitioners is at the core of CAM's popular appeal.[2] Complementary and alternative medicine practitioners have been shown to spend more time with each patient[3,4]; are said to have a more equal, open, and reciprocal relationship with patients[3,5]; and form stronger bonds with patients[3,6] than physicians.

The possibility that patients have relationships with CAM therapists that are different from relationships with conventional practitioners, however, has never been empirically tested. It is not even clear what parameters or issues should be assessed to identify potential differences. This study aimed to explore similarities and differences in patients' visits with family physicians (FPs) and naturopathic practitioners (NPs). The exploratory nature of this study warranted use of both qualitative and quantitative methods.

## METHOD

Family physicians and NPs were chosen as comparison groups because both are generalists who provide primary care. Naturopathic practitioners can be described as general practitioners of CAM. They are trained in a variety of treatments including botanical medicine, clinical nutrition, homeopathic medicine, oriental medicine and acupuncture, and naturopathic manipulation and are currently regulated in four Canadian provinces: British Columbia, Saskatchewan, Manitoba, and Ontario. There are approximately 450 NPs practising in Canada, most in Ontario and British Columbia.

Although both qualitative and quantitative data were collected, sample selection and data analysis were shaped by qualitative ethnographic theory.[7]

### Participants

Qualitative criterion–based purposeful sampling[8] was used to select 10 practitioners (five FPs and five NPs) from southern Ontario (London and Toronto) to participate in this study. Pairs of FPs and NPs were matched according to sex, number of years in practice, and practice location. The five pairs of practitioners were selected according to the following criteria: all practitioners had reputations as "good" practitioners; there were at least four practitioners (two pairs) of each sex; at least one pair of practitioners had been in practice less than 5 years and at least one pair had been in practice more than 10 years (**Table 1**).

**Table 1. Characteristics of naturopathic practitioners (NPs) and family physicians (FPs):** *Toronto (population 2.3 million) and London (population 331 000)*

| PRACTITIONER IDENTIFIER | SEX | YEARS IN PRACTICE | COMMUNITY |
|---|---|---|---|
| NP1 | Male | 3 | Toronto |
| FP2 | Male | 3 | Toronto |
| NP3 | Male | 4 | London |
| FP4 | Male | 4 | London |
| NP5 | Male | 15 | Toronto |
| FP6 | Male | 18 | Toronto |
| NP7 | Female | 4 | Toronto |
| FP8 | Female | 4 | Toronto |
| NP9 | Female | 4 | Toronto |
| FP10 | Female | 4 | Toronto |

Each practitioner was asked to enrol the first three consecutive patients (starting on a day specified by the investigator) presenting with "new complaints" who agreed to participate. New complaints were defined as patient-initiated visits to discuss new symptoms or concerns or flare-ups of chronic problems. All participants (practitioners and patients) were given written information about the study and signed consent forms before data collection commenced.

### Data collection

***Patient characteristics.*** The widely used, valid, and reliable Short Form 12 (SF-12) questionnaire[9,10] (completed at the practitioner's office) was used to assess the baseline quality of life reported by patients. In addition, patients were given a validated take-home questionnaire that assessed their use of health services in the previous month[11]; satisfaction with previous care from physicians (including reliable and validated items for overall satisfaction and subscores on professional competence, personal qualities and cost and convenience)[12,13]; and demographic information. Questionnaires were collected from patients'

**Dr Boon** *is an Assistant Professor in the Faculty of Pharmacy at the University of Toronto in Ontario.*
**Dr Stewart** *is Director and* **Ms Kennard** *is a Research Assistant at the Centre for Studies in Family Medicine at The University of Western Ontario in London.*
**Ms Guimond** *is a medical student at Memorial University of Newfoundland.*

homes by study personnel in the week after their visits with study practitioners.

Naturopathic patients' and family medicine patients' responses to these questionnaires were compared to identify potential differences. Given the small sample in this exploratory study, only descriptive statistics were computed for the quantitative data.

***Visit characteristics.***
*Qualitative data:* Patient-practitioner interactions were audiotaped and transcribed verbatim. Qualitative content analysis was used to identify key themes.[14,15] Interview transcripts were each coded independently by a minimum of two investigators. After coding every two to four interactions, investigators met to compare and combine their independent analyses. Computer software (QSR NUD*IST)[16] was used to facilitate this process.

*Quantitative data:* The valid and reliable nine-item Perception of Patient-Centredness Questionnaire[17] was used to assess the patient-centredness of visits. Numerical answers to the nine items on the questionnaire were averaged to provide an overall perception of patient-centredness and composite scores for three subscales. Differences in the means of 0.75 to 1.00 points on this scale are considered large and potentially clinically significant.[17]

The study protocol received ethical approval from the University of Western Ontario's Review Board for Health Sciences Research Involving Human Subjects.

## FINDINGS

### Practitioner characteristics

In total, six FPs and five NPs were approached and five practitioner pairs were recruited to participate in the study. The FP who declined to participate indicated that he "did not have time" to participate in the study (**Table 1**).

### Patient characteristics

Overall, NPs enrolled 12 patients and FPs enrolled 15 patients in the study during the designated data collection period. No patients who were asked to participate in the study refused; however, the tape recorder malfunctioned for one NP patient and another NP was able to enrol only one patient during the study period because he had to limit his patient contact hours due to other commitments.

There appeared to be no important differences in patients' age, sex, marital status, education, income, quality of life, or use of health care services in the last month (**Table 2**). Patients visiting NPs in this study were more likely, however, to be seeing the practitioner for the first time (nine of 12 patients) than those visiting FPs (five of 15 patients). There was also a difference between the two patient groups' self-reported satisfaction with *previous* interactions with physicians. Two of the three subscales were rated more highly by FP patients than by NP patients (**Table 3**).

**Table 2. Characteristics of patients**

| PATIENT CHARACTERISTICS | NATUROPATHIC PRACTITIONERS' PATIENTS (N=12) | FAMILY PHYSICIANS' PATIENTS (N=15) |
|---|---|---|
| Mean age (y) | 48.9 (range 29-73) | 43.4 (range 26-79) |
| Sex (% female) | 70 | 80 |
| Country of birth (% North America) | 80 | 60 |
| Ethnic background (% white) | 87 | 67 |
| Education (% more than high school education) | 67 | 60 |
| Income (% annual income > $60 000) | 43 | 40 |
| Overall health (% "good" or "excellent") | 83.3 | 75 |

### Visit characteristics

***Reason for visit.*** Patients identified a variety of symptoms (eg, menstrual problems, leg pain, fatigue, depression, headaches, hemorrhoids, allergies) and issues (eg, weight loss, pregnancy) as reasons for their visits to practitioners. Many patients of NPs indicated that one of the main reasons for visiting was to obtain advice about health maintenance or enhancement.

> **Naturopathic practitioner:** "If we could deal with only one thing today, just to get some idea of priority, what would it be?"
> **Patient:** "Optimizing my health, in general. … I think I'm a fairly healthy person, but I don't have the energy I used to. I just want to make sure I'm taking good care of myself."

None of FPs' patients indicated this reason for their visits. Family physicians' patients were all visiting to investigate specific new symptoms.

***Telling the story.*** There was evidence from both FP and NP interactions that practitioners made conscious

**Table 3. Patients' satisfaction with previous care from physicians:** *Higher scores indicate more positive responses; maximum score 2.*

| SATISFACTION FACTOR | NATUROPATHIC PRACTITIONERS' PATIENTS (N=12) | FAMILY PHYSICIANS' PATIENTS (N=15) |
|---|---|---|
| Professional competence (composite score) | 1.48 | 1.73 |
| • Doctors can help you both in health and in sickness* | | |
| • Doctors will not admit it when they do not know what is wrong with you | | |
| • Doctors spend more time trying to cure an illness you already have than preventing one from developing | | |
| • Doctors will do everything they can to keep from making a mistake* | | |
| • No two doctors will agree on what is wrong with a person | | |
| • Doctors are put in the position of having to know more than they possibly could | | |
| Personal qualities (composite score) | 1.48 | 1.82 |
| • Doctors should be a little more friendly than they are | | |
| • With so many patients to see, doctors cannot get to know them all | | |
| • Doctors are devoted to their patients* | | |
| • Many doctors do not care whether or not they hurt patients during examinations | | |
| • Most doctors let you talk out your problems* | | |
| • Doctors make you feel like everything will be all right* | | |
| • Most doctors take a real interest in their patients* | | |
| Cost and convenience (composite score) | 1.56 | 1.56 |
| • The more money you have, the easier it is to see a doctor | | |
| • Most doctors are willing to treat patients with low incomes* | | |
| • It is easier to go to the drugstore for medicine than to bother a doctor | | |
| • There are just not enough doctors to go around | | |
| • It is hard to get a quick appointment to see a doctor | | |
| • Doctors try to have their offices and clinics in convenient locations* | | |
| • Doctors should have evening office hours for working people | | |
| • People complain too much about how hard it is to see a doctor* | | |
| • More and more doctors are refusing to make housecalls | | |

**Item reversed for analysis.*

and explicit efforts to elicit patients' concerns, feelings, ideas, and expectations about their symptoms. All practitioners, however, interrupted patients' "stories" to ask for details necessary to rule out possible causes of the symptoms and to obtain information necessary to diagnose the problems patients were describing. The need to do this meant that much of the interaction, regardless of type of practitioner involved, became very practitioner-directed with patients giving answers to practitioners' specific questions.

**Patient:** "I got up in the morning, and in my mouth, I saw blood. …"
**Family physician:** "You had blood in your mouth?"
**Patient:** "Yes, and you know I have something in my. …"
**Family physician:** "Well, that's another complaint. … Okay, let's just do the eye thing first."

**Naturopathic practitioner:** "Let's actually try another approach. We've got spicy, sweet, sour, bitter, and salty. I want you to score them out of 10, 10 being you love them, 0 being yuck. Spicy?"
**Patient:** [provides answer].
**Naturopathic practitioner:** "Okay. Now regiments [sic] for menses. Do any of these cravings change?"
**Patient:** [provides answer].
**Naturopathic practitioner:** "Okay. So let's actually go from another standpoint. I'd like to ask you some questions about your menstrual cycle. …"

Questions and details requested by FPs and NPs differed noticeably. For example, NPs queried patients about details regarding their sleeping habits, food cravings, personality, taste and temperature preferences, nature of personal relationships, and fears (information necessary for recommending homeopathic products). In contrast, FPs tended to focus on questions about symptoms (ie, how long they lasted, what they felt like, were they getting worse or better?). The process in which both types of practitioners were involved was virtually identical (differential diagnosis), but the content differed.

### Management of patients' conditions

The ways both types of practitioners developed strategies to meet patients' needs were remarkably similar. Both made obvious attempts to find common ground with patients. The biggest difference in how FPs and NPs managed patients' conditions was in the content of negotiated management strategies. Family physicians were much more likely to order tests for patients (tests were ordered for 10 of 15 patients) than NPs (tests were ordered for three of 12 patients). In addition, FPs and NPs ordered different types of tests. Family physicians ordered blood tests, urine tests, x-ray examinations, and ultrasound scans. In contrast, NPs recommended patients have food sensitivity tests and, in one case, a thyroid function test.

Medications and natural health products are important tools for both FPs and NPs attempting to help patients find relief from symptoms. In this study, NPs were much more likely to recommend multiple products than FPs were. Seven of 12 NP patients were recommended three or more natural health products; one was taking more than 16 different products. In contrast, only five of 15 FP patients were given recommendations or prescriptions for medications. Four of these FP patients were given only one product recommendation or prescription, and one FP recommended two vitamin and mineral products.

Since both FPs and NPs are generalists, referrals are another way for them to guide patients to others best suited to address specific symptoms or complaints. In this study, two of 15 patients were given referrals by FPs (to a physiotherapist and to an eye specialist) and none received referrals from NPs.

***Patient-centred interactions.*** No clinically significant differences between overall scores on the 9-item patient-centredness scale, nor on any of the three subscales, appeared among FP patients and NP patients (**Table 4**).

***Time.*** Patient visits with NPs lasted much longer (mean 54 minutes, range 30.4 to 92.9 minutes) than visits with FPs (mean 16.5 minutes, range 8.3 to 26.1 minutes).

**Table 4. Patients' perceptions of patient-centred care:** *Lower scores indicate more positive responses.*

| PATIENTS' PERCEPTIONS | NATUROPATHIC PRACTITIONERS' PATIENTS (N=12) | FAMILY PHYSICIANS' PATIENTS (N=15) |
|---|---|---|
| Perception that illness was explored (composite score) | 1.56 | 1.31 |
| • ATo what extent was your main problem discussed today? | | |
| • To what extent did the doctor listen to what you had to say? | | |
| • How well do you think your practitioner understood you today? | | |
| Perception common ground was found (composite score) | 2.08 | 1.64 |
| • How satisfied were you with the discussion of your problem? | | |
| • To what extent did the doctor explain the problem to you? | | |
| • To what extent did you and the doctor discuss your respective roles? | | |
| • To what extent was the treatment explained to you? | | |
| • To what extent did the doctor explore how manageable this [treatment] would be for you? | | |
| Perception of treatment for whole person | 2.56 | 1.81 |
| • To what extent did your doctor discuss personal or family issues that might affect your health? | | |
| OVERALL PERCEPTION OF PATIENT-CENTRED CARE | 1.95 | 1.56 |

## DISCUSSION

### Patient visits with FPs and NPs

One key finding of this study was that patients visited FPs and NPs for different reasons. Naturopathic practitioners' patients were much more likely to be seeking advice about health maintenance or enhancement. In contrast, FPs' patients were all seeking help for specific symptoms of ill health. Length of visit was another key difference; NPs spent significantly more time with each patient than FPs did. Shorter FP visits meant that the discussion was more likely to be focused on only one or two patient issues, which might explain FPs' lower rate of prescriptions and recommendations. In longer visits, NPs investigated a variety of patient issues; this could, in part, explain their higher rate of recommendations. Since NPs were able to investigate more patient complaints in one visit, they could have been attempting to help patients with various complaints. Clearly the influence of significantly longer patient visits on patient-practitioner interactions requires further exploration.

### Limitations

One of the main limitations of this study was that participants might not be representative of FPs, NPs, or their respective patients. All practitioners chosen in the convenience sample had reputations as "good practitioners." In addition, the high proportion of patients in both groups who had been seeing study practitioners for less than 1 year (much higher than in other studies of family practice) suggests that the sample is not representative of Canadian patients seeking help from primary care practitioners. The small sample size also limits the generalizability of our results. In addition, the fact that the patients in our study were visiting FPs and NPs for largely different reasons limits our ability to draw conclusions about the differences in their interactions with FPs and NPs. This highlights the importance of ensuring that future studies control for the patients' reasons for visiting practitioners.

### Implications for family physicians

Despite assumptions to the contrary, patient-NP interactions might not be very different from patient-FP interactions. Naturopathic practitioners in this study did not appear to be "better" practitioners than FPs. Visits to NPs were much longer, on average, than FP visits, and patients appeared to be more likely to discuss health maintenance and optimization with NPs than with FPs. It is important for FPs to understand that patients' decisions to see NPs might reflect this need, rather than dissatisfaction with FP care. Thus FPs and NPs could be providing complementary services rather than competing to help the same patients with the same complaints. This hypothesis needs to be examined in future studies.

**Editor's key points**

- This combined qualitative and quantitative pilot study examined differences and similarities in patient visits to naturopathic practitioners (NPs) and family practitioners (FPs).
- Patients were more likely to consult NPs about health maintenance and FPs about specific complaints.
- The process of enquiry to obtain a diagnosis was remarkably similar for NPs and FPs, although the content of interviews differed, based on each practitioner's knowledge base.
- Both NPs and FPs attempted to find "common ground" with their patients. Patient-centred care scores were similar, but NP visits lasted 54 minutes, on average, while FPs' lasted 16 minutes.
- Naturopathic physicians tended to recommend more treatments, a variety of natural products, whereas FPs ordered more tests and recommended fewer medications.

**Points de repère du rédacteur**

- Cette étude pilote à la fois quanlitative et quantitative comparaît les visites effectuées chez des médecins naturopathes (MN) et chez des médecins de famille (MF).
- Les MN étaient le plus souvent consultés pour des questions de maintien de santé et les MF pour des problèmes de santé spécifiques.
- La façon d'établir le diagnostic était remarquablement semblable dans les deux groupes, mais la teneur des entrevues différait selon les connaissances de base de chaque médecin.
- Les MN comme les MF cherchaient à amener leurs patients sur un « champ d'intérêt commun ». Les deux groupes obtenaient des scores identiques pour l'aspect « soins centrés sur le patient », mais les consultations duraient en moyenne 54 minutes chez les MN contre 16 minutes chez les MF.
- Les MN avaient tendance à prescrire plus de traitements et plusieurs produits naturels alors que le MF prescrivaient plus d'examens et moins de médicaments.

Finally, FPs need to be aware that NPs often recommend several natural health products for patients. These could interact with conventional medications that are prescribed or recommended by FPs. This finding highlights the importance of asking about any other products patients are taking as part of routine medication history.

## Conclusion

Overall there appeared to be more similarities than differences in patients' visits with FPs and NPs. Key differences appear to include length of visits and reasons for visits. We hope future studies will build on our groundwork in this area.

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### Contributors

**Dr Boon** *conceived and designed the study. She contributed substantially to data collection, analysis, and interpretation. She wrote the final draft of the article and approved the final version to be published.* **Dr Stewart** *contributed substantially to study design and data analysis and interpretation.* **Ms Kennard** *contributed substantially to data collection, analysis, and interpretation.* **Ms Guimond** *contributed substantially to data analysis and interpretation.* **Dr Stewart, Ms Kennard**, *and* **Ms Guimond** *all critically revised the manuscript for important intellectual content and approved the final version to be published.*

### Competing interests

*None declared*

***Correspondence to:*** *Dr Heather Boon, Faculty of Pharmacy, University of Toronto, 19 Russell St, Toronto, ON M5S 2S2; telephone (416) 946-5859; fax (416) 978-1833; e-mail* heather.boon@utoronto.ca

### References

1. Ramsay C, Walker M, Alexander J. *Alternative medicine in Canada: use and public attitudes*. Public Policy Sources Number 21. Vancouver, BC: The Fraser Institute; 1999.
2. Sellerberg A. "Hawks" in Swedish medical care: a study of alternative therapists. *Res Sociol Health Care* 1991;9:191-205.
3. Goldstein MS, Sutherland C, Jaffe DT, Wilson J. Holistic physicians and family practitioners: similarities, differences and implications for health policy. *Soc Sci Med* 1988;26(8):853-61.
4. Boon H. The holistic and scientific orientations of Canadian naturopathic practitioners. *Soc Sci Med* 1998;46(9):1213-25.
5. Sharma U. The equation of responsibility. Complementary practitioners and their patients. In: Budd S, Sharma U, editors. *The healing bond. The patient-practitioner relationship and therapeutic responsibility*. New York, NY: Routledge; 1994. p. 83-102.
6. Hewer W. The relationship between the alternative practitioner and his patient. *Psychother Psychsom* 1983;40:172-80.
7. Chambers E. Applied ethnography. In: Denzin NK, Lincoln YS, editors. *Handbook of qualitative research*. 2nd ed. Thousand Oaks, Calif: Sage Publications, Inc; 2000. p. 851-69.
8. Creswell JW. *Qualitative inquiry and research design. Choosing among five traditions*. Thousand Oaks, Calif: Sage Publications, Inc; 1998.
9. Ware J Jr, Kosinski M, Keller SD. A 12-item short-form health survey: construction of scales and preliminary tests of reliability. *Med Care* 1996;34(3):220-33.
10. Ware J, Kosinski M, Keller S. *SF-12: how to score the SF-12. Physical and mental health summary scales*. 2nd ed. Boston, Mass: Health Institute, New England Medical Centre; 1995.
11. Moreno CA. Utilization of medical services by single-parent and two-parent families. *J Fam Pract* 1989;28(2):194-9.
12. Hulka BS, Zyzanski SJ, Cassel JC, Thompson SJ. Scale for the measurement of attitudes toward physicians and primary medical care. *Med Care* 1970;8:429-36.
13. Hulka BS, Zyzanski SJ, Cassel JC, Thompson SJ. Satisfaction with medical care in a low income population. *J Chronic Dis* 1971;24:661-73.
14. Berg BL. *Qualitative research methods for the social sciences*. 2nd ed. Needham Heights, Mass: Allyn and Bacon; 1995.
15. Morse JM, Field PA. *Qualitative research methods for health professionals*. 2nd ed. Thousand Oaks, Calif: Sage; 1995.
16. Qualitative Solutions & Research Pty Ltd. *QSR NUD*IST*. 4th ed. Melbourne, Australia: Qualitative Solutions & Research Pty Ltd; 1995.
17. Stewart M, Brown JB, Donner A, McWhinney IR, Oates J, Weston WW, et al. The impact of patient-centred care on outcomes. *J Fam Pract* 2000;49(9):805-7.