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How patients choose osteopaths: A mixed methods study☆

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Summary
Objectives: To explore how patients choose individual osteopaths to consult; to test whether patients' preferences for osteopaths depend on gender, the osteopath's qualifications, and the cost of treatment; to explore patients' perspectives.
Design: An explanatory mixed methods design incorporating a quasi-experimental study administered by postal survey and a qualitative interview study.
Setting: One sample of patients at a private-sector complementary therapy clinic in the UK completed a survey; a second sample of patients recruited from osteopathy clinics took part in qualitative interviews.
Main outcome measures: In the survey, male and female respondents ($n = 176$) rated the likelihood of consulting each of 8 fictional osteopaths, representing all possible combinations of 3 factors (practitioner gender, biomedically qualified or not, working in a public sector or private clinic). Semi-structured qualitative interviews ($n = 19$) about patients' experiences of osteopathy were analysed deductively and inductively.
Results: Survey respondents preferred osteopaths who were also biomedical doctors, $F(1,174) = 67.21$, $p < 0.001$, $\eta^2 = 0.28$. Qualitative data showed that, when choosing an osteopath, patients valued personal recommendations from a trusted source and such recommendations overrode other considerations. First impressions were important and were based on patients' perceptions of an osteopath's competence, interpersonal fit, and immediate treatment effect.
Conclusions: Word of mouth appears to be the primary mechanism by which patients choose individual osteopaths; in the absence of personal recommendations, some patients

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prefer biomedically qualified practitioners. Trustworthy and appropriate information about practitioners (e.g. from professional regulatory bodies) could empower patients to make confident choices when seeking individual complementary practitioners to consult.

Introduction

Policy makers in the UK and elsewhere emphasise the importance of patient choice in health care with initiatives such as ''Choose and Book'' which allows patients to choose specific hospitals and clinics. The choice of individual clinician is of particular interest as it forms the starting point of the therapeutic relationship which is central to all patient outcomes.

Research on patient decision-making demonstrates that the patient's social context influences their decisions to use CAM.[1] For example, patients might be more likely to use CAM if their family members do so[2]; some seek information from and discuss their options with friends and family members[3–5]; some are inspired to choose CAM therapies by testimonials from other patients[6]; and some are pushed towards CAM practitioners by the poor availability of accessible conventional doctors.[7] While patients particularly value the empowering empathetic therapeutic relationships they experience with CAM practitioners[8–12] few studies have focused on the related specific question of how patients initially select an individual CAM practitioner to consult. Participants in one Canadian study selected a CAM practitioner based on personal recommendations, referrals from trusted others (rarely biomedical doctors) and a practitioner's reputation as evidenced in publications or other patients' testimonials.[13] In the UK, a small sample of predominantly female participants preferred female acupuncturists and those who were also biomedically qualified.[14] Choice of individual practitioner has been studied more extensively in relation to conventional biomedicine: many studies find a gender concordance effect (where patients prefer doctors of the same gender as themselves) which is stronger in the context of intimate health problems and might be driven by patients' beliefs that doctors of a particular sex are easier to talk to.[15–21]

In this study, we focused on how patients with low back pain (LBP) choose UK osteopaths. Osteopathy is a holistic, patient-centred manipulative therapy which emphasises preventative care[22–24] and is subject to statutory regulation in the UK.[25] We focused on osteopathy for LBP as osteopathy is one of the most established CAM therapies in the UK,[26] is included in primary care guidelines for managing LBP,[27] and is popular among patients with LBP.[28,29] We conducted a quantitative survey to test hypotheses derived from the quantitative literature. This was followed by a qualitative analysis to elucidate how people currently or recently undergoing osteopathy chose their osteopath. The hypotheses for the quantitative study were:

1. Female patients will prefer female osteopaths while male patients will prefer male osteopaths (i.e. as has been found in conventional medicine there will be a gender concordance effect).
2. Patients will prefer osteopaths who are dual-qualified as both biomedical doctors and osteopaths (as was found for acupuncturists[14]).
3. Patients' choice of osteopath will be influenced by whether the osteopath works in the NHS or the private sector. This hypothesis is two-tailed, because while osteopaths predominantly work in the private sector[30,31] some patients see the NHS as a safe environment to try CAM.[5,32,33]

Methods

Mixed methods design

The quantitative study preceded the qualitative analysis, which was undertaken in order to generate explanations for the quantitative findings and explore patients' experiences in more depth; this constitutes an explanatory mixed methods design.[34] Distinct samples of participants were recruited for each study. We have integrated the findings to convey how the qualitative data were used to explain and expand on the quantitative results. Ethics approvals were obtained from the host institution.

Quantitative study

Design

Following Furnham et al.[35] a mixed $2 \times 2 \times 2 \times 2$ factorial design was used to test the impact of four factors on patients' choice of osteopaths. Three within-subjects factors each had two levels: practitioner gender (male vs. female); practitioner qualification (additionally qualified as a biomedical doctor or not); and sector (NHS or private practice). One between-subjects factor had two levels: participant gender (male vs. female). The dependent variable was self-reported likelihood of consulting each osteopath.

The questionnaire

The questionnaire was adapted from a previous study.[14] Respondents were asked to imagine they have back pain and that osteopathy has been recommended to them, but no-one has recommended a particular osteopath (see Appendix A). Three multiple-choice questions assessed comprehension. Respondents rated 8 fictional osteopaths, representing each combination of the within-subjects factors (e.g. a male osteopath who is also a biomedical doctor working in the NHS), on a 10-point Likert scale (1 = ''would never make an appointment''; 10 = ''would certainly make an appointment''). We fixed osteopaths' nationality (British, born and raised in UK) and first language (English). Some respondents

added written comments; these were incorporated into the qualitative analysis.

Procedure

We invited all (909) patients that had attended a multidisciplinary private sector CAM practice within the past two years. We recruited CAM users because they were likely to be familiar with and consider using osteopathy. Patients were mailed a study pack and chose whether to complete identical online or paper questionnaires.

Statistical methods

Data analysis used SPSS version 17. Respondents were excluded if they answered the multiple choice comprehension questions incorrectly ($n = 20$) or omitted rating the osteopaths ($n = 14$). A $2 \times 2 \times 2 \times 2$ factorial ANOVA examined the effect of the practitioner factors (gender, qualifications, and sector) and patient gender. Levene's test of equality of variance showed the assumption of homogeneity of variance was met. Significant interactions were explored graphically and visual interpretations were tested using multiple *t*-tests applying Bonferroni corrections to maintain alpha at 0.01.

The qualitative study

Design

This is a secondary analysis of semi-structured interviews conducted with people who were currently using or had recently used osteopathy for lower back pain.

Procedure

Purposive sampling was used to recruit participants with a diverse range of experiences (many/few sessions, one/many osteopaths, NHS/private settings, positive/negative experiences). Participants were recruited through osteopaths, newspaper adverts, chronic pain groups and adverts in and around the host institution. Each participant was interviewed once by KB in person or by telephone for approximately 1 h. The main question was ''I'm really interested in hearing about your experiences of having osteopathy, so please can you tell me all about it''. Interviews were audio taped with consent and later transcribed verbatim. Interviewees were allocated pseudonyms.

Data analysis

The data corpus for this analysis comprised written comments on the questionnaires and all talk from the qualitative interviews about choosing osteopaths. A deductive analysis categorised statements related to gender, healthcare sector, or practitioner's qualifications. Additional descriptions of choosing osteopaths (that did not fit these categories) were analysed inductively to identify additional themes. Three researchers (FB, KB, and YM) contributed, making it less likely that the findings reflect an idiosyncratic or overly selective interpretation. Illustrative quotes presented below were selected for lucidity and typicality.

Table 1 Participants' characteristics.

Characteristic	Survey respondents ($n = 176$)	Interviewees ($n = 19$)
Age		
Range	18—87 years	27—67 years
Average	53 (mean)	41 (median)
Gender		
Female *n* (%)	147 (84%)	12 (63%)
Male *n* (%)	29 (16%)	7 (37%)
Education		
Degree level *n* (%)	97 (55%)	9 (47%)
Back pain history		
Ever had back pain *n* (%)	147 (84%)	19 (100%)
Osteopathy history		
Ever had osteopathy *n* (%)	126 (72%)	19 (100%)

Box 1 Interviewees noticed osteopaths' qualifications during consultations

''I've got one hundred percent confidence that she knows what she's doing. Obviously round her wall she's got all these certificates that she's done this and she's passed that, and she just seems a very confident lady.'' (Annabel, interviewee)

Results

Participants

Questionnaires were returned by 210 people (response rate = 23%) of which 176 provided usable data. Nineteen people were interviewed in the qualitative study. Their characteristics are summarised in Table 1.

An osteopath's qualifications and skills

Survey respondents were more likely to consult osteopaths who were also qualified biomedical doctors (mean = 7.04, standard error = 0.23) than osteopaths who were not ($M = 5.12$, se = 0.24), $F(1,174) = 67.21$, $p < 0.001$, $\eta_p^2 = 0.28$. There was no direct evidence in the qualitative data to explain or corroborate this finding; interviewees did not talk about whether an osteopath had biomedical qualifications but did attend to osteopaths' clinical and interpersonal skills. Only one interviewee had received osteopathy from a dual-qualified practitioner, but did not mention this during the interview. Interviewees used personal recommendations to judge an osteopath's skills before meeting them (see Personal Recommendations below) and used their own experiences to judge an osteopath's skills after meeting them. One interviewee felt that age served a useful proxy for clinical experience, which itself indicated a more skilled practitioner. Typically, interviewees who mentioned an osteopath's qualifications did not attend to qualifications when first selecting the osteopath but noticed them later, during consultations (Box 1).

Table 2 Mean ratings of osteopaths by qualifications and sector ($n = 176$).

Biomedical qualifications	Sector	Mean (standard error)	95% CI
Yes	NHS	7.55 (0.20)	7.15, 7.96
Yes	Private sector	6.88 (0.19)	6.50, 7.27
No	NHS	5.29 (0.21)	4.88, 5.70
No	Private sector	4.90 (0.19)	4.53, 5.27

Box 2 Patients saw their osteopath's gender as less important than their clinical skills and interests

''I chose her because she was spiritual and understood everything to do with Alexander technique. I knew she wouldn't touch me if she was out of balance. That was important to me.'' (Survey respondent)

Gender concordance

In the survey, the hypothesis that there would be a gender concordance effect was rejected: there was no significant interaction between practitioner gender and patient gender, $F(1,174) = 0.06$, $p = 0.81$. Furthermore, neither practitioner gender nor patient gender alone had a significant effect on likelihood of consulting an osteopath, for practitioner gender $F(1,174) = 0.48$, $p = 0.49$; for patient gender $F(1,174) = 0.33$, $p = 0.57$. Similarly, gender was rarely mentioned in the qualitative data and was typically only mentioned in the context of what a practitioner's gender was thought to mean for their interpersonal or clinical skills (Box 2). Only one interviewee reported having deliberately sought out a female osteopath, following an unsatisfactory consultation with a male osteopath.

Healthcare sector and practicalities

In the survey, there was no main effect of healthcare sector on likelihood of consulting an osteopath, $F(1,174) = 1.88$, $p = 0.17$. The qualitative analysis identified features that attracted patients to each sector. Not having to pay for treatment was an attractive feature of consulting an osteopath working in the NHS: ''It's great that it's available on the NHS otherwise I would have to spread it out further or have less sessions.'' (Tina, interviewee). Typical reasons for preferring a private sector practitioner included the choice of convenient location, the perception that this would avoid lengthy waits for NHS services, that paying for treatment meant one had more say over the timing of appointments, and that health care services in the private sector are generally better quality than those in the NHS (Box 3):

Box 3 Features that attracted patients to the private sector

''In the past I had to wait 4—5 weeks for a free service, so went private.'' (Survey respondent)

''Paying tends to get more flexible times, and I would pay for this reason.'' (Survey respondent)

''I am prepared to pay for first class treatment''. (Survey respondent)

''There was an osteopath who was working in under her own name, in her own house, within ten minutes walk of the [my] house and I decided that I would try her. Her fees were two thirds the price of the other ones.'' (Ian, interviewee)

Interactions between factors

The ANOVA detected two significant interactions. There was a significant two-way interaction between qualifications and sector, $F(1,174) = 4.10$, $p = 0.04$, $\eta_p^2 = 0.02$. To explore this interaction required 4 t-tests, meaning a p value of less than 0.0025 was needed to be considered statistically significant. Paired t-tests (see Table 2 for means) revealed that in both the NHS and the private sector, biomedically qualified osteopaths were preferred over those without biomedical qualifications (for the NHS $t(175) = 12.14$, $p < 0.0001$, for the private sector $t(175) = 10.83$, $p < 0.0001$). For biomedically qualified osteopaths those working in the NHS were preferred over those in private practice, $t(175) = 3.14$, $p = 0.0020$. However, for osteopaths without biomedical qualifications participants did not prefer one sector over the other, $t(175) = 2.17$, $p = 0.031$, ns.

There was a significant three-way interaction between qualifications, practitioner gender and patient gender, $F(1,174) = 4.29$, $p = 0.04$, $\eta_p^2 = 0.02$. Fig. 1 illustrates this interaction. Essentially, participants preferred osteopaths who had biomedical qualifications over those who did not, but this preference was weak (marginally non-significant) in male participants rating female osteopaths. This was confirmed by the series of 12 t-tests shown in Table 3.

Personal recommendations and anticipated trust

The survey imposed a scenario in which respondents were unable to acquire any personal recommendations to help them choose an osteopath. However, many interviewees valued personal recommendations from friends, family members, and colleagues. For example, Ryan felt that a personal recommendation can give one confidence in an osteopath even before meeting them and is far more trustworthy than an advertisement, which Ryan thought tells you very little and is not necessarily reliable. Personal recommendations were also seen as essential by those survey respondents who were not willing to select an osteopath for the survey. All 10 who commented on why they had not rated any of the osteopaths argued that they would never choose

Table 3 Mean ratings of osteopaths by qualifications, osteopath's gender and patient's gender.

Respondents (*n*)	Osteopath's characteristics	Mean rating (se)	95% CI	*T* (df)	*p*
Males (29)	Male, biomedical	6.88 (0.37)	6.13, 7.63	−0.99 (174)	0.322 ns
Females (147)	Male, biomedical	7.33 (0.19)	6.96, 7.71		
Males (29)	Female, biomedical	6.66 (0.39)	5.85, 7.46	−1.31 (174)	0.193 ns
Females (147)	Female, biomedical	7.28 (0.20)	6.89, 7.68		
Males (29)	Male, not biomedical	5.10 (0.41)	4.27, 5.94	−0.12 (174)	0.909 ns
Females (147)	Male, not biomedical	5.16 (0.20)	4.76, 5.56		
Males (29)	Female, not biomedical	5.22 (0.37)	4.47, 5.97	0.46 (174)	0.648 ns
Females (147)	Female, not biomedical	5.00 (0.21)	4.59, 5.41		
Males (29)	Male, biomedical	6.88 (0.37)	6.13, 7.63	4.07 (28)	0.0004*
Males (29)	Male, not biomedical	5.10 (0.41)	4.27, 5.94		
Males (29)	Female, biomedical	6.66 (0.39)	5.85, 7.46	3.41 (28)	0.002 ns
Males (29)	Female, not biomedical	5.22 (0.37)	4.47, 5.97		
Females (147)	Male, biomedical	7.33 (0.19)	6.96, 7.71	10.84 (146)	0.0001*
Females (147)	Male, not biomedical	5.16 (0.20)	4.76, 5.56		
Females (147)	Female, biomedical	7.28 (0.20)	6.89, 7.68	11.97 (146)	0.0001*
Females (147)	Female, not biomedical	5.00 (0.21)	4.59, 5.41		

* After Bonferonni corrections, $p < 0.0008$ was needed to be considered statistically significant.

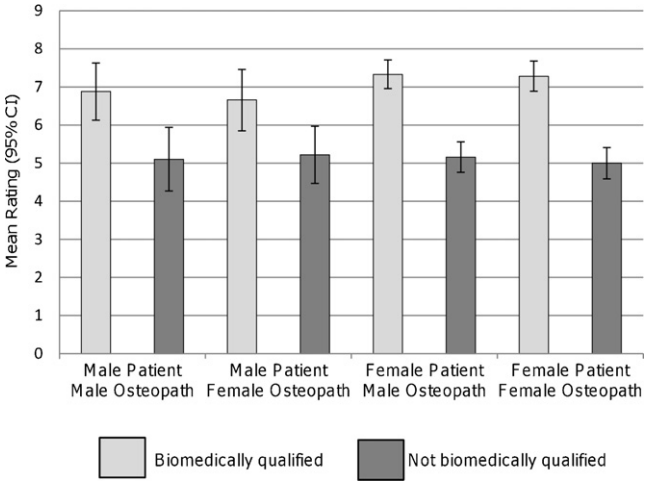

Figure 1 Participants preferred osteopaths who had biomedical qualifications over those who did not, but this preference was not significant when male participants were rating female osteopaths.

an osteopath without a personal recommendation. Trusted, authentic, personal recommendations led patients to have greater trust in an osteopath (Box 4).

There were mixed opinions concerning the value of recommendations or referrals from conventional medical practitioners. One survey respondent added that they would follow the advice of their GP or consultant, and while one interviewee reported having followed their GP's advice another interviewee did not want a doctor's referral because he felt that it could be based on financial kick backs. Being a conventional medical practitioner may not be a guarantee of being seen as a trustworthy source of recommendations concerning osteopaths.

Box 4 Personal recommendations were highly valued
''There was probably three or four people that I spoke to all knew of him and I think three out of the four had personally had treatment from him so they all had first hand information. So I listened to them, they said how thorough he is.'' (John, interviewee)
''I would not see any complementary practitioner unless via personal recommendation, no matter whether they are NHS/private/Medical doctor/male or female.'' (Survey respondent)

First impressions and loyalty

The interviews provided a longitudinal perspective that was absent from the survey. Interviewees talked about the importance of personal experience and the need to try out an osteopath before committing to a series of treatments. A first impression was good if a patient felt they could get on with the osteopath, felt the osteopath was competent, and/or perceived immediate physical benefit from the treatment. Interviewees reported being likely to return to these osteopaths. Bad first impressions were sufficient to lead patients to seek a different osteopath: ''I saw an osteopath that I didn't feel I clicked with, didn't get on particularly well with. I didn't go back.'' (Tina, interviewee)

While the survey assumed participants would have no prior experience of individual osteopaths, the qualitative data suggested that this scenario is only appropriate for first-time users of osteopathy. If they had identified a competent and trustworthy osteopath and developed a relationship with them over time, interviewees were reluctant to switch to a new osteopath and typically favoured the osteopath with whom they had an established relationship (Box 5).

Box 5 Personal experience and continuity of care were valued
''I did have a bad session because I went to another partner because I couldn't get in with the person I normally see. So a good one [session] I would say to go with somebody who you know, who you've built up a rapport with. I think when you see somebody different maybe they don't know of haven't read the treatment that you've had and may not do things in the same way.'' (Helen, interviewee)

Discussion

We used quantitative methods to test the effect of four factors on patients' preferences for fictional osteopaths and qualitative methods to explore patients' real-world experiences of choosing osteopaths for their LBP. There was mixed support for our hypotheses. Consistent with Hypothesis 2, osteopaths were preferred if they were also qualified biomedical doctors. This extends our previous finding that patients prefer acupuncturists who also have biomedical qualifications.[14] Hypotheses 1 and 3 were rejected: there was no gender concordance effect and healthcare sector did not have a straight forward effect on preferences. The qualitative data allowed us to explore additional factors and processes involved when patients choose an osteopath: personal recommendations and anticipated trust, location and financial cost, and first impressions and past experience.

Patients valued personal recommendations when choosing an osteopath, which is consistent with sociological theorising about lay networks[36] as well as previous findings that word-of-mouth referrals are highly valued by other CAM patients.[3,4,6,13,14] Our analysis illustrates how positive personal recommendations enable people to have positive expectations and to anticipate being able to trust their practitioner. For our interviewees, good first impressions built on anticipated trust, laying the foundations for loyal and trusting therapeutic relationships. Bad first impressions destroy anticipated trust and led patients to search for a different practitioner.

The quantitative and qualitative data appeared contradictory in that an osteopath's biomedical qualifications were not discussed by our interviewees, but our survey respondents did prefer fictional osteopaths who had additional biomedical qualifications. This was probably a consequence of the scenario in which survey respondents had to imagine choosing an osteopath in the absence of personal recommendations. It might also relate to the concept of anticipated trust: perhaps this group of patients took a biomedical qualification to indicate a potentially more trustworthy practitioner. Future studies should test this interpretation and use think-aloud methods to clarify how people think about different types of qualifications when rating CAM practitioners. It could be that survey respondents took a pragmatic stance that, all else being equal, having a practitioner with two sets of qualifications was preferable and possibly safer and better than having a practitioner with one set.

The predicted gender concordance effect was not found in the survey which could be a consequence of the small proportion of male respondents (only 16%). While the lack of a gender concordance effect is inconsistent with the literature on choice of conventional practitioners,[15–18,20] it is consistent with our own qualitative findings. If consulting an osteopath for LBP is not considered to be an intimate or potentially embarrassing process then we might not expect a gender concordance effect.[16] However, osteopathy for LBP typically does involve the patient getting undressed and physical hands-on contact during both diagnosis and treatment.

Survey respondents' overall preferences were not influenced by healthcare sector although biomedically qualified osteopaths in the NHS were preferred over those in the private sector. Perhaps survey respondents did not distinguish between non-medical osteopaths on an individual basis, because they were already discounted in favour of biomedically trained osteopaths to the extent that other factors were ignored. It must be remembered that we recruited all the survey respondents from a private-sector CAM clinic; health care sector might yet influence the choices of people who have a history of using public-sector CAM services. The perceived advantages of the private sector (better access, shorter waiting lists, and better quality) resonate with patients' perceptions of the private sector provision of other health services.[37–39] The main perceived advantage of NHS-based osteopathy was that it is free at the point of use; this was also valued by patients attending a primary care osteopathy NHS service.[40]

Our findings are based on samples of CAM users and osteopathy patients. The low response rate suggests that our survey respondents might not be representative of the wider population of CAM users, but their demographic profile (highly educated, female) is broadly typical of CAM users.[41] While the marked gender imbalance in the survey respondents is typical of CAM users it means that our findings related to gender effects need to be replicated as they could be an artefact of the low proportion of male participants. The main weakness in our design is that our qualitative analysis was a secondary analysis of a pre-existing collection of qualitative interviews conducted with a broader focus. In the questionnaire study, additional covariates such as practitioner's age could have been specified.

In conclusion, personal recommendations and first impressions are important to patients seeking an individual osteopath and — particularly in the absence of personal recommendations — osteopaths who have additional qualifications may be more popular than those who do not. While further work is needed, our findings suggest that systems such as ''Choose and Book'' and directories of practitioners should provide practical information about financial costs and location; information about a practitioner's qualifications, skills, and interests; and a balanced selection of testimonials from previous patients. Doing so could help to empower patients to make confident decisions when seeking an individual complementary medicine practitioner.

Conflicts of interest

The authors declare they have no conflicts of interest.

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Appendix A. Scenario respondents were asked to imagine when completing the questionnaire

Imagine that you have been suffering lower back pain recently. Despite several visits to your GP there seems to be no conventional treatment that works for you. Both your doctor and a good friend recommend you to go to an osteopath.

You decide to consult an osteopath. Your doctor recommends two local health centres. One of the centres is privately owned (so you would have to pay for your treatment) and the other is a National Health Service (NHS) funded practice (where you would not have to pay for your treatment). Four osteopaths work at each centre. Each osteopath is British, and was born and raised in the UK. They all speak English as their first language.

On the following page are the names of all eight osteopaths. They are all registered members of the General Osteopathic Council (GOsC). As members of the General Osteopathic Council they are fully qualified and observe strict Codes of Practice. Some are trained in conventional Western medicine as well — they practice as doctors.

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