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OSTEOPATHY IN SWITZERLAND

Practice and Contribution to Healthcare 2016–2017

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SWISS OSTEOPATHY
SCIENCE FOUNDATION

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SUMMARIES

SUMMARIES

Summary of key points – English

Background and aim

In June 2016, the Swiss Parliament and the House of States adopted the Law on Allied Health (GesBG/LPSan) that recognised osteopathy as a primary care health profession. Future health practitioners are to be trained in state-funded Universities of Applied Sciences to obtain a Master of Science degree. Osteopaths are therefore trained as primary care practitioners and are able to investigate, detect, and triage medical conditions as well as manage and provide treatment for functional disorders. However, little is known on what osteopaths do and what role this new profession could play in our health system.

The Swiss Osteopathy Science Foundation therefore initiated a project to describe osteopathic activity and scope of practice. This report provides the results from a large-scale survey on osteopathic care provided to the Swiss population in 2016.

The collected data should help define the profession, target education and training priorities, formulate expected standards of care, fix benchmarks for future improvements, identify research priorities, and provide sound data for stakeholders to formulate policies.

Method and Design

This was a questionnaire survey of osteopaths and retrospective descriptive patient record review. All osteopaths registered to the National Registry of Allied Health Professionals (NAREG) were approached to participate in the survey (n=1086). Assistant osteopaths were approached via the Swiss Federation of Assistant Osteopaths (SVOA-FSOA; (n=84).

An online questionnaire survey was developed and used to describe osteopaths' profile and working environments and their patients. Each participating osteopath was asked to select up to four random patients from 2016 and extract anonymised data from these records.

Key findings

The response rate from the survey was 44.5% (521/ 1170) and we received data about 1'144 patients and 3'449 consultations. In 2016, osteopaths contributed to the health of the nation by providing around 1'700'000 consultations to an estimated 550'000 people at an overall estimated cost of CHF 200 million. This represents around 6.8% of the total Swiss population (8.3 million) and 2% of all costs for musculoskeletal conditions.

Nearly half of osteopaths work exclusively on their own (46%) and few work in a hospital setting (1.5%). Most osteopaths work from Monday to Friday between the hours of 8:00 and 18:00. The average length of a consultation is 45 minutes. Osteopaths see around 36 patients per week who pay ~120 CHF per consultation, with around 80% of patients using insurance to finance their care.

The average age of the adult osteopathic patient was 45 years old. Children and babies (under 2 years old) made up 10% of all patients, 9% of patients were 65 years or over. Most patients can expect to have 2 consultations for their presenting condition. Patients most commonly sought treatment for musculoskeletal complaints (81%) with the spine being the most common location (66%). The patients were relatively healthy, 65% reporting no co-morbidities and only 16%

reported taking time off work or school for their complaint. Most patients (76%) referred themselves directly to the osteopath, 18% were referred by other healthcare professionals.

The most common form of manual treatment given to patients were soft tissue and articular techniques (75% of the time) with thrust techniques used ~42% of the time. Other forms of provided treatment included exercise (34.2%), psychological and lifestyle management (35.5%), and adjunct therapy (3.9%).

Analysis of consent procedures showed that most patient consent for examination and treatment was implied (60%) rather than explicit (36-38%).

Conclusions

The number of consultations provided to the Swiss population indicate that there is a demand for osteopathic care and that it could play a larger role in primary health care provision.

Over half of the osteopaths practice in isolation, there were issues surrounding consenting procedures and record keeping, indicating a role for more formalised regulation and professional practice standards.

Obtaining more information directly from patients will further help develop our understanding of care and the needs of the patients seeking and using osteopathic services.

Keywords

Osteopathic Medicine, Delivery of Health Care, Clinical Audit, Switzerland

Zusammenfassung der wichtigsten Punkte[a] – Deutsch

Hintergrund und Ziele

Im Juni 2016 hat das Schweizer Parlament das Bundesgesetz über die Gesundheitsberufe (GesBG) verabschiedet, in dem die Osteopathie als Beruf der Erstversorgung im Gesundheitsbereich anerkannt wird. Zukünftige Gesundheitsversorger sind in staatlich finanzierten Hochschulen für Angewandte Wissenschaften auszubilden, um einen Master of Science-Abschluss zu erhalten. Osteopathen sind daher als Erstversorger ausgebildet, welche in der Lage sind Krankheitsbilder zu untersuchen, zu erkennen und eine Triage durchzuführen, sowie funktionelle Störungen zu behandeln und zu fördern. Wenig ist jedoch bekannt über die Rolle, die dieser neue Beruf in unserem Gesundheitssystem spielen könnte und wie umfassend die osteopathischen Leistungen sind.

Die Swiss Osteopathy Science Foundation hat daher ein Projekt zur Erforschung der Art und des Umfangs der osteopathischen Arbeit in der Schweiz lanciert. Dieser Bericht enthält die Ergebnisse der gross angelegten Studie über die osteopathische Gesundheitsversorgung der Schweizer Bevölkerung im Jahr 2016.

Die gesammelten Daten sollen helfen, das Berufsbild zu definieren, Prioritäten in der Aus- und Weiterbildung zu identifizieren, Behandlungsstandards zu formulieren, Vergleichswerte für künftige Verbesserungen zu bieten, Forschungsschwerpunkte zu identifizieren und fundierte Daten für Interessensgruppen und Entscheidungsträger zu bieten.

Methodik und Design

Es handelte sich um eine Umfrage mittels Fragbogen von Osteopathen und um eine Prüfung der retrospektiven Beschreibung von Patientenakten. Alle Osteopathen, welche beim Nationalen Register der Gesundheitsberufe (NAREG) registriert waren, wurden kontaktiert, um an der Umfrage teilzunehmen (n=1086). Osteopathische Assistenten (n=84) wurden durch die Berufsverbände SVOA-FSOA und SVO-FSO sowie ihre Supervisoren kontaktiert.

Eine Onlineumfrage wurde entwickelt und durchgeführt, um das Berufsbild und die Arbeitsumstände der Osteopathen und ihrer Patienten zu beschreiben. Jeder teilnehmende Osteopath wurde gebeten, vier zufällig ausgewählte Patienten aus dem Jahre 2016 auszuwählen und anonymisierte, nicht personenbezogene Daten aus ihren Akten zu entnehmen.

Hauptergebnisse

Die Antwortquote der Umfrage war 44.5% (521/1170), mit 1‘144 erhaltenen Datensätzen aus Patientenakten aus über 3'449 Konsultationen. Im Jahr 2016 haben Osteopathen zur Gesundheit der Nation beigetragen, indem sie rund 1'700'000 Konsultationen für schätzungsweise 550'000 Menschen mit Gesamtkosten von 200 Millionen Franken durchgeführt haben. Dies entspricht 6.8% der Schweizerischen Gesamtbevölkerung (8.3 Millionen) und 2% aller Kosten für muskuloskeletale Erkrankungen.

Fast die Hälfte aller Osteopathen praktizieren ausschliesslich alleine (46%) und nur wenige arbeiten in einem Krankenhaus (1,5%). Die meisten Osteopathen arbeiten von Montag bis Freitag zwischen 08:00 und 18:00 Uhr. Die durchschnittliche Dauer einer Konsultation beträgt 45 Minuten. Osteopathen behandeln pro Woche im Schnitt 36 Patienten, welche ~120 CHF pro

[a] Aus Gründen der besseren Lesbarkeit wurde nur die männliche Form verwendet. Gemeint sind immer weibliche und männliche Vertreter.

Konsultation bezahlen und wovon 80% eine Form der Rückvergütung durch ihre Krankenkasse erhalten.

Das Durchschnittsalter eines erwachsenen osteopathischen Patienten betrug 45 Jahre. Kinder und Kleinkinder (unter 2 Jahren) machten 10% aller Patienten aus. Neun Prozent aller Patienten waren über 65. Patienten können mit rund 2 Konsultationen für ihre aktuelle Beschwerde rechnen. Muskuloskeletale Beschwerden waren der häufigste Grund (81%) für das Aufsuchen eines Osteopathen; diese waren meistens im Bereich der Wirbelsäule (66%). Die Patienten waren relativ gesund, 65% hatten keine Komorbiditäten und nur 16% berichteten von Absenzen von ihrer Arbeit oder Schule aufgrund ihrer Beschwerde. Die meisten Patienten (76%) waren Selbstüberweiser. 18% wurden von anderen Gesundheitsberufen überwiesen.

Die häufigsten Formen der Behandlung waren Weichteil- und artikuläre Techniken (75%). 42% der Behandlungen waren Thrust Techniken. Neben diesen wurden unter anderem noch Übungen mitgegeben (34.2%), beratend im Bereich von Lebensweise und psychologischer Unterstützung gewirkt (35.5%) und mit anderen ergänzenden Therapien behandelt (3.9%).

Das Einverständnis zur Untersuchung und Behandlung wurde eher stillschweigend (60%) als explizit (36-38%) eingeholt.

Schlussfolgerungen

Die Zahl der Konsultationen, welche die Schweizer Bevölkerung nutzt, zeigt, dass eine Nachfrage nach osteopathischer Versorgung vorhanden ist, und dass diese eine grössere Rolle in der primären Gesundheitsversorgung spielen könnte.

Über die Hälfte der Osteopathen arbeiten alleine. Das Einholen des Einverständnisses der Patienten und das Führen von Patientenakten bereiteten Probleme, welche auf die Wichtigkeit einer formalisierten Regelung und Berufspraxisstandards hinweisen könnte.

Weitere direkte Befragung von Patienten wird helfen, unser Verständnis der osteopathischen Versorgung und der Bedürfnisse der Patienten, die Osteopathen aufsuchen und ihre Leistungen beanspruchen, zu verstehen.

Schlüsselwörter

Osteopathische Medizin, Gesundheitsversorgungsbereitstellung, klinische Prüfung, Schweiz

Aperçu des points importants – français

Contexte et objectifs

En juin 2016, l'Assemblée fédérale (Conseil national et Conseil des états) a adopté la nouvelle loi sur les professions de la santé (LPSan) qui reconnaît l'ostéopathie comme étant une profession de premier recours. Cela signifie que les futurs ostéopathes sont dès maintenant formés dans les hautes écoles spécialisées suisses. La formation de niveau universitaire débouche sur un master en science. Les ostéopathes reçoivent ainsi une formation leur permettant d'exercer comme praticiens de premier recours. Ils sont habilités à investiguer et détecter les pathologies, à gérer et fournir des traitements, et au besoin à référer les patients à d'autres spécialistes. Cependant la profession est mal connue et le rôle joué par les ostéopathes dans le système de santé suisse reste à définir.

La « Swiss Osteopathy Science Foundation » a donc mis sur pied un projet visant à décrire l'activité des ostéopathes et leur champ de pratique. Ce rapport présente les résultats de cette enquête de grande envergure sur les soins prodigués par les ostéopathes à la population suisse, en 2016.

Les informations récoltées devraient aider à définir la profession, à identifier les priorités de formation, à formuler les standards de qualité des traitements, à fixer des critères d'amélioration, à identifier des priorités pour la recherche, et finalement fournir des données fiables aux parties prenantes afin d'établir les politiques et stratégies futures.

Méthodologie

Nous avons mené une évaluation des services au moyen d'un questionnaire adressé aux ostéopathes et d'une revue rétrospective de la pratique par analyse de dossiers de patients. Tous les ostéopathes enregistrés auprès du registre national des professions de santé (NAREG) ont été contactés pour répondre au sondage (n=1086). Les ostéopathes assistants ont été approchés par l'intermédiaire de la Fédération Suisse des Ostéopathes Assistants (SVOA-FSOA) ; (n=84).

Nous avons développé un questionnaire en ligne pour décrire le profil des ostéopathes, de leur environnement de travail et de leurs patients. Nous avons demandé à chaque ostéopathe de choisir aléatoirement jusqu'à quatre patients qu'ils ont suivis en 2016 en vue d'extraire de manière anonyme des informations de leur dossier.

Principaux résultats

Le taux de réponse au sondage était de 44.5% (521/1170) et nous avons reçu la description de la prise en charge de 1'144 patients lors de 3'449 consultations. En 2016, les ostéopathes ont contribué à la santé de la population en fournissant environ 1'700'000 consultations à 550'000 personnes, pour un coût total de CHF 200 millions. Ceci représente 6.8% de la population suisse (8.3 millions) et 2% des dépenses pour les pathologies musculo-squelettiques.

Quasiment la moitié des ostéopathes travaillent exclusivement seuls (46%) et rares sont ceux qui travaillent en milieu hospitalier (1.5%). La grande majorité des ostéopathes travaillent du lundi au vendredi et de 8h00 à 18h00. La durée moyenne d'une consultation est de 45 minutes. Les ostéopathes voient environ 36 patients par semaine pour un coût médian de CHF 120.- par consultation ; 80% des patients ont une assurance complémentaire qui couvre au moins partiellement ces frais.

L'âge moyen des patients adultes était de 45 ans. Les jeunes enfants (< 2 ans) représentaient 10% de l'ensemble des patients et 9% des patients avaient 65 ans ou plus. Les patients peuvent s'attendre à ce que leur plainte soit traitée en deux consultations. Les principales causes de

consultation étaient des douleurs d'origine musculo-squelettique (81%), principalement à la colonne vertébrale (66%). Les patients étaient généralement en bonne santé, 65% d'entre eux n'avaient pas de comorbidités déjà diagnostiquées et 16% avaient dû être mis en arrêt d'activité en raison de leur plainte. La plupart des patients (76%) se sont rendus directement chez l'ostéopathe traitant, alors que 18% ont été référés par un autre professionnel de la santé.

Les traitements manuels les plus fréquemment utilisés étaient ceux sur les tissus mous et des techniques articulaires (75% des patients) alors que les techniques avec impulsion étaient utilisées chez 45% des patients. Les autres formes de traitement prodiguées comprenaient les exercices (34.2%), la gestion du mode de vie et le soutien psychologique (35.5%), et les thérapies alternatives (3.9%).

L'analyse des procédures utilisées pour obtenir le consentement montre que 60% de patients ont accepté la consultation et le traitement de manière implicite plutôt qu'explicite (36-38%).

Conclusions

Le nombre important de consultations fournies à la population suisse indique qu'il existe une demande pour des soins ostéopathiques et que cette profession émergeante pourrait jouer un rôle important dans les traitements de premiers recours.

Plus de la moitié des ostéopathes pratiquent de manière isolée et il y a lieu d'améliorer la procédure de consentement et la tenue des dossiers, d'où l'importance pour la profession de mieux formaliser ses normes de diligences.

La récolte d'informations directement auprès des patients permettrait de connaître mieux encore les soins fournis par les ostéopathes suisses et les besoins des patients ayant recours à leurs services.

Mots clefs

Médecine ostéopathique, prestations de soins, audit clinique, Suisse

INTRODUCTION

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Osteopathic health care

Osteopathy can be described as a form of health care, offering assessment, diagnosis and management for a range of health-related conditions. The aim of osteopathic treatment is to optimise, restore and/ or maintain a person's natural structure, function and well-being (Adapted from Osteopathic International Alliance (OIA) report 2013).[1]

Globally osteopathic care is characterised by hands-on manual techniques, but an osteopath may provide additional supportive patient care and advice. Typically, osteopathy is known for the treatment of musculoskeletal disorders such as back and neck pain but osteopaths also treat other functional problems such as breathing and digestion.

There is diversity in the nature and type of osteopathic care provided not only by individual osteopaths but in Europe and internationally (OIA report 2013),[1] thus making it difficult to have a single definition of osteopathy. Describing what osteopaths do, to whom and for what condition is essential for our understanding of the profession.

Osteopathy is widely practiced in Europe, the OIA[1] estimated that there were approximately 38'000 practicing osteopaths in the European Union (17'500 in France, 5'500 in Italy and a further 6'000 in Germany). Regulation and state recognition of osteopathy varies between countries, issues surrounding the lack of research evidence for effectiveness and concerns about safety contribute to state and public reservation and acceptance of osteopathy.

In Switzerland, osteopathic care has been regulated by the cantons and the GDK-CDS. The GDK-CDS is the inter-cantonal health organ that has set the national standards for practitioners. They are to organise exams and certifications for practitioners until 2023. This certification is requested by most cantons to then be registered and recognised as an independent practitioner to provide care to the public. The Swiss Federation of Osteopaths is a professional association which osteopaths can join but there is no obligation to be registered. It is the privileged partner for the state to discuss with. The professional body represents osteopaths, not patients. Health care regulation and professional standards are governed by Federal and Cantonal laws.

Osteopaths like other health care professionals in Switzerland operate fairly independently and little is known about the osteopaths and their practice post certification. This contributes to a lack of understanding about the profession by the public and other health care professionals.

History of osteopathy in Switzerland

Osteopathic care was delivered and tolerated within the Swiss health system as a non-regulated profession until cantonal initiatives, led by Vaud (1996) and Geneva (2001), started integrating the profession in their health laws. This led health directors from different canton to seek to unify standards to admit future osteopaths. The inter-cantonal structure asked all professionals to gather into a single professional association that was founded in December 2005, the Swiss Federation of Osteopaths (SVO-FSO). By 2006, more than half of the Swiss cantons had included the profession in their laws and the conference of health ministers adopted a unified recommendation on standards for defining osteopaths. They planned a transitory period for practicing osteopaths running till 2012, where all osteopaths had to meet the minimum required training, equivalent to five years full time, and pass a clinical exam. New osteopaths all have to

justify a 5-year training with an addition of 2 years of internship as an osteopathic assistant and successfully pass a theoretical exam and a practical clinical exam. Over 1000 diplomas were issued by the intercantonal structure (GDK-CDS diploma). On the 30th of September 2016, osteopathy was recognised at a national level with the adoption of the federal law on allied health professions. The last CDS-GDK diploma are to be delivered in 2023. The new procedure is being defined and is currently under consultation.

Osteopathic education was introduced in Europe by John Martin Littlejohn who founded the British School of Osteopathy in 1915 and saw its firsts students enter the program in 1917. In 1953, at Paris, the "Ecole Française d'Ostéopathie" was the first school to open on the continent. Under the pressure of the Order of Medicine, the school was shut down in 1960 and moved to the UK in 1965 as the British London School of Naturopathy and Osteopathy before moving again to Kent in 1971 and becoming the European School of Osteopathy. In 1965, members of the International Osteopathic Association chose Switzerland to continue educating French speaking practitioners. This led to the creation of the European College of Osteopathy in Geneva in 1967. The Geneva school changed its name to European Etiopathic Centre in 1973, and to the Geneva School of Osteopathy in 2000. In 1990, the Swiss School of Osteopathy opened a full time 6-year program to train Swiss osteopaths and delivered over 750 diplomas before closing down in 2014. In 2014, the first students entered the state university program leading to a Bsc and a MSc in osteopathy. This training was put into place by the School of Health Sciences Fribourg of the University of Applied Sciences and Arts Western Switzerland. This state-run institution, member of Swissuniversities, is one of the largest universities in Switzerland. In 2016, the university welcomed 20'793 students, 3'657 students in the Department of Health, with an overall budget of 528 million CHF.- and a teaching staff of 1'800 full time equivalent. The university limits entries to 30 osteopathic students per year and delivers a bilingual program for all students (French and German). The MSc was opened in September 2017. The first BSc graduates received their degree in December 2017 and all 20 students entered the MSc program ending in 2019.

Purpose of the report

On the 30th of September 2016, the Swiss federal government formally recognised Osteopathy as a health profession within the Swiss health care system. Accordingly, a better understanding of osteopathic practice in Switzerland is required to inform future professional regulation, help define practice standards and ensure patient safety.

There are existing indicators for demographics and healthcare service provision from other health providers[2–4] but not for osteopaths. The profession requires data to describe osteopaths' scope of practice and their patient profile to better understand their role within the Swiss health service provision, formulate teaching goals, plan ongoing training, identify national research priorities,[5] and provide data for stakeholder negotiation.

The study's main objectives were to describe:

- Osteopaths' working conditions, their workload and working environment including interdisciplinary collaborations.
- Type of patients seen by osteopaths including their insurance coverage.
- Primary reasons patients seek osteopathic care.
- Nature and type of treatment given to patients
- Interdisciplinary relations
- Mechanisms in place to obtain and record consent.

Target audience

This report is aimed at those interested in understanding more about Swiss osteopathy, such as policy makers, health ministers, governmental and non-governmental organisations including health insurers, other health care professionals and their professional bodies, educators, students and interested members of the public.

Report structure

We briefly describe how we collected the information used to write this report and then present information about osteopaths, their practice and their patients. We conclude the report by discussing health care implications within the context of the Swiss health care system.

SYNOPSIS OF METHODS

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Design

This was a questionnaire survey and osteopathic practice audit review, which is a type of service evaluation.[6,7] The study was conducted between February and August 2017.

All osteopaths with a GDK-CDS diploma, and all assistant osteopaths who were registered with the FSOA-SVOA, were invited to participate in an online-survey. Responding osteopaths were asked to provide contact details of their assistants who were not members of the FSOA-SVOA.

Osteopaths and assistants were asked to provide information about themselves and their practice and then provide information on four randomly selected new patients or patients consulting for a new complaint or episode of a previous complaint during 2016.

All patient data was anonymised in accordance with the Swiss law on data protection (DSG/LPD 235.1).

The study was done by the Unit of Research in Mobility, Faculty of Health which is part of the Universities of Applied Sciences. The study was funded via donations from Swiss osteopaths via the Swiss Osteopathy Science Foundation.

Surveyed population

In January 2017, there were 1086 osteopaths who had obtained a GDK-CDS certificate in Switzerland (35 graduated in September 2016) and we estimated there were a further 80-90 assistant osteopaths working under the supervision of a GDK-CDS osteopath before being eligible to take the state exam. All were invited to take part in the survey (see flow chart, **Figure 1**).

Seven GDK-CDS osteopaths reported not having practiced in Switzerland in 2016. Reasons given for non-practice were: parenting (n=2), studying (n=1), teaching and/or research (n=2), working in unrelated field (n=1), and having worked abroad (n=1).

521 practicing osteopaths gave information about themselves and their practice: of these, 473 were GDK-CDS osteopaths (43.4% of all GDK-CDS osteopaths), and 48 were osteopathic assistants. The participating osteopaths provided information about 1091 patients. Response rates were highest for GDK-CDS osteopaths, members of professional associations (SVO-FSO: 56.0%, 413/737; Ostéo-Swiss: 53.5%, 38/71), and among assistants working under the supervision of a GDK-CDS osteopath (57.1%, 48/84). Response rates were lowest among osteopaths who were not members of professional associations (8.9%, 25/281). Little is known about reasons for not participating; only two osteopaths gave reasons: “not interested in research”.

The responding practicing osteopaths represent 44.5% (521/1170) of the estimated total number of certified GDK-CDS osteopaths and assistant osteopaths in Switzerland. The sample is representative of gender (54.7% of women vs. 51.6%, p=0.263) and of the linguistic regions (German 39.2% / French 58.8% / Italian 1.8% / Romansch 0.2% vs. 39.5% / 56.0% / 3.5% / 0.8% respectively, p=0.050).

Among practicing osteopaths who participated to the study (n=521), 62% of them were from the French speaking part and 71.4% were working in urban areas versus 37.0% in rural areas.

The sample underrepresents GDK-CDS osteopaths that were not affiliated to any professional associations (4.8% vs. 25.9%, p<0.001).

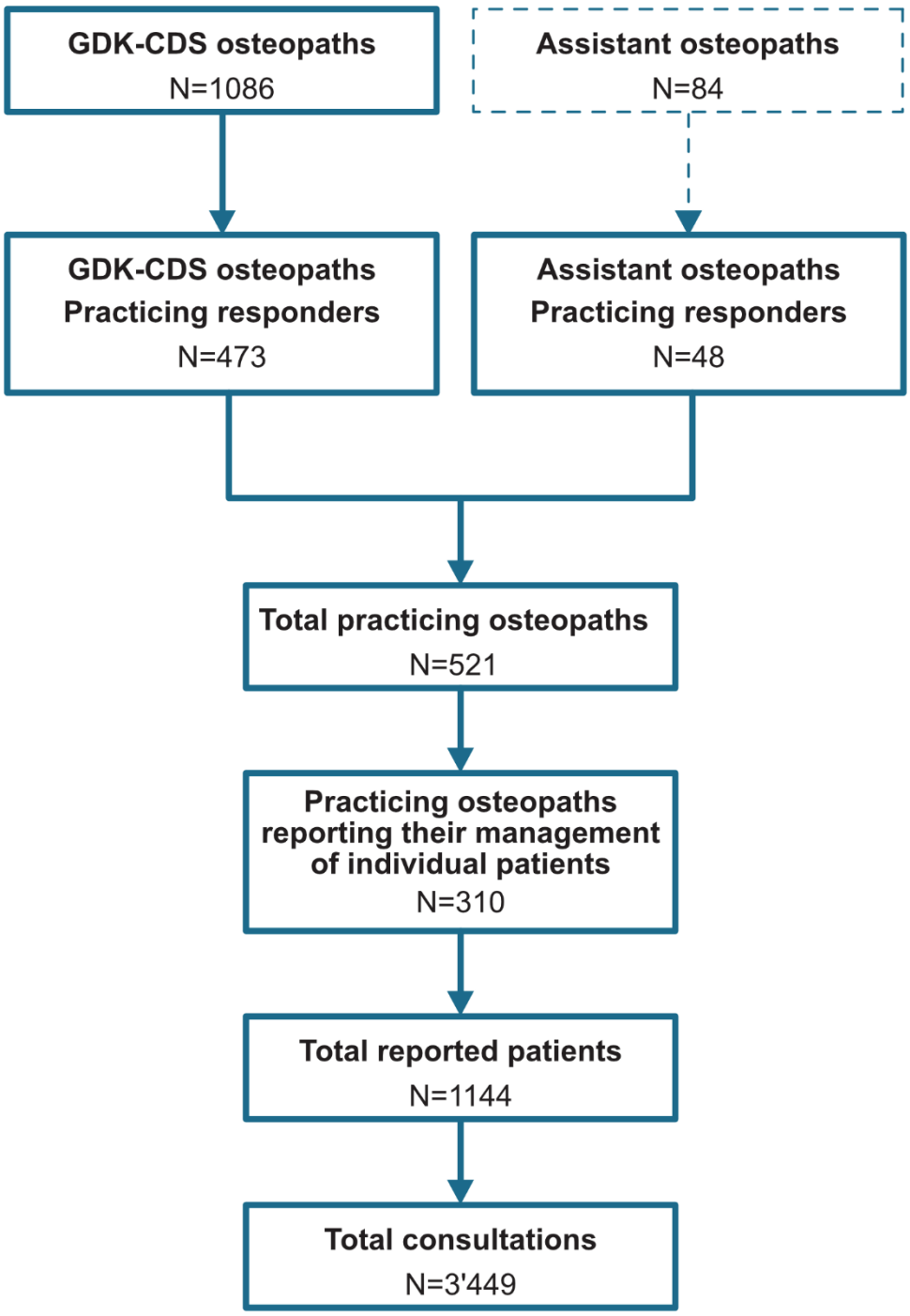

Figure 1 Flow chart illustrating participants

CHAPTER 1
PROFESSION DEMOGRAPHICS

CHAPTER 1: PROFESSION DEMOGRAPHICS

Distributions and demographics of Swiss osteopaths

Since 1 January 2007, the Swiss Conference of the Cantonal Ministers of Public Health (GDK-CDS) published directives to the cantons on the regulation of osteopathy and set up a list of requirements to qualify for the Inter-Cantonal Osteopathy Diploma which requires five years of full-time study, commonly to Master's level, and a 2-year full-time internship.

The Swiss Red Cross is responsible for holding the national register of health professions (NAREG) that lists osteopaths who have passed the Diploma examination and are therefore entitled to be called GDK-CDS 'osteopathe, osteopath or osteopata'. In 2007, six osteopaths passed their CDS-GDK exam to be members of a state exam jury. Between 2008 and 2012, a transitionary period was set up for practicing osteopaths. If osteopaths passed the exam, they were entitled to receive the state diploma. In January 2017, 1086 people have received their GDK-CDS diploma.

The overall population density of GDK-CDS osteopaths in Switzerland in 2017 was 12.9 osteopaths per 100'000 residents. However, some cantons authorise osteopaths to practice without a GDK-CDS diploma. In 2016 there were 1368 osteopaths that were on the registry to be refunded by private insurances (EMR-RME) using this data the population density of osteopaths is 16.2 osteopaths per 100'000 residents. The estimated number of osteopaths in Switzerland is provided in **Table 1**.

The density of osteopaths around Switzerland is shown in the map below (**Figure 2**). Canton Vaud shows the most osteopaths (46.1 osteopaths per 100'000 residents) and Cantons Appenzell I.Rh. the least (1.8 osteopaths per 100'000 residents). The density of osteopaths is three times higher in French majority speaking cantons than in German speaking majority cantons (35.2 vs. 9.5 osteopaths per 100'000 inhabitants). In absolute numbers, 56% of all osteopaths have their main clinical activity in French speaking cantons when only 25.9% of Swiss residents live there.

To put this data in context with other European countries there are around 8 osteopaths per 100'000 UK residents and 30 osteopaths per 100'000 French residents.[1]

Cantons	EMR-RME	SVO-FSO	Population census (2016)	Density (ost. / 100'000 residents)		
				EMR-RME	SVO-FSO	GDK-CDS
Appenzell A. Rh.	1	2	54’954	1.8	3.6	
Appenzell I. Rh.	2	0	16’003	12.5	0.0	
Aargau	38	23	663’462	5.7	3.5	
Basel Land	27	13	285’624	9.5	4.6	
Basel Stadt	33	16	193’070	17.1	8.3	
Bern	119	64	1’026’513	11.6	6.2	
Fribourg	94	88	311’914	30.1	28.2	
Geneva	128	76	489’524	26.1	15.5	
Glarus	2	2	40’147	5.0	5.0	
Graubünden	14	7	197’550	7.1	3.5	
Jura	27	21	73’122	36.9	28.7	
Luzern	22	14	403’397	5.5	3.5	
Neuchâtel	54	45	178’567	30.2	25.2	
Nidwalden	2	1	42’556	4.7	2.3	
Obwalden	4	4	37’378	10.7	10.7	
Schaffhausen	8	6	80’769	9.9	7.4	
Schwyz	8	3	155’863	5.1	1.9	
Solothurn	11	4	269’441	4.1	1.5	
St Gallen	46	19	502’552	9.2	3.8	
Ticino	48	24	354’375	13.5	6.8	
Thurgau	28	10	270’709	10.3	3.7	
Uri	1	1	36’145	2.8	2.8	
Valais	101	76	339’176	29.8	22.4	
Vaud	362	239	784’822	46.1	30.5	
Zug	32	17	123’948	25.8	13.7	
Zürich	156	105	1’487’969	10.5	7.1	
Switzerland	1368	853*	8’419’550	16.2	10.1	12.9

Table 1 Estimated number of osteopaths in Switzerland in 2016.
* 27 osteopaths have clinical activities in more than one cantons.
Sources: EMR-RME member list delivered to insurance in July 2016 / SVO-SFO registered members in July 2016, NAREG registry in July 2016 of GDK-CDS diplomas.

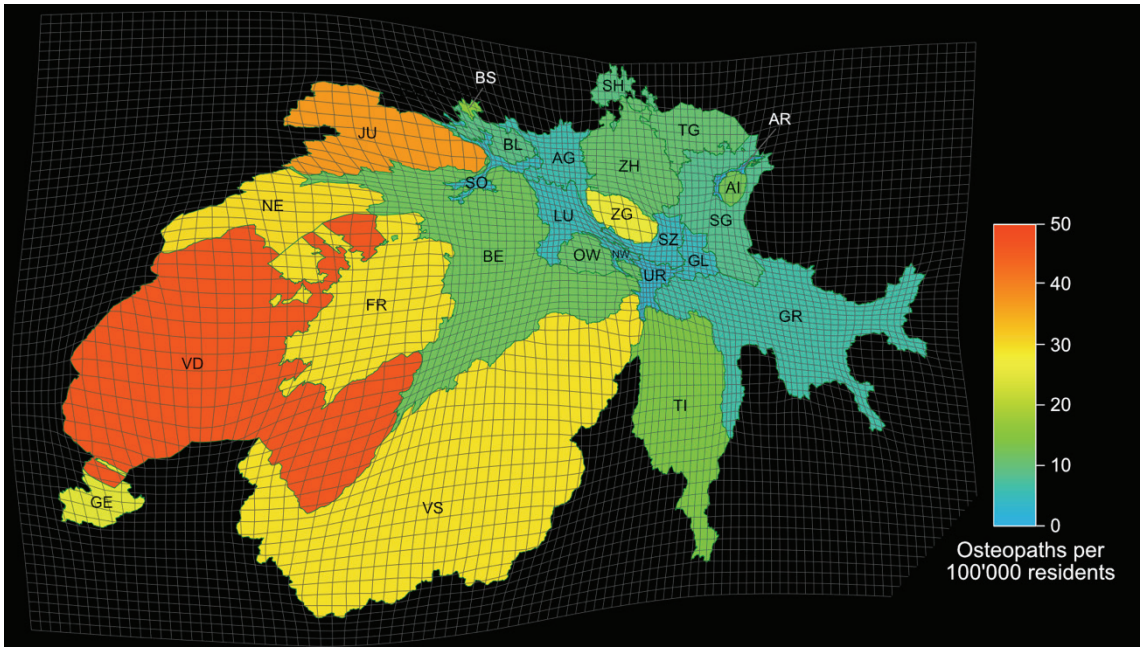

Figure 2 Area cartogram with each Canton rescaled in proportion to the density of osteopaths in 2016. Sources: Registry of Empirical Medicine in July 2016 / Switzerland's population 2016 census from the Federal Statistical Office)

Age and gender shift

The age and sex profiles of our survey responders was 54.7% (285/521) female and that 60.3% (304/521) were 40 years old or above; 0.8% (4/521) of osteopaths were 65 years or older. With time, the gender profile is likely to shift from a male majority to a female majority (**Figure 3**).

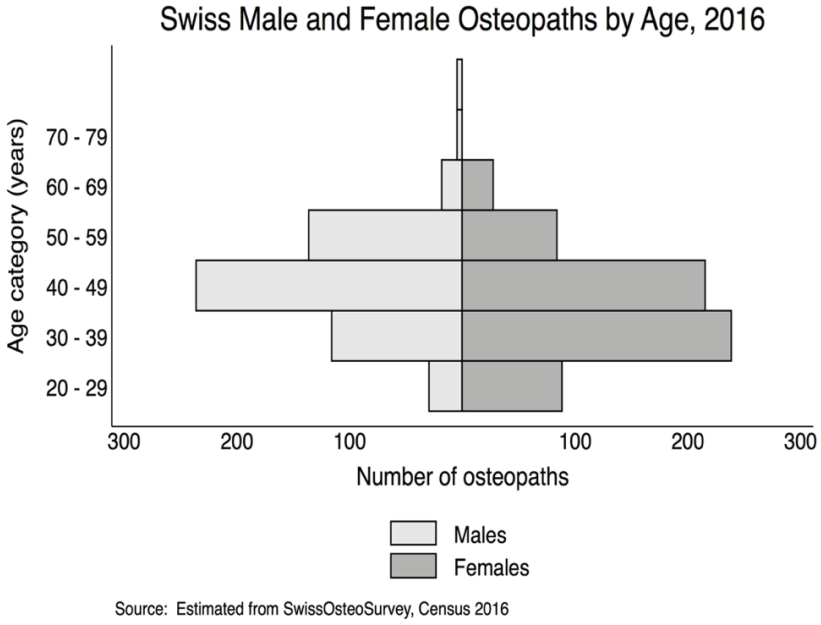

Figure 3 Gender shift from male to female from older to younger osteopaths.

Growth of the profession

Looking at the age profile of osteopaths we expect to see an attrition of around 20 osteopaths over the next 5 years based on a retirement age of 65 years. We do not know how many osteopaths leave the profession for reasons other than retirement. It will be interesting to monitor over time the average duration of years spent in osteopathic practice.

The School of Health Sciences, with its division in osteopathy, is currently the only recognised higher education institution provider in Switzerland. From 2019, it will produce around 30 new graduates per year. Should the profession wish to maintain its 'market' presence with the current provision of 13 osteopaths per 100'000 it may need to consider training more osteopaths considering the expected attrition rates, population growth (estimated expansion to 9 million in 2025) and the gender shift towards more female osteopaths (the data indicates that women see 30% less patients than men).

Training, working experience and continuous professional development

Since 2007, Switzerland set the minimum acceptable osteopathic education academic qualification standard at a university master degree level. This is in line with the European Standards for Osteopathy Services[8] that recommends European countries provide education to level 7 standard in the European Qualification framework (i.e. Equivalent to a Master's degree).

At present the age an osteopath can receive a CDS-GDK certificate if they graduate from school at 18 years old is 25 years (7 years after a 5 year MSc and 2 years as an assistant). It would appear that the majority of osteopaths trained in Switzerland stay in Switzerland, ~30% trained in other parts of Europe (**Figure 4**).

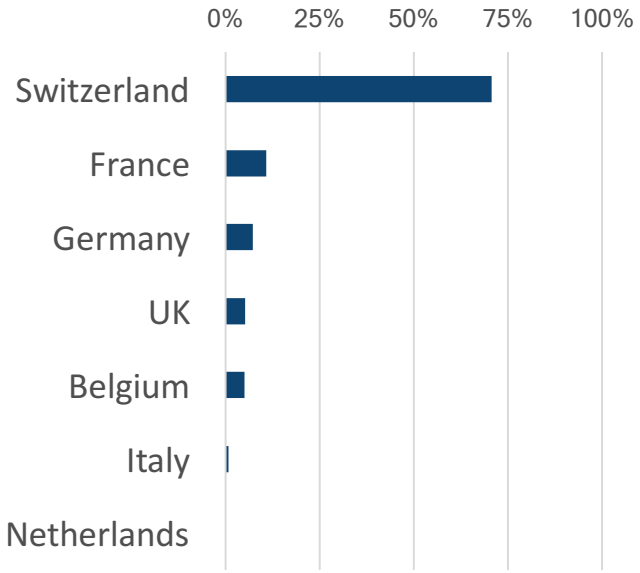

Figure 4 Proportion of osteopaths with degrees from different countries. (n=521)

The most common osteopathic qualification held by Swiss osteopaths are diplomas obtained from private schools (488/521; 93.7%). We however noted that many osteopaths with a diploma degree from private schools claimed having received other degrees from unestablished or non-state validated universities (27 Bachelor, 48 Masters, and 2 PhDs in osteopathy). From our survey, only 9 respondents (1.7%) are believed to have an academic qualification in osteopathy at Master level. Considering other training, 0.8% have a PhD, 7.1% have a Masters, 16.5% have a Bachelor degree, and 1.6% have undergone advanced studies (CAS, DAS, MAS).

Osteopaths who are registered with the Swiss Federation of Osteopaths are required to partake in continuous professional development (CPD) activities. The Registry of Empirical Medicine requests a minimal number of hours for CPD for osteopaths of 20 hours per annum. The SVO-FSO also requires members to undergo continuous training with a total of 30–38 hours of training depending of the type of professional development. Members are free to choose the training they wish within three categories (A: osteopathic, medical science or university trainings; B: supervised or group personal development, para-osteopathic training; C: research or teaching) but it is recommended they structure their training. The required training is different from above with at least 30 hours in category A, or 22 in A and 16 in B or C.

When accounting for all forms of continuous professional development, the total number of reported hours is above requirements of 36 hours with an average of 71 hours. The CPD reported reflects the SVO-FSO policy of according most CPD 'points' to structured courses **(Table 2**). The advantage of structured courses is that osteopaths have the opportunity to mix with other osteopaths and health care professionals which may ameliorate some of the problems associated with being a 'lone –practitioner' by learning with others. However, quality and content of these courses are unknown as is the receipt of information by osteopaths and how this translates back into good patient care. We also do not know whether the CPD done is developing the osteopaths' areas of weakness or improving that in which they are already competent.

	med (IQR)
Structured osteopathic course	30 h (20;40)
Structured non-osteopathic course	0 h (0;10)
Lectures	0 h
Group or practice meetings	2 h (0;10)
Higher education	0 h
Teaching/mentoring/tutorials	0 h
Publishing	0 h
Distance learning	0 h
Reviewing and reading scientific articles	4 h (0;12)
Congress/conference	10 h (0;20)
Internet research	10 h (0;20)
Other	0 h
Overall	**71 h (45;125)**

Table 2 Number of hours dedicated to continuous professional development in 2016. (n=521)

Language skills

Most responding osteopaths (70.6%; 368/521) work in the French-speaking region of Switzerland (**Figure 2**).

Most osteopaths consider themselves either *fluent* or *good* in French (82.9%), English (76.7%) and/or German (58.9%) (**Figure 5**). English and French were the two languages where only a small number of osteopaths stated they have *no* or *limited skills* (EN – 23.3%, FR – 17.1%). Osteopaths working in German-speaking regions of Switzerland master English (86.3%) better than French (60.2%). For those working in the French-speaking part of Switzerland, more osteopaths master English (76.7%) than German (59.9%). This may change in the future given the MSc in osteopathy in Switzerland is delivered bilingually, therefore graduating students should be more proficient in both French and German; English remaining essential to access to the literature in the domain.

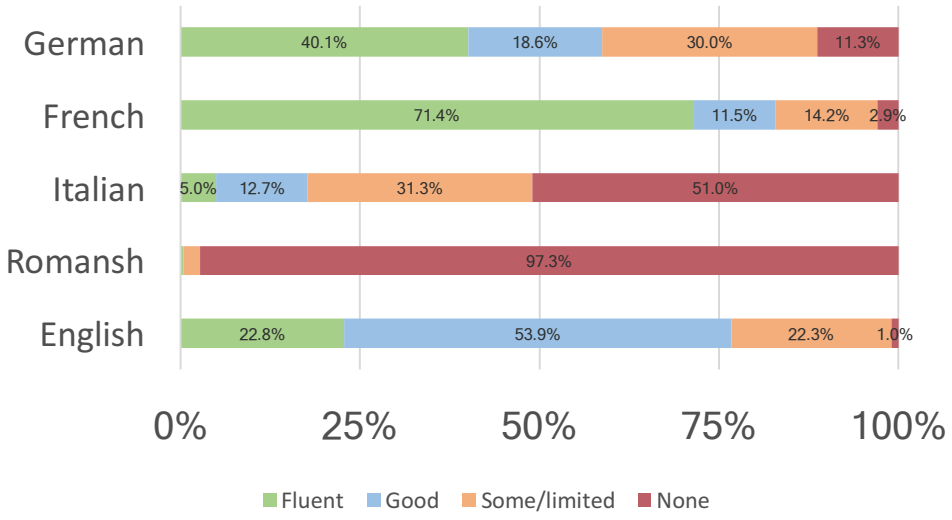

Figure 5 Language fluency for Swiss osteopaths (n=521)

Affiliation to registries

The majority (74.2%; 806/1086) of GDK-CDS osteopaths are affiliated to a professional body (**Table 3**). The Swiss Federation of Osteopaths (FSO-SVO) represented the largest professional body for the osteopathic profession in Switzerland with a total of 853 members in July 2016. This included 772 GDK-CDS osteopaths, 84 assistants, and 32 osteopaths without a GDK-CDS diploma. Up to May 2018, for historical reasons, the SVO-FSO would only accepts those practicing osteopathy alone and did not accept members who exercise another health-profession. Swiss-Ostéo however does not have this constraint and includes many members who practice both physiotherapy and osteopathy. In 2016, Swiss-Ostéo included 116 members of which 71 had a GDK-CDS diploma. For physicians, the Swiss Association for Osteopathic Medicine (SAGOM) includes members who practice both osteopathy and medicine. In 2016, this association had 37 members but none of them had a GDK-CDS diploma.

	CDS-GDK osteopaths	
	n	%
SVO-FSO	737	67.9%
Swiss-ostéo	71	6.5%
SAGOM	0	0%
Other / Non-affiliated	281	25.9%
Total	**1086***	

Table 3 Number of GDK-CDS osteopaths in professional bodies (N=1086).
* Three osteopaths belonged to both bodies.

Affiliation to insurance registries is required for osteopaths to be refunded by private complementary insurances. From our survey, the Registry for Empirical Medicine (EMR-RME) included nearly all (99.6%) GDK-CDS practicing osteopaths (**Figure 6**).

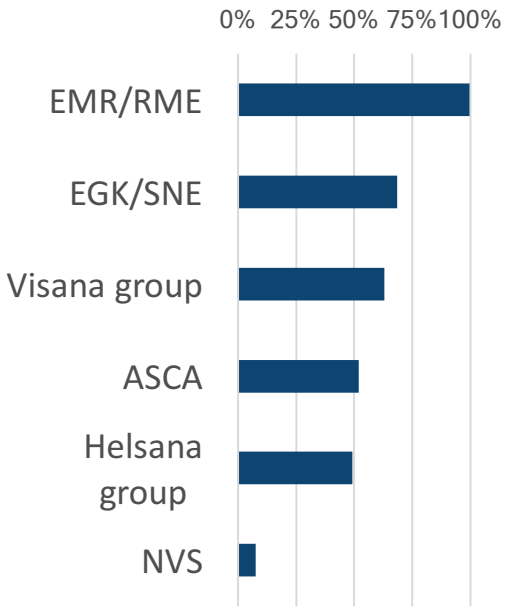

Figure 6 Affiliation to registries for reimbursement from private complementary insurances.

Economic contribution

From our survey, we estimate that Swiss GDK-CDS osteopaths deliver approximately 1,700,000 consultations per year lasting between 30 and 60 minutes. Consultations cost on average CHF 120.- each. In 2012, a different survey estimated that 6.8% of the population aged 15 years or more had attended an osteopath during the prior 12 months with an average of 3.7 consultations (median 2 consultations).[9] Both these data sources lead to the same estimation for the overall expenditure on osteopathic care in Switzerland; approximately CHF 200 million per annum.

CHAPTER 2
PROFILING OSTEOPATHIC PRACTICE

CHAPTER 2: PROFILING OSTEOPATHIC PRACTICE

Practice setting

Most osteopaths in this survey were self-employed (81%; 422/521); around 21% were working as employed associates or assistants (**Table 4**).

	n	%
Self-employed osteopath	419	80.4%
Employed		
Assistant in a private practice	65	12.5%
Associate in a private practice	41	7.9%
Associate in a hospital/clinic	4	0.8%
Voluntary osteopathic work	8	1.5%
Total	**521**	

Table 4 Employment status for GDK-CDS osteopaths and osteopath assistants (n=521)

Our survey indicated that 46.1% (240/521) osteopaths worked exclusively on their own, 14% worked occasionally (73/521) with others and only 39.9% worked with others on a daily basis (208/521). This has implications for professional regulation as monitoring of care quality is almost exclusively by patient notification of a concerns.

Very few practitioners worked in a hospital setting (1.5%; **Table 5**) which is not a-typical for primary care health care practitioners but is slightly less than that reported for Europe overall where around 3% of osteopaths work in a hospital setting (OIA report).[1]

	n	%
Dedicated private practices	497	95.4%
Individual private practice	281	53.9%
Group private practice	259	49.7%
At home	29	5.6%
Dedicated room	20	3.8%
Shared domestic/clinical room	9	1.7%
Patients' homes	20	3.8%
Health centres	33	6.3%
Hospital	8	1.5%
Private clinic	12	2.3%
Teaching clinic	5	1.0%
Social care centre	9	1.7%
Total	**521**	

Table 5 Type of practices osteopaths work in. (n=521)

Working time as practitioners

The average number of years in practice was 11 years (range 0 to 36 years). In our survey, osteopaths spent most of their time in clinical activities 87.4% (median 100%; IQR 80% – 100%) with 8.1% of osteopaths working 50% or less. Women were more likely to work part time than men (55.4% vs. 26.3%, p<0.001).

Osteopaths in our survey saw around 36 patients per week (IQR 26 – 42) of these around 5 were new patients. Men saw more patients per week than women (42.7 vs. 30.2). Only a small minority of osteopaths saw patients on weekends (13.7%; 71/521) or offered home visits (3.8%). Patients are mostly seen Monday to Fridays (98%) and between 8:00 and 18:00 (94%).

A fifth of osteopaths reported working in professional activities other than their osteopathic clinical activity (**Table 6**).

	n	%
Non-osteopathic health services	35	6.7%
Education		
For osteopathic students	37	7.1%
For other healthcare students	15	2.9%
Management	3	0.6%
Osteopathic association work	4	0.8%
Counselling for insurances	2	0.4%
Humanitarian work	2	0.4%
Research	8	1.5%
Studying	8	1.5%
Work in unrelated field	26	5.0%
Total	**521**	

Table 6 Other professional activities (n=521)

Planned length of consultations, fees and insurance coverage

In our survey, the reported planned median duration of consultations was 45 minutes. This duration was similar whether the attending patient was new, returning for a new complaint, or being followed-up for a given condition (**Figure 7**).

Fees for new patient consultations (n=1'144) ranged between IQR 120.- ; 150.-, mean CHF 120.- for standard consultations, CHF 100.- (IQR 80.- ; 120.-) for short emergency consultations, and CHF 130.- (IQR 120.- ; 150.-) for home visits. The maximum fees charged were CHF 250.- for home visits and CHF 180.- for standard consultations.

The hourly fee charged for standard consultations (**Figure 8**) was on average CHF 160.33 (IQR 147.-; 170.-). Price was dependent on the: duration of consultations – longer consultations are cheaper by CHF 0.78 for every additional 5 minutes of consultation, the linguistic region – consultations were more expensive in the German speaking part of Switzerland (+ CHF 23.40 per hour), the urban setting (+ CHF 6.- per hour), and the osteopath's gender – men were more expensive (+ CHF 2.40 per hour). Age or years of experience did not affect fees.

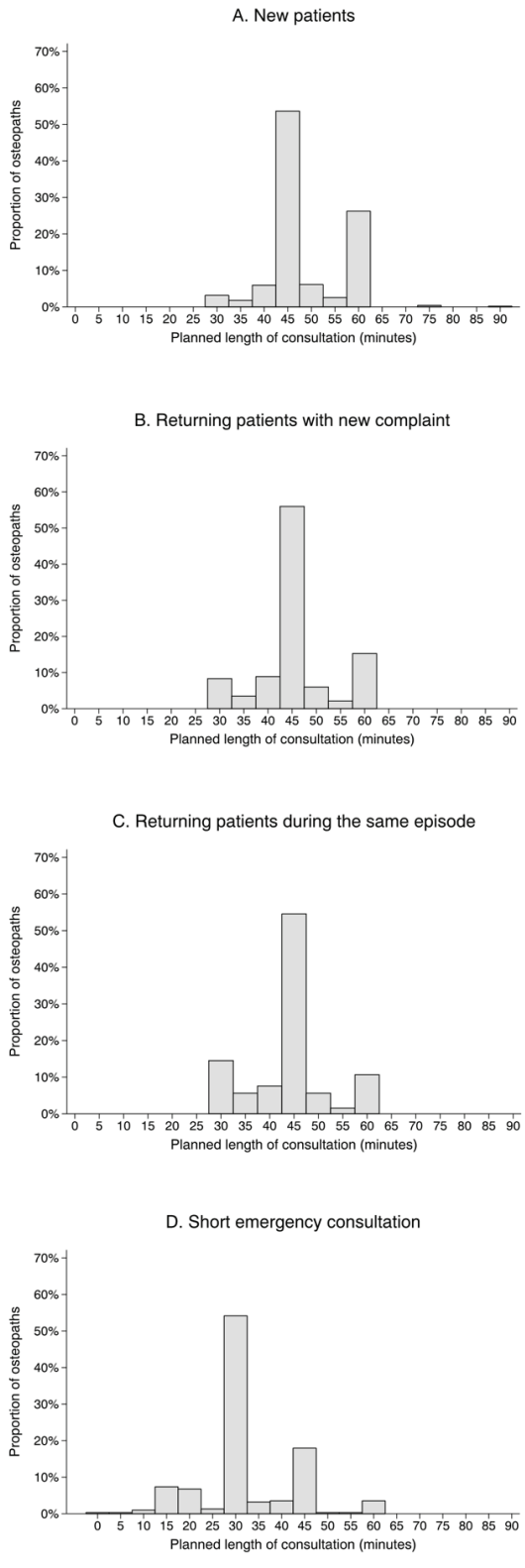

Figure 7 Planned duration of consultations for new patients (A), returning patients with new complaint (B), follow-up (C), and short "emergency" (D). *(n=521)*

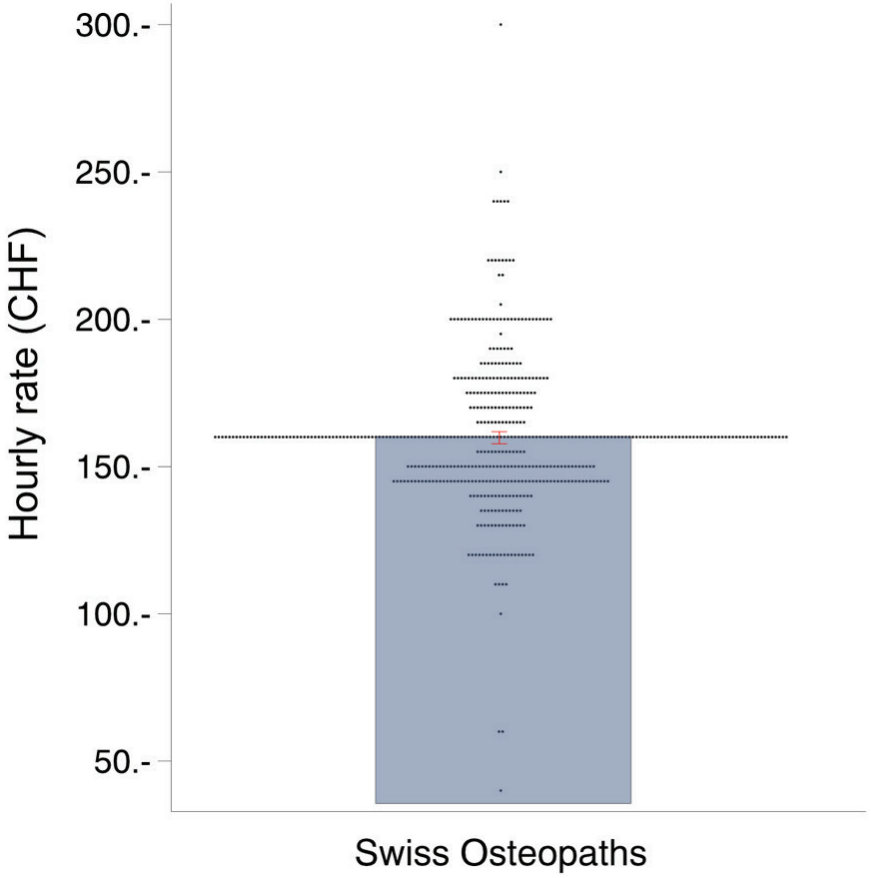

Figure 8 Hourly fees charged by osteopaths in 2016. Open small dots correspond to individual measures; red lines to CI95%. *(n=521)*

Osteopathic care is not refunded by the compulsory health insurance (KVG/LAMal). Supplementary private insurance is required, 60% of the adult population buy this additional cover.[9]

In our survey, osteopaths estimated that 83.7% of their patients were covered by a supplementary private insurance (**Table 7**). This was confirmed by patient records. We observed that payment for osteopathic care in 80% of cases was from insurance cover with 14% paying privately. Lack of coverage might prevent some patients to access to osteopathic care, however 80.5% of osteopaths granted a price reduction for less fortunate patients in 2016, thereby facilitating their access.

	n	%
Insurances	917	80.2%
Private complementary insurance	890	77.8%
Employers accident insurance	13	1.1%
Private accident insurance	12	1.0%
Invalidity insurance	2	0.2%
The patient	163	14.2%
Parents or family	3	0.3%
Patient's employer	1	0.1%
Free treatment	2	0.2%
Don't know / can't tell from the record	58	5.1%
Total	**1144**	

Table 7 Source of payment for consultation fees

Diversity in treatment options

In our survey, 99.8% of osteopaths reported using osteopathic manipulative treatment, 95.2% prescribed exercise, and 99% used psychological and lifestyle management. Adjunct therapy, which normally requires additional training, was used at least once by 53.5% of osteopaths in 2016. Osteopaths used a wide range of different techniques and approaches with their patients. Osteopathic manipulative treatment used on most patients were (in order): soft tissue, articulation, visceral and cranial techniques, HVLA thrust, and functional techniques. Adjunct therapies, such as acupuncture and homeopathy were rarely used (**Figure 9**).

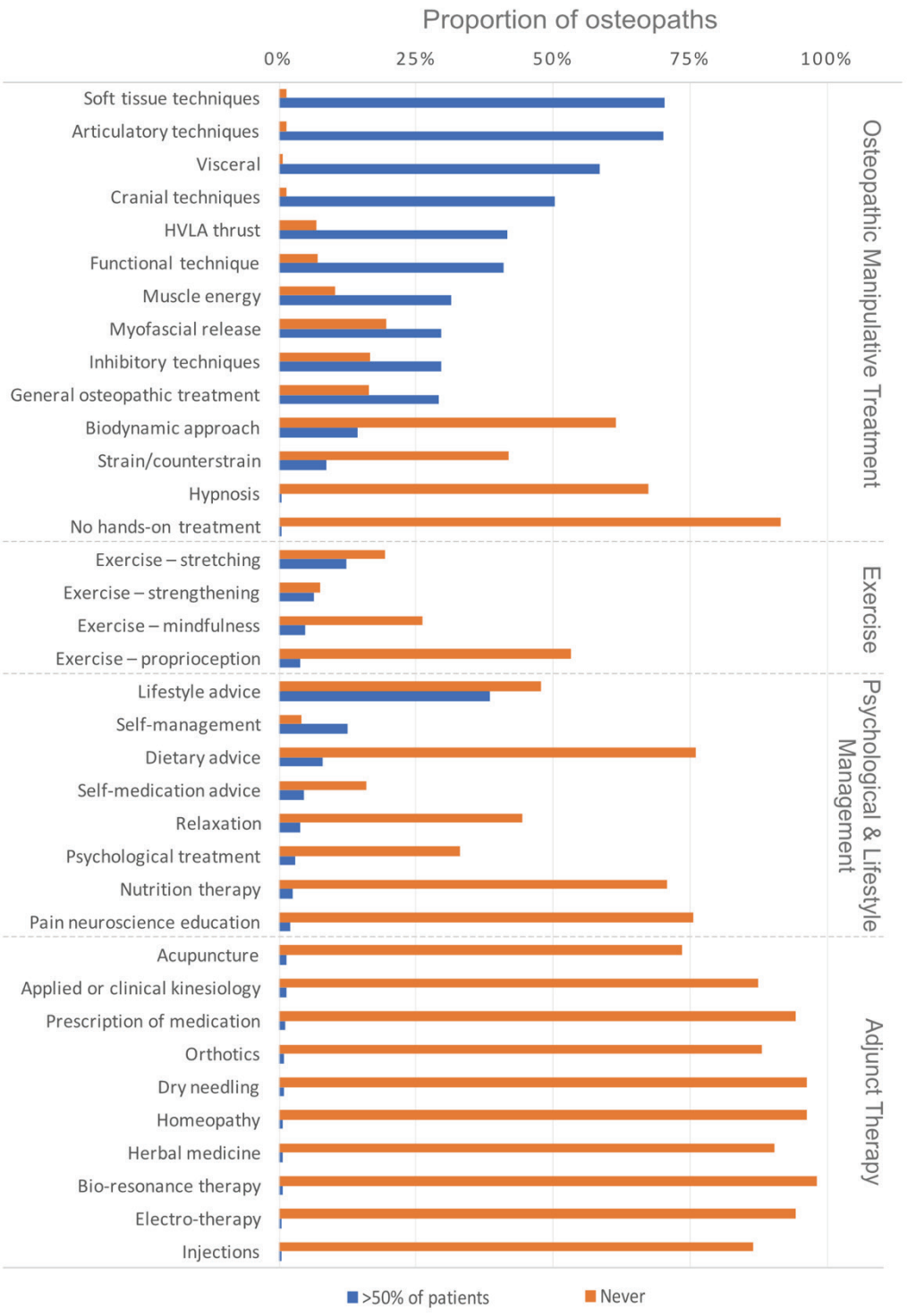

Figure 9 Proportion of osteopaths using techniques and treatments. In blue those reporting practicing the treatment on over 50% of their patients, in red those never practicing the given treatment. *(n=521)*

Specialisation

Nearly all osteopaths (88.5%; 461/521) provided their services to a wide range of the public over all ages (**Table 8**). Only 2.3% of osteopaths limited their practice to a specific group or type of patient (that is 90-100% of their time).

	≥50% of patients		None	
	n	%	n	%
Infants (< 1 year)	19	3.6%	47	9.0%
Children (1–12 years)	8	1.5%	15	2.9%
Adolescents (13-17 years)	6	1.2%	7	1.3%
Adults (18–64 years)	264	50.7%	1	0.2%
Elderly (≥ 65 years)	61	11.7%	4	0.8%
Pregnant women	15	2.9%	14	2.7%
Sportsmen/women	36	6.9%	41	7.9%
Performing artists	6	1.2%	176	33.8%
Total	**521**		**521**	

Table 8 Proportion of osteopaths who see patients of different age groups or specific conditions. (n=521)

Osteopaths provide paediatric, obstetrical and geriatric care. Nearly all osteopaths had treated at least one elite sportsperson (92.1%). This was less the case for performing artists (65.9%) and animals (3.7%).

CHAPTER 3
OSTEOPATHIC PATIENT CARE

CHAPTER 3: OSTEOPATHIC PATIENT CARE

Patient demographics

The responding osteopaths reported data from 1144 patients and 3449 consultations. 73% of the patients' records reviewed were selected from the first random date choice given and were evenly represented throughout the year, averaging 10% of the sample in each month, the upper range was 12% of patient sample that were seen in June and 6% in December. 33.4% of patients had never been to an osteopath before, 17.2% had seen another osteopath previously, 24.2% had received treatments from the same osteopath for a different complaint, and 17.1% had received treatment for a prior episode for the same complaint.

Patients from the Lake Geneva region were most represented in respect of osteopath density over cantons (**Table 9**).

	In study		Relative density	
	n	%	Index*	Residents (millions)‡
Lake Geneva Region (GE, VD, VS)	446	39.0%	1.00	1.61
Espace midlands (BE, FR, JU, NE, SO)	360	31.5%	0.70	1.86
Northwestern Switzerland and Zurich (AG, BS, BL, ZH)	209	18.3%	0.29	2.63
Eastern Switzerland (AI, AR, GL, SG, SH, TG)	51	4.5%	0.19	0.97
Central Switzerland (LU, NW, OW, SZ, UR, ZG)	42	3.7%	0.19	0.80
Graubünden and Ticino (GR, TI)	30	2.6%	0.20	0.55
Abroad	6	0.5%	–	–

Table 9 Region of residency for osteopathic patients. (n=1144)
* Canton with the highest density was given the index of 1
‡ Data from 2016 Census, OFS – La population de la Suisse 2016

In our sample 57% of patients were female. **Figure 10** shows the age profile of patients. The average age for female adults (over 18 years) was 44 and for males 46 years.

Ten percent of the sample were infants, aged under 2 years (118/1142), 8.4% were aged between 2 and 18 years. Infants were seen mainly in the first months of their lives possibly indicating a gap in standard health care provision for parents and their new born babies.

The OIA survey 2012 indicated that around quarter (23.4%) of all osteopathic patients globally were children under 18 years old, with 9% infants (0-12 months), thus indicating that the age distribution of our sample is similar to that worldwide.[1]

In 2016, there were just over 1.5 million retired residents (aged 65+) in Switzerland representing 18.1% of the population; 425'000 of them were 80 years or older, representing 5.1% of the population.[10] The older age groups are less likely to seek osteopathic care with only 9.2% of osteopathic patients aged 65+ and less than 1% aged 80+. Possible explanations are the lower coverage by complementary insurance, osteopaths not been integrated in health networks, and osteopathic care been less popular for these age groups.

Forty-five percent of our sample of patients were employed, 13% self-employed, 9% home carers, 8% were retired, 10% were children not at school and 14% were still in school or higher education.

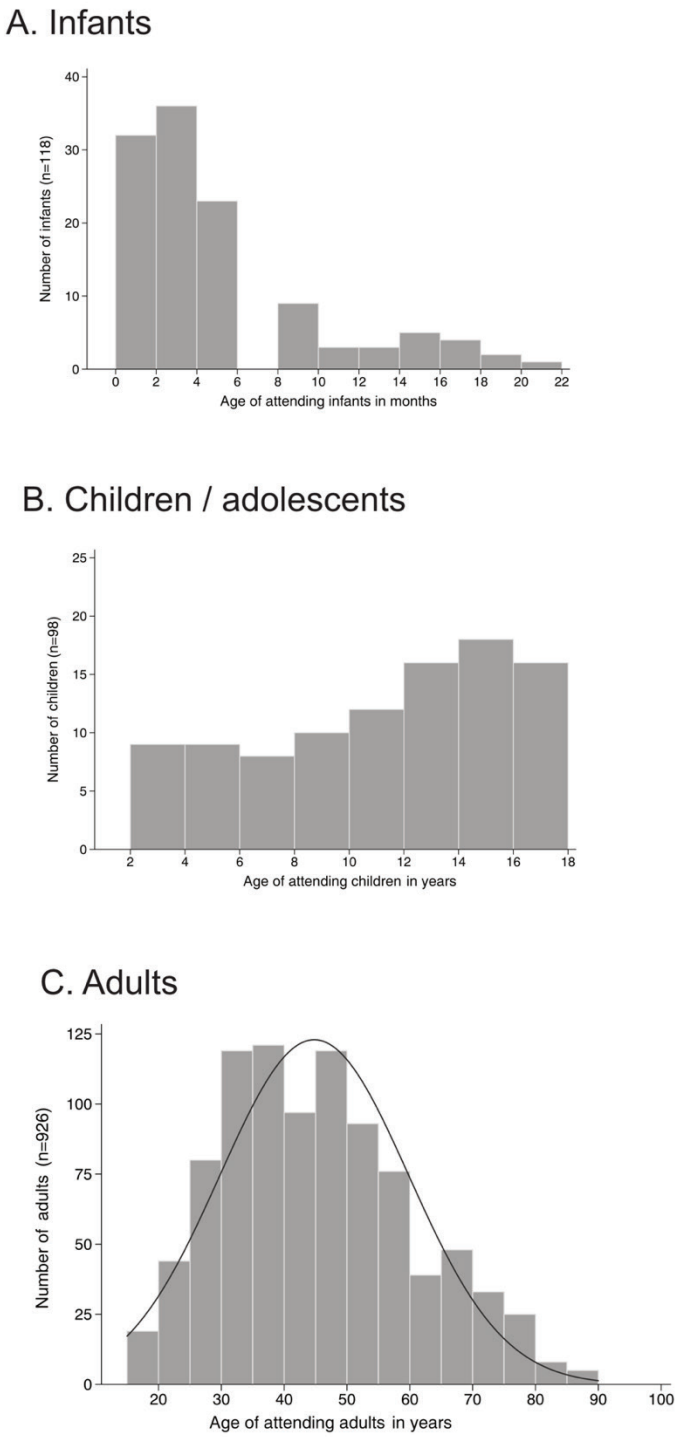

Figure 10 Age distribution of osteopathic patients for three age groups; 0–23 months (A), 2–17 years (B), 18–90 years (C)

Duration and structure of consultation

A majority of patients (55%) are seen within 7 days (10% within one day), 30% waited 8 days or more to be seen by an osteopath. This could be because they wanted to see a particular osteopath or because they requested a date in advance not necessarily because the osteopath was unavailable or too busy.

First consultations for all patients were on average 48 minutes long (range 5–160 minutes), subsequent appointments were on average 46 minutes long (range 15 – 145 minutes). This is slightly longer than the average duration reported by the osteopaths of 45 minutes, regardless whether the appointment is the first or a subsequent visit (**Figure 11**).

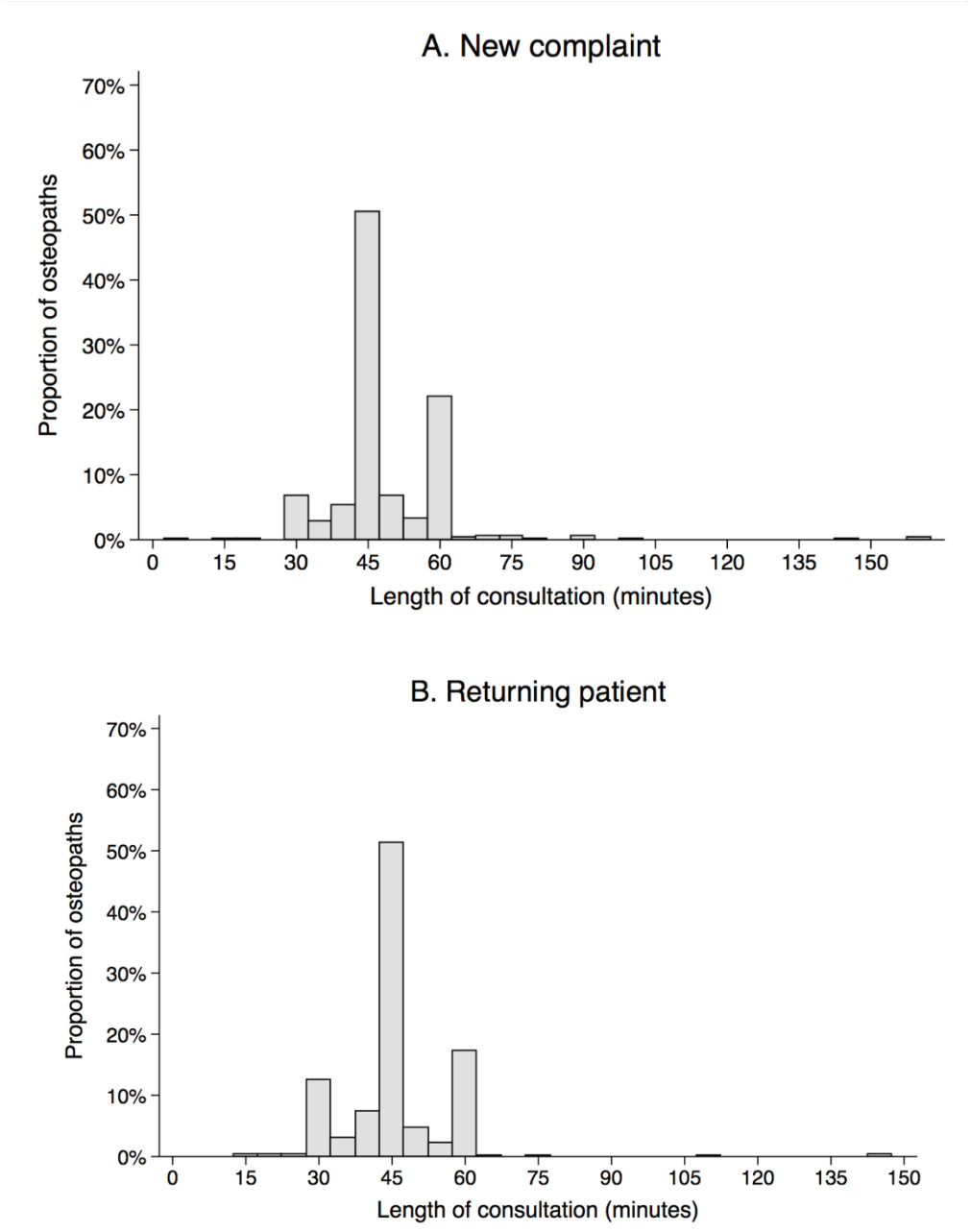

Figure 11 Duration of consultations

The consultations generally consisted of case history, examination, discussion of treatment, discussion for consent, treatment, advice and guidance and administration (**Table 10**), with the majority of time spent on treatment (20 minutes) and the least on consent (1 minute).

	Median	p25	p75
Case history	10′	8′	13′
Examination	10′	5′	10′
Discussion of treatment	2′	1′	5′
Discussion for consent	1′	0′	1′
Treatment	20′	15′	27′
Advice and guidance	3′	1′	5′
Administration	3′	1′	5′

Table 10 Duration for sections of the first consultation in minutes (n=1′144)

Number of consultations

The average number of treatments reported per patient was 3.06 (range 1 – 100), although 194 patients (17%) were still in the process of being treated for their condition.

The mean number of treatments for low back complaints was 3.16 (range 1– 100), for neck and shoulder complaints 3.00 (range 1-30), upper limb 3.13 (range 1 – 29), lower limb 3.44 (range 1–100), abdominal 3.48 (range 1 – 14) and head and face 3.97 (range 1-45).

There were important regional differences in the number of consultations per patient (**Table 11**). Strangely, the region with the highest density of osteopaths, the Lake Geneva region, had the lowest number of consultations per patient with 75% of patients seen two times or less. There seems to be a linguistic difference with patients attending German-speaking osteopaths requiring over two times more consultations than patients seeing other osteopaths (4.6 vs. 2.2 consultations). We were unable to explain these regional differences. They were not due to the type of complaint, number of concomitant complaints, intensity of symptoms, or the duration of the condition.

Having clear guidelines on how many consultations are justified seems difficult to formulate. However, looking into reasons why some patients require a frequent number of consultations could improve the quality of care.

	Number of consultations		
	Average (SD)	Median	(p25–p75)
Lake Geneva Region (GE, VD, VS)	2.2 (2.5)	2	(1–2)
Espace midlands (BE, FR, JU, NE, SO)	2.8 (2.5)	2	(1–3)
Northwestern Switzerland and Zurich (AG, BS, BL, ZH)	5.1 (7.6)	3	(2–6)
Eastern Switzerland (AI, AR, GL, SG, SH, TG)	4.0 (4.4)	2.5	(2–5)
Central Switzerland (LU, NW, OW, SZ, UR, ZG)	3.8 (2.8)	3	(2–5)
Graubünden and Ticino (GR, TI)	2.3 (1.6)	2	(1–3)

Table 11 Number of consultations required to address complaints. (n=1144)

Patient health profile – presenting complaint

The most frequent onset of symptoms was slow or insidious (47.2%), followed by non-traumatic acute or sudden onset (27.6%), and finally traumatic onset (21.3%). For 55.9% it was their first episode, 11.7% their second, 5.5% their third, and 18.4% their fourth or more.

Four patients out of ten (41.9%) of patients attended osteopaths with a single location for their complaint and nearly all patients (96.2%) had a complaint in three or less locations; including 4.2% in no distinct location. The main locations of presenting complaint **(Figure 13**) were the spine (65.8%), the lower limbs (21.7%), the upper limbs (17.6%), the head and face (17.2%), the abdomen (11.7%), and the thorax (6.6%). These figures are similar to those reported in other countries where lumbar and neck and shoulder conditions are the most common complaints that patients seek treatment for. Severity of symptoms were moderate to high (**Figure 12**) with 65.1% reporting a pain above 50 points.

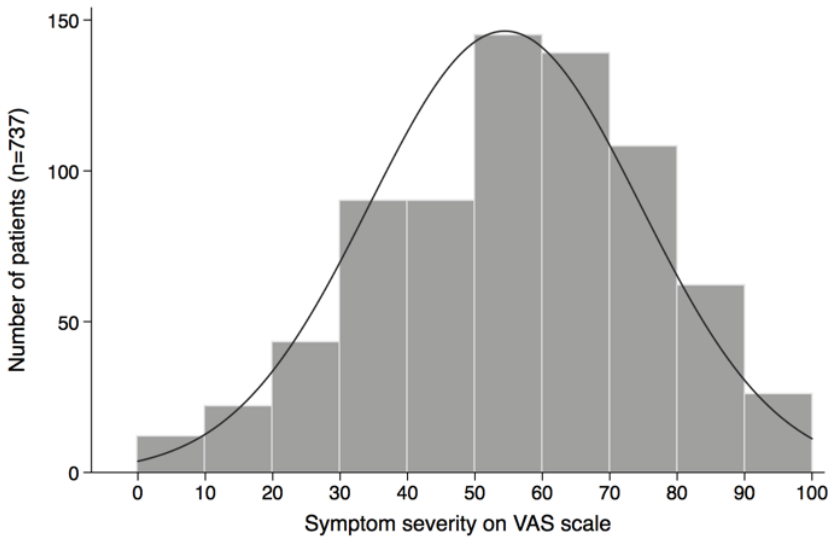

Figure 12 Severity of symptoms related to main complaint on a 100-point visual analogue scale (VAS).

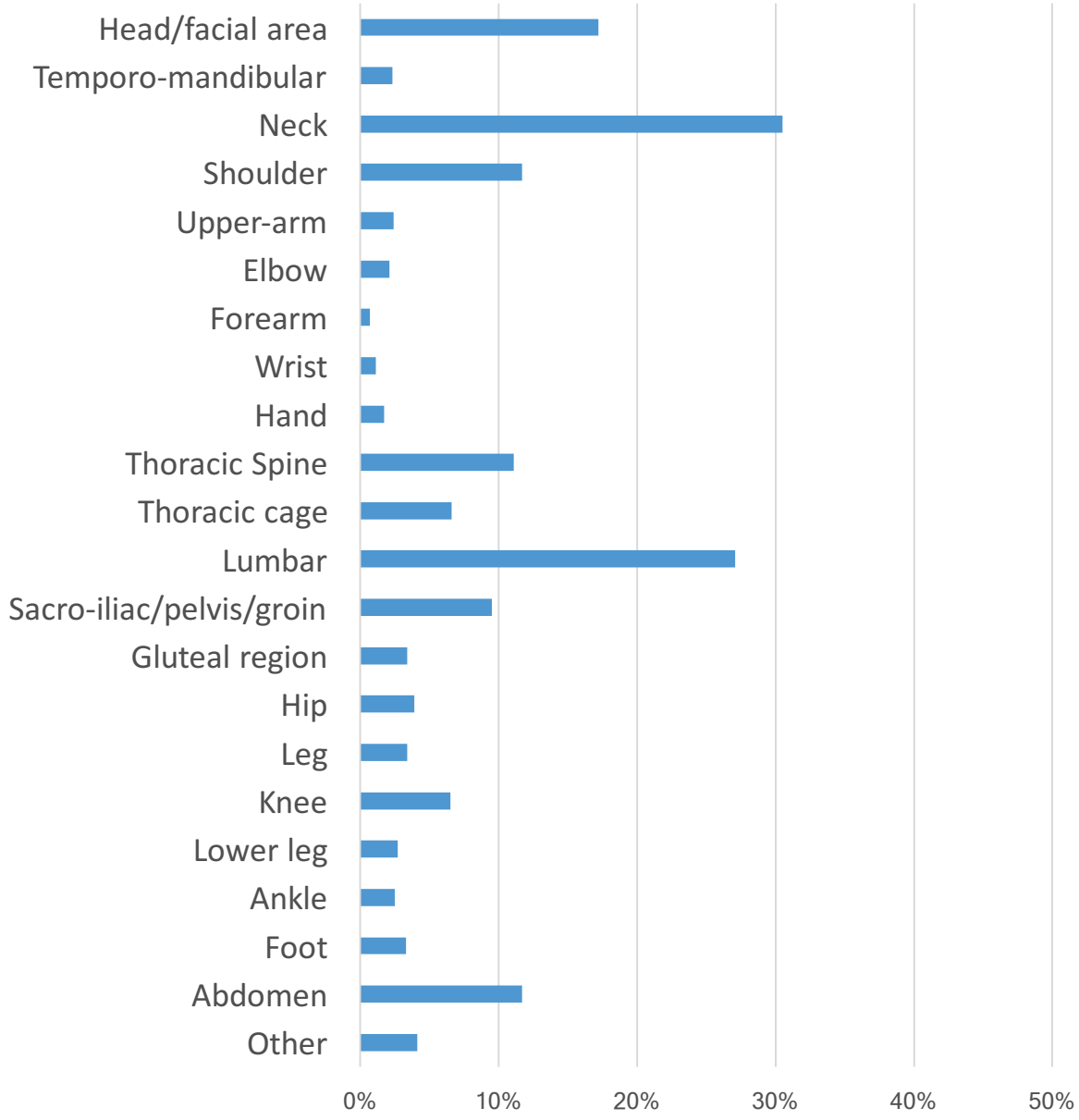

Figure 13 Location of complaints

A large majority of patients (80.9%; 925/1144) complained of musculoskeletal pain followed by complaints of gastrointestinal origin (10.4%) (**Figure 14**). Eight percent of complaints were infant-specific (i.e. unsettled crying, reflux, congenital torticollis, plagiocephalia, etc.). In addition, prevention was reported as a reason for attending an osteopath by only 3% of patients.

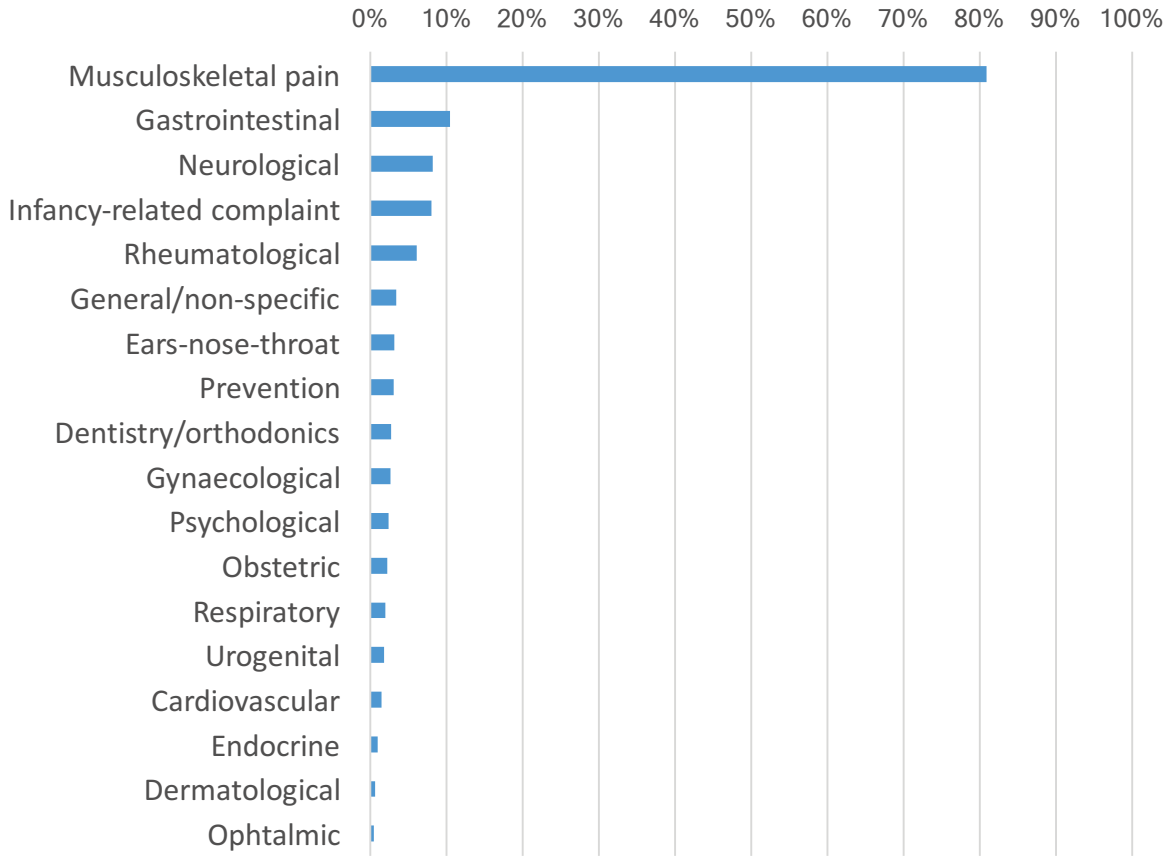

Figure 14 Type of complaint (more than one can apply for each patients)

There was a fairly equal mix of acute, subacute and chronic patients. 45% (515/1144) had their complaint for 4 weeks or less, with 26.9% having their complaint more than one year, and 11% more than 5 years (**Figure 15**).

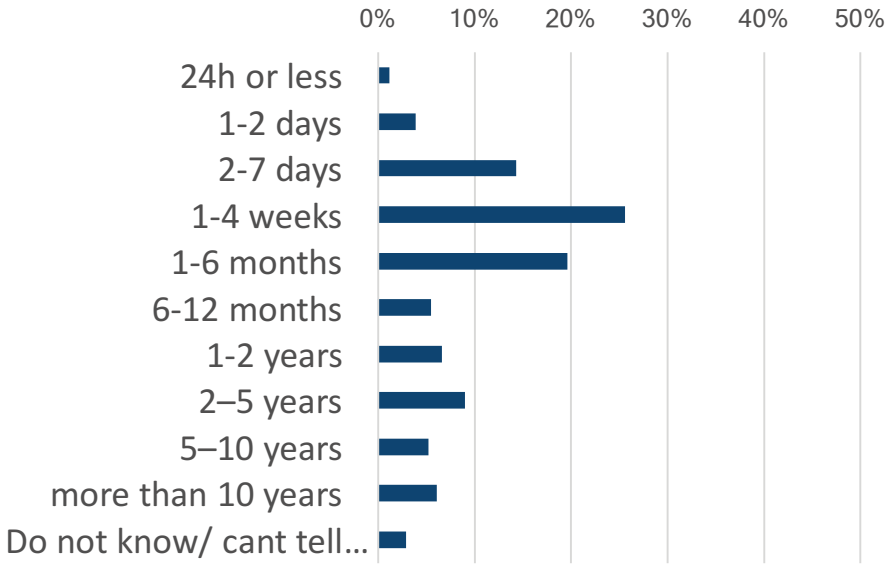

Figure 15 Duration of complaint prior to seeking osteopathic care

Patient's health profile – co-morbidities

It is not surprising that adult patients, with an average age of 45 years, have co-morbidities. Nevertheless, 63.5% (726/1144) of patients did not. Among those reported, the most common were rheumatological (8.1%), followed by digestive (6.9%) and cardiovascular conditions (5.4%). Those reporting a psychiatrically diagnosed condition were 3.1%.

Forty percent of the patients had previously seen someone else about their complaint, most commonly a general practitioner (24.1%) or physiotherapist (11.8%). Eighty – four percent had no days-off work or school due to their complaint, indicating that most patients visiting the osteopaths had reasonable health.

Investigations and exams

Patients were previously seen by a physician for complementary exams in over 1/4 of cases (25.6%). The most frequent reported exams were X-rays followed by MRI (**Table 12**). Osteopaths read and analysed X-rays for 3.2% of cases and MRI for 2.8% of cases. 18.2% of patients with low back pain (n=444) had an X-ray and 14% a MRI.

	Exam done		Report seen		Exam seen	
	n	%	n	%	n	%
X-ray	173	15.1%	91	8.0%	37	3.2%
CT scan	35	3.1%	21	1.8%	4	0.4%
MRI	130	11.4%	68	5.9%	32	2.8%
Other types of imaging	30	2.6%	7	0.6%	6	0.5%
Blood test	90	7.9%	19	1.7%	13	1.1%
Urine analysis	23	2.0%	2	0.2%	5	0.4%
Other	44	3.8%	5	0.4%	1	0.1%

Table 12 Complementary exams (n=1144)

Observation, palpation, range of motion, and pain provocation tests were the most frequent examinations done by osteopaths (**Figure 16**). Clinical orthopaedic or neurological tests were not done systematically. Neurological tests were done for 29.3% of patients with low back pain and for 27.8% of those with neck pain. Orthopaedic tests were done for 41.8% of patients with shoulder pain, and for 63.5% with knee pain.

Imaging was requested for 2.2% of patients with low back pain and 0.9% of those with neck pain.

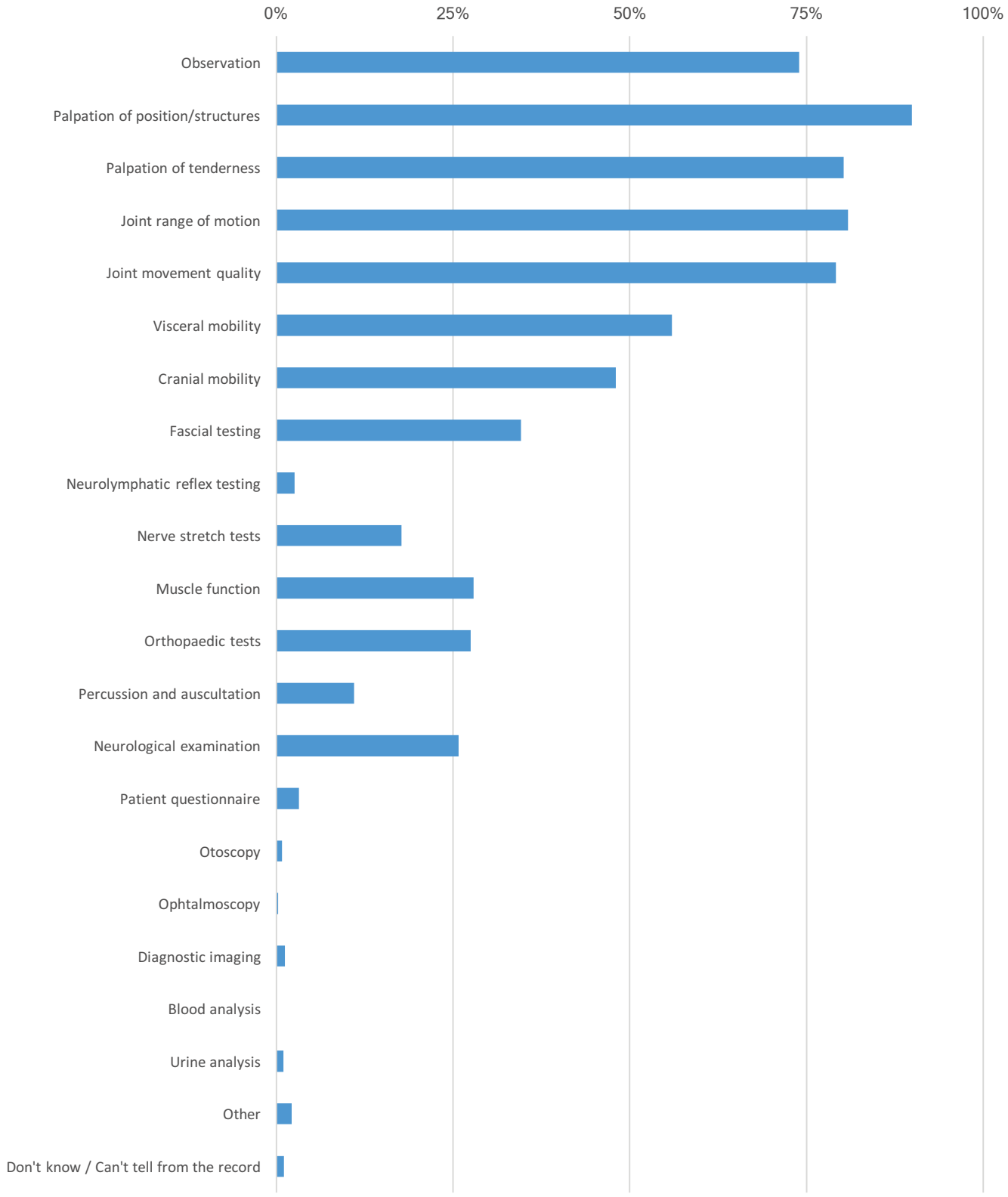

Figure 16 Examination procedures used by the osteopaths

Consent for examination

Consent for examination was mainly implied (**Table 13**).

	Consent	
	n	%
Implied consent	682	60.4%
Verbal	396	35.1%
Written	23	2.0%
From parent	15	1.3%
None	28	2.5%
Don't know / can't tell from the record	14	1.2%

Table 13 Type of consent obtained for examination (n=1144)

When analysing intimate area examination, in 2016, 38% (75/521) of osteopaths reported performing examinations of a highly intimate nature (genital, rectal, breast). Of those who performed the examination (n=198), 4% did not gain specific informed consent, they reported receiving only implied consent. Most osteopaths gained verbal consent (96%, 190/198), whereas some osteopaths also acquired additional written consent (12.6%, 25/198). Chaperones were always offered by 25% of osteopaths who did genital examination (29/116), 26.5% for rectal examination (33/125), and 7.1% for breast examination (6/84). A chaperone was never offered by 33.6% of osteopaths for genital examinations, 35.2% for rectal examination, and 65.5% for breast examination. From the 1'144 reported follow-ups, pelvic examination was done with 8 patients (0.07%), 6 vaginal and 2 rectal. Verbal consent was obtained for 5 cases, written consent for one, and implied consent for 2.

In February 2017, the Swiss Federation of Osteopathy reviewed its recommendations and reminded all members of ethical requirements to undergo such examinations. These are made accessible to practitioners and patients on the association's webpage.

Discussion with patients

Nearly all osteopaths reported usually discussing or communicating with patients about aspects of their proposed treatment plan (**Figure 17**). They were however less inclined to discuss policies regarding cancelations, data handling, or confidentiality.

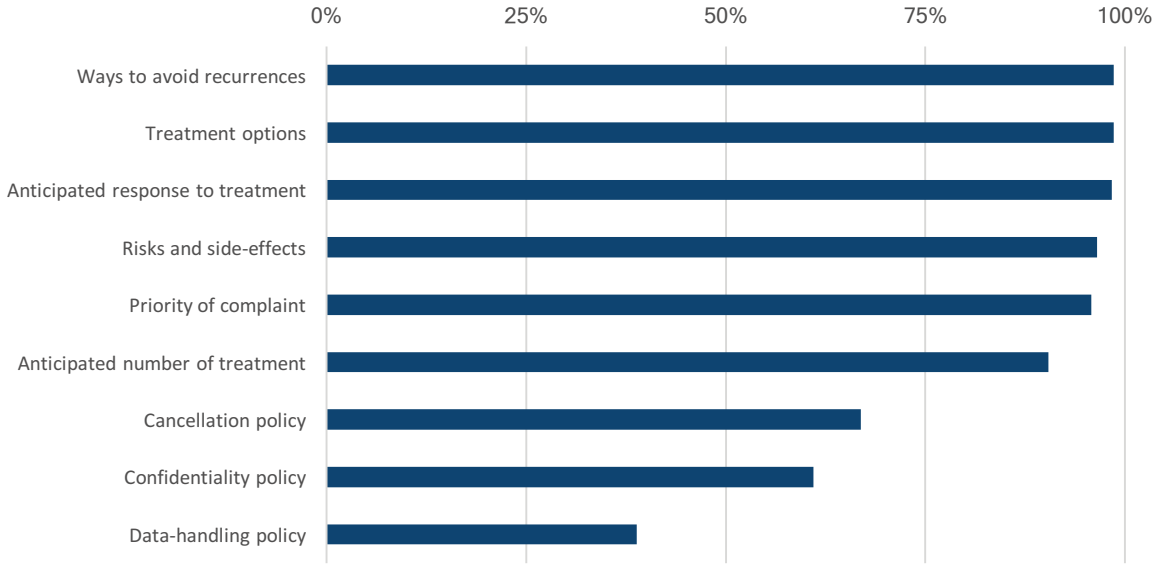

Figure 17 Proportion of osteopaths who report usually discussing the subject. (n=521)

A treatment plan was agreed upon with the patient in most cases (95.4%, 1092/1144) and consisted of osteopathic management for 86.6% of patients (991/1144). This consisted of a treatment plan feasible in a single consultation for 15.9% of patients (182/1144). Only 2.7% (31/1144) of patients were referred on without any treatment.

Treatment approach

Osteopaths provide patients with a wide range of therapeutic approaches including osteopathic manipulative treatment (99.0%, 1132/1144), exercise (34.2%, 391/1144), psychological and lifestyle management (35.5%, 406/1144), and adjunct therapy (3.9%, 45/1144).

Osteopathic Manipulative treatment

The three most common treatment modalities used on patients were soft tissue (75.3%, 862/1144), articulatory (74.8%, 856/1144) or visceral approaches (54.8%, 627/1144). HVLA techniques, also known as thrust techniques or manipulations, were only used on 41.9% of the patients. This was less than cranial (51.8%), or functional approaches (43.9%), but more than muscle energy (33.9%), myofascial (22.6%), inhibitory (18.8%), biodynamic (12.1%), or strain/counter strain techniques (6.4%) (**Figure 18**). Other techniques used were balanced ligamentous tension, lymphatics, and manual therapy on the mother when treating an infant.

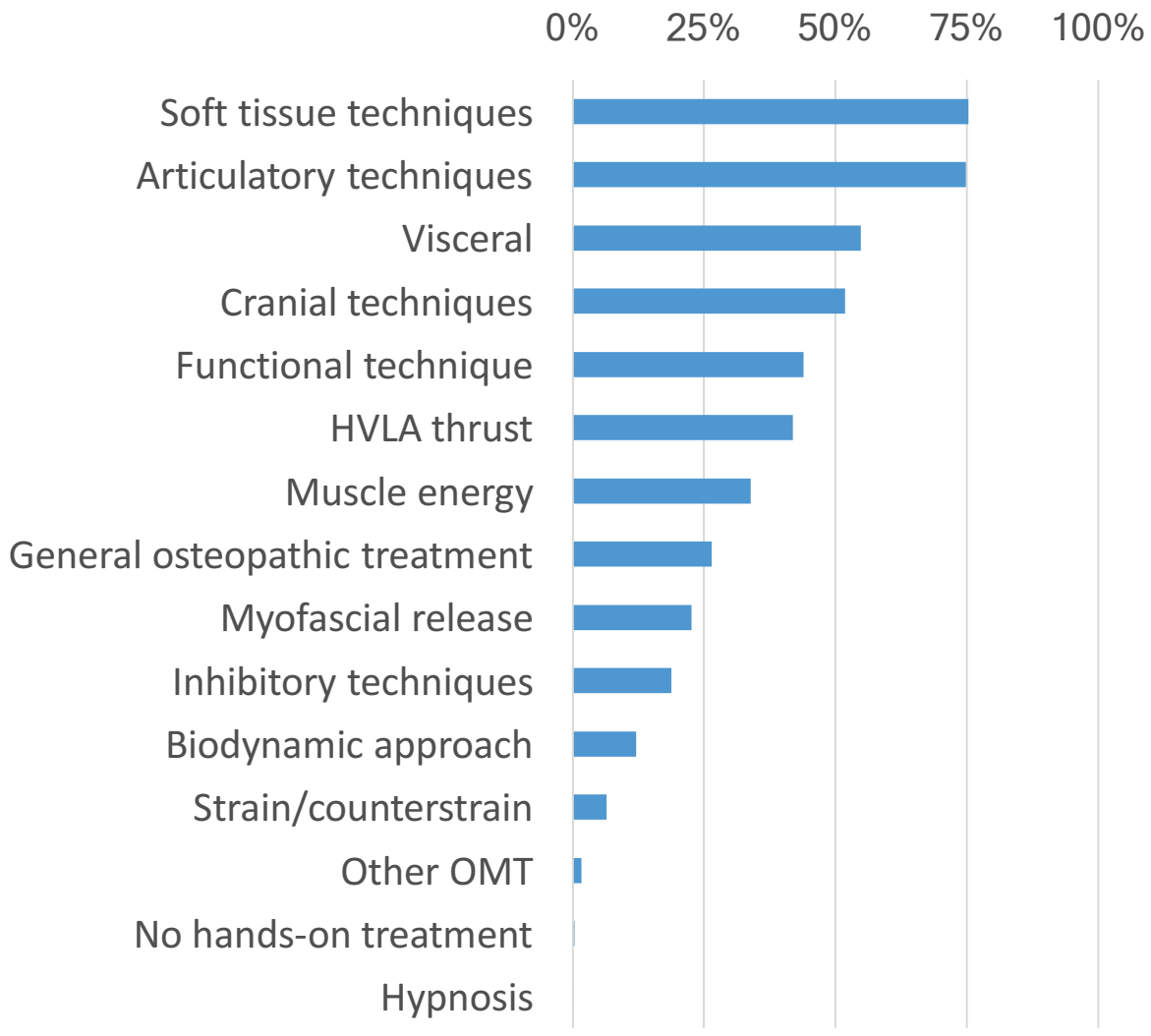

Figure 18 Osteopathic manipulative treatment – proportion of patients having received each type of treatment (n=1144)

Therapeutic exercise

Osteopaths show and have patients practise exercise they are to do on a regular basis at home. These include stretching exercises, strengthening exercises, proprioception, and mindfulness (**Figure 19**). Osteopaths also reported having patient do breathing exercises and exercises to mobilise joints (other).

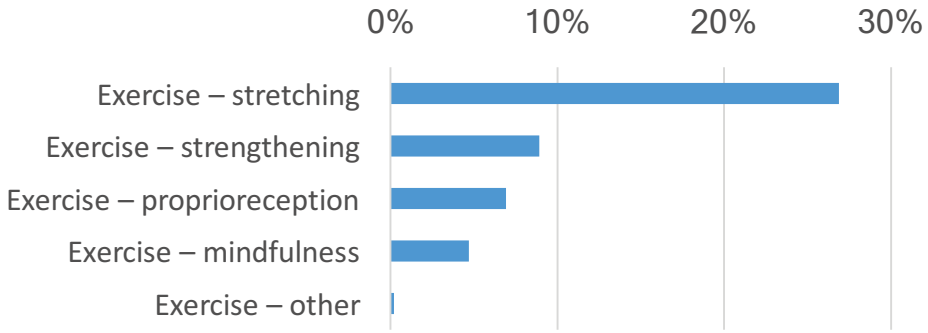

Figure 19 Treatment as exercise – proportion of patients having received each type of exercise (n=1144)

Psychological and lifestyle management

An important aspect of osteopathic care is improving self-efficacy and helping patients manage their condition themselves. It is therefore not surprising that osteopaths rely on psychological and lifestyle management for over one third of their patients. This includes advice on lifestyle (21.2%), nutrition (11%), relaxation (9.7%), and self-medication (2.4%) (**Figure 20**). Promising emerging approaches, such as pain neuroscience education, which have recently been integrated in osteopathic university programs, are for the moment rarely used (0.3%) in practice. This might change in the future given training in pain management is starting to be made available through continuous training.

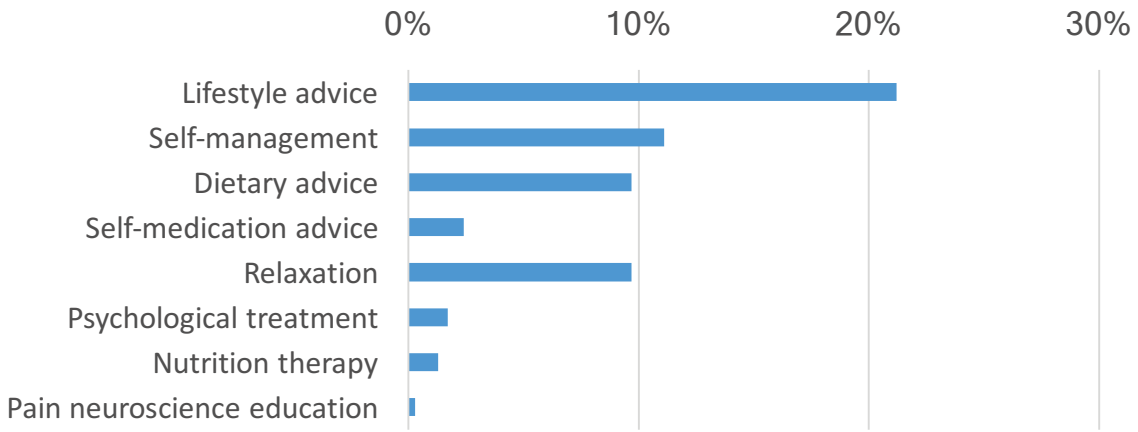

Figure 20 Psychological and lifestyle management – proportion of patients having received such support (n=1144)

Adjunct therapy

Adjunct therapy was defined as any treatment that required additional training to the ones usually provided in osteopathic education programs. Swiss osteopaths apparently rarely rely on complementary therapies such as acupuncture (1.0%), herbal medicine (1.0%), or homeopathy (0.3%) to treat their patients (**Figure 21**).

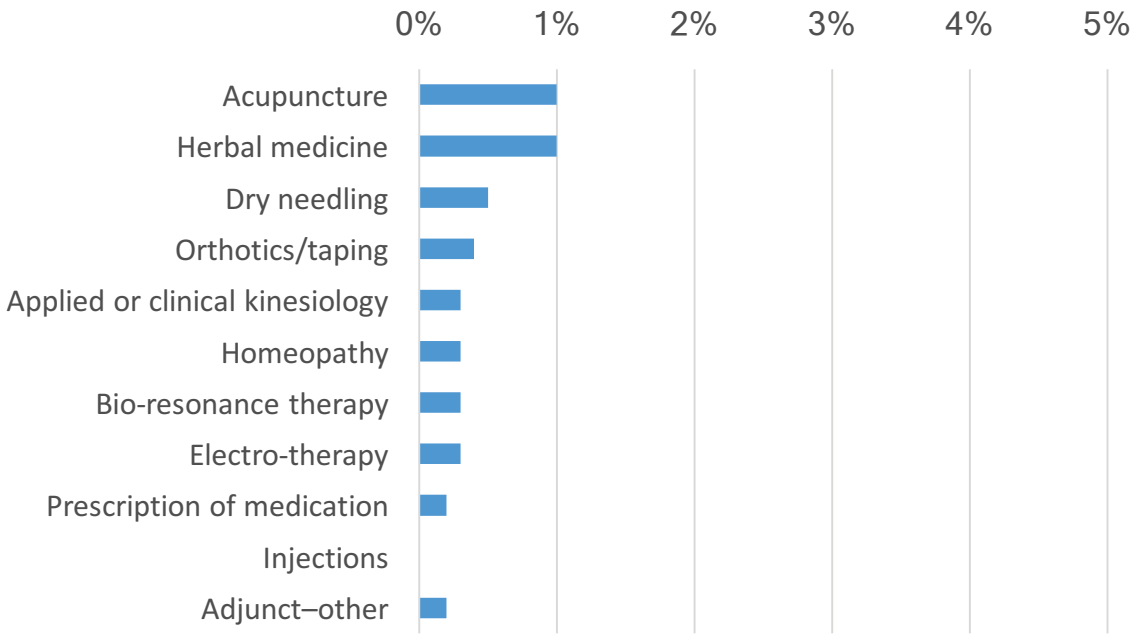

Figure 21 Adjunct therapy – proportion of patients having received such support (n=1144)

Information and treatment consent

Overall, the level of information provided to patients by osteopaths covered most aspects making it possible for patients to make their decisions on treatment options (**Table 14**).

	Information	
	n	%
Explanations on the complaint	858	75.2%
Treatment options and alternatives	944	82.6%
Possible risks and side effects	895	78.3%
Anticipated response to treatment	1039	90.9%
Anticipated number of consultations	824	72.0%
Ways to avoid recurrence	824	72.1%

Table 14 Information provided to the patient (n=1144)

Consent for treatment was mainly implied (**Table 15**). However, when using thrust techniques, consent was sought 2/3 of the time with 68.9% of patients giving specific consent for neck manipulation, 62.9% for thoracic spine manipulation, and 65.9% for low back manipulation.

	Consent	
	n	%
Implied consent	684	60.4%
Verbal	404	35.7%
Written	22	1.9%
From parent	15	1.3%
None	22	1.9%
Don't know / can't tell from the record	1	0.1%

Table 15 Type of consent obtained for treatment (n=1144)

Complications identified during follow-up

One serious adverse event was reported by an osteopath but we do not know what it was. Treatment side effects were reported for 465 of the 791 returning patients (58.8%) and were seemingly minor and transient, such as fatigue, increased pain, stiffness, headache and dizziness (**Figure 22**). Side effects to treatment could be underreported given some patients with side-effects might have decided not to continue their treatment without informing the osteopath of the reason.

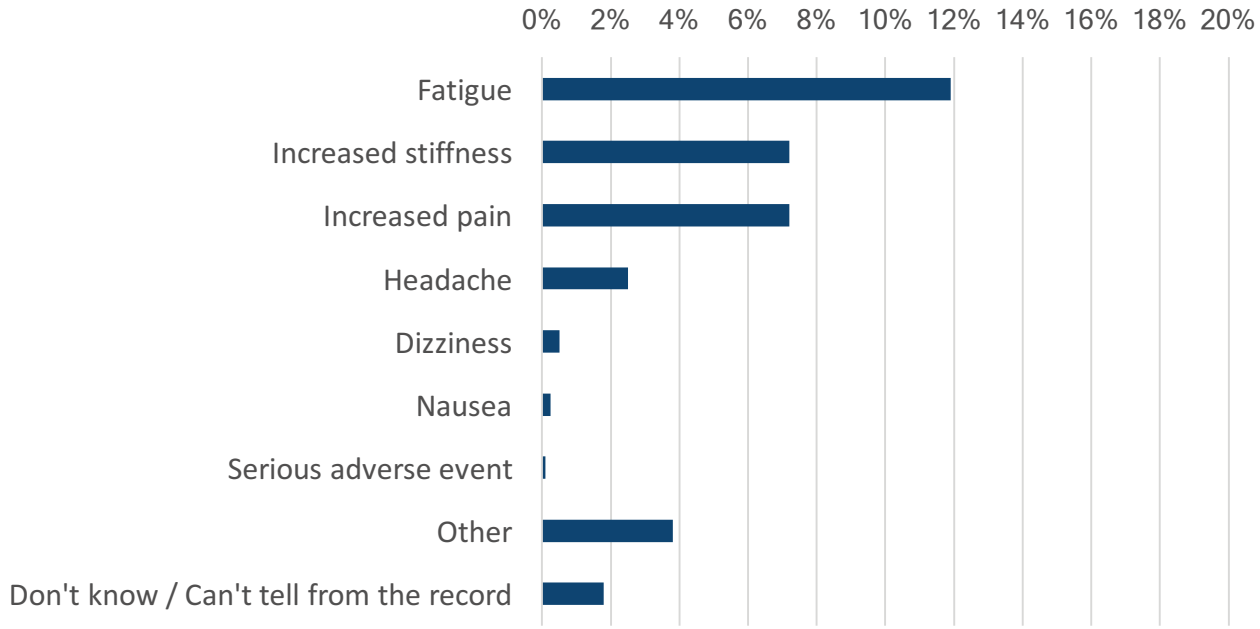

Figure 22 Reported treatment side effects during follow-up after treatment (n=791)

88.7% of returning patients totally or mostly achieved the set treatment goals at the end of the treatment.

CHAPTER 4
INTEGRATION IN HEALTHCARE

Primary care profession

Three quarters of the patients (76%; 869/1144) came direct to the osteopath without a referral from another care provider and 56.8% had not had previous treatment or undergone investigation for the actual episode. Eighteen percent of patients were referred, in order of frequency: GP, midwife, a complementary therapist, a different osteopath or a physiotherapist (**Figure 23**).

Figure 23 Proportion of patients referred to an osteopath by profession. (n=1144)

However, only a small proportion of patients (5.6%) had not sought any form of prior treatment: 17.0% relied on manual therapy from another practitioner, 9% on complementary medicine, 6.1% on self-medication, 20.6% on prescribed medication, and 3.4% on surgery.

Contact with the GP

Osteopaths contacted GPs only for 5.9% of patients (n=68). For over half of these patients (n=35), the GP had initially referred the patient to the osteopath. GPs were contacted for discussion on further investigations for 20 patients (1.7%) and for referral to a specialist for 21 patients (1.8%).

Patients were rarely referred to their GPs by the osteopaths (3.1%) and for two patients out of three, this was done without any direct contact between the osteopath and the GP.

Referral

Few medical specialists referred patients to osteopaths, but conversely osteopaths rarely refered to other professionals either (**Figure 24**). Only 9% (n=106), around half the number of patients referred to an osteopath, were referred to another health care professional or provider. Less than 1% were referred to either accident and emergency, another osteopath, an orthodontist/dentist or a psychologist. Around 1% were referred to a medical specialist consultant (n=14) or complementary therapist (n=15).

There is a potential to explore this phenomenon further to understand if this reflects a lack of interdisciplinary and multidisciplinary care or whether patients actually need to be referred. There are ethical and financial obligations and standards to take into account, the best interests of the patient and not the health care practitioner must be paramount in any referral decision.

Figure 24 Proportion of patients referred-on to other health professionals. (n=1144)

CHAPTER 5
IMPLICATIONS AND CHALLENGES

CHAPTER 5: IMPLICATIONS AND CHALLENGES

Summary of findings

The response rate from the survey was 44.5% and we received data about 1'144 patients. More females than males responded to the survey (55%) and 60% of respondents were aged 40 years or more. The sample was representative in terms of geography i.e. more osteopaths were from the western, predominantly French speaking part, of Switzerland (62%).

The results from the survey indicated that osteopaths contribute to the health of the nation by providing around 1'700'000 consultations per year to an estimated 566,666 people (using the average 3 consultations per patient). This represents around 6.8% of the total Swiss population (8.3 million) that seek osteopathic care from around 1086 osteopaths. The estimated turn-over (income before overheads and tax) per osteopath is ~CHF 187'845 per year.

Just over half the osteopaths work in isolation (54%) with few working in a hospital setting (1.5%). The average length of a consultation is 45 minutes. Females are more likely to work part-time than males. Osteopaths see around 36 patients per week who pay on average ~120.- CHF per consultation, with around 84% of patients using insurance to finance their care.

The average age of the adult osteopathic patient was 45 years old. Children and babies (under 2 years old) make up 10% of all patients and 9% of patients were 65 years or over. Patients can expect to have around 2 consultations (IQR 1 to 4) for their condition. Patients most commonly sought treatment for musculoskeletal complaints (81%) with the spine being the most common location (66%). The patients were relatively healthy 65% reporting no co-morbidities and only 16% reported taking time off work or school for their complaint. Most patients (76%) referred themselves directly to the osteopath, 18% were referred by other healthcare professionals.

The most common form of treatment given to patients were soft tissue and articular techniques (75% of the time) with thrust techniques used ~42% of the time. Most consultation time was spent on the treatment (20 minutes), case history and examination (10 minutes each), the least time was spent on discussing treatment (2 minutes) and discussion for consent (1 minute).

Potential for growth in the profession in primary care

The data indicate that there is potential for growth in the profession in Switzerland. Overall there around 10 osteopaths per 100,000 residents but the distribution is not even throughout the country, the density in Vaud is 46: 100,000 and as few as 1.8 in the Cantons of Appenzell. The number of osteopaths in other European countries ranges from 5.3 – 25 osteopaths per 100,000.

The average age of the osteopathic patient is around 45 years old, this is relatively young considering the age profile of the Swiss population, 20% are over 65 years.[10] This figure is likely to increase over the next three decades as the population demographic ages.[11] Expanding the age profile of osteopathic patients to include older people would increase the population base. This will probably occur naturally as the current osteopathic patient population pool ages but actively marketing the skills of osteopaths for the health care and management older people might be advantageous to the profession and also reduce some of the burden from general practitioners and provide more accessible care to this proportion of the population.

Given the predicted decline in general practitioners in Switzerland,[12,13] an aging population with increasing prevalence of long term conditions, there is likely to be a shortage in primary health care provision.

It may be prudent to Targeting graduate and continuing professional development training for osteopathic care of the older person to increase the skills and knowledge of osteopaths to prepare for future demand and need.

In addition, osteopaths are trained to diagnose and recognise when to refer patients to specialist care, they are ideally placed in primary care to triage patients. Osteopaths have the potential to play a larger role in the primary care setting especially for the management and care of those with long term conditions.

Finally, there is spare capacity since osteopaths mainly work from Monday to Friday between 8:00 and 18:00. There are additional opportunities for working on the weekends and in the evenings. This is especially useful information for new graduates trying to establish new practices.

Challenges

The survey data highlighted some key areas for development and some issues that the profession need to confront. These issues are not particular to the osteopathic profession, other health care professions are also confronting similar issues.

Isolated practitioners

Nearly half of the osteopaths responding to the survey practice in isolation (54%). This has implications for patient safety and protection and the surveillance, maintenance and regulation of osteopathic standards of practice. Safeguarding patients is paramount for the credibility and image of any health care profession, the osteopathic profession generally benefits from having good public trust and high levels of patient reported satisfaction.[14,15] Clinical governance and surveillance of lone practitioners largely centres on patients and their willingness to report dissatisfaction with health service provision. However, in the absence of any complaints or concerns raised by patients to regulatory or official organisations can we cannot assume that health care provision is of a high quality and delivered at an acceptable standard. The issue of patient safeguarding with lone practitioners is not new.[16] Many recommendations exists to protect patients. These include peer review of practice, continuous professional development, obligations to clearly display complaints procedures to patients, monitoring complaints, and protecting whistle blowers (colleagues who report poor, dangerous or unsafe practices).

Duty of care and patient record keeping

The survey of patient records illustrated that a lot of data was recorded about the patient consultations, but it was not always complete. Our survey showed that patient records were incomplete for at least 11.5% of patients (i.e. the osteopaths were not able to answer the question based on the recorded information). For example, we found important aspects that should have been recorded about co-morbidities, prior treatments done by the same osteopath, examination procedure, treatment plan, type of treatment, consent for examination or treatment that the osteopaths were unable to determine from their records. There may be some opportunity for developing patient record-keeping to comply with good clinical practice and set some minimum professional standards to ensure that records are legible, indelible, clear, unambiguous and chronologically accurate.[17] In Switzerland, there is a legal obligation to have patient records

made available to them. This is important if patients wish to continue treatment with another practitioner. Furthermore, there are many legal stipulations about the specific content of medical records and how records should be kept. This is important to secure patient data and make records reliable to defend practitioners or patients in case of complaints for misconduct.

Roughly interpreted patient files should have a record of the date, patient details, presenting complaint, medical history, clinical findings, a diagnosis, treatment plan, any consent given, the treatment given and the response to that treatment and any advice given. Each consultation needs to be comprehensively recorded and dated by the identifiable treating clinician indicating that each entry is an accurate record of the consultation.[18]

Consenting procedures

The data shows that the majority of consultation time is spent on treatment (20 minutes) with a further 20 minutes spent on the case history and examination of the patient with only 3 minutes spent on administration. Discussion about treatment, consent and advice and guidance and administration takes up a relatively short period of time (in total 9 minutes).

The survey showed that the practices around obtaining and recording consent are not fully developed. Gaining consent is a fundamental part of practice and is both an ethical and legal requirement. If a patient is examined or treated without consent, the osteopath will become liable of any undesired consequence without any defence. Consent needs to be informed, i.e. osteopaths need to provide as much information about effectiveness, risks and alternative treatments so that patients can make informed decisions about their care. Consent should also be an ongoing process. The time spent on consent (around 1 minute) and the osteopath reports about the type of consent sought reflect a major need for further training and development. How consent is recorded in the patient files may also need to be addressed. The lack of data about consent may indicate a lack of recording rather than that consent was not sought. Decisions about care can be complex and the process of consent can be daunting for both the clinician and the patient, it is good practice to develop these skills from the outset during training at an undergraduate level.

Recognised qualifications

The data indicated that there are not many osteopaths in Switzerland with recognised, standardised qualifications accredited at university level such as a bachelor, masters or PhD. It is important for the credibility of the profession that universally recognised qualifications are awarded to ensure that the professional training given is comparable with other health care professions. The new division at the School of Health Sciences Fribourg is already leading in this area with the development and implementation of the BSc and MSc in osteopathy. Considering the shortfall in recognised qualifications in the practicing osteopathic population it may be worth considering the possibility of opening academic degrees for osteopaths wishing to update and or upskill their scientific and academic qualifications and or provide more formal education opportunities to those who would like to further their education.

Future research priorities

From the survey, we identified five potential research priorities. These are:

- Investigate and document usefulness of management and care in the paediatric population.
- Improve knowledge and understanding of the role of osteopaths in giving advice on exercise.
- Investigate perception and importance of self-management and lifestyle change approaches in osteopathy.
- Monitoring of patient reported outcomes including adverse events following treatment.
- Plan practice evaluation and qualitative approaches to improve consent procedures.

Osteopathic treatment for infants is very common in Switzerland, but here is limited evidence that osteopathic treatment is effective in this patient group and what the active mechanism of actions are. For example, there is some evidence for reduced crying time after osteopathic care for the treatment of excessively crying, unsettled and distressed infants but there is still much debate about the clinical importance of these effects and whether it is the manual therapy component of care or the patient practitioner relationship (reassurance, advice and guidance) and, or the self-limiting nature of the condition that has most impact on outcome.[19] Further research is needed in the area of paediatric care to inform practitioner claims about their treatment and the advice they give patients, parents and guardians. Evidence informed practice is increasingly being demanded by those commissioning and paying for health care services and from patients themselves. It is therefore important that osteopaths are aware of best evidence guidance to optimise patient care, seek informed consent and provide best practice prevention and management advice.

The survey data illustrated that osteopaths, as part of their standard package of patient care, give advice and guidance about exercise. We note from the BSc and MSc curricula and from the available continuing professional development courses this is an under-taught area in osteopathy. There is opportunity to expand knowledge in this field and compile research evidence relevant to osteopaths to inform this aspect of care.

Self-management is being increasingly recognised as an integral part of any health care consultation to encourage patients to have confidence in their ability to manage their own health.[20,21] There is increasing evidence to show that self-management programmes using psychological techniques such as cognitive behavioural and motivational approaches with patients can improve quality of life and well-being, self-efficacy and depression.[22] Research has shown that health care professionals from different fields (including osteopaths) can be trained to deliver self-management guidance effectively,[23] however self-management and other kinds of psychosocial techniques are yet to fully materialise in mainstream care despite claims of holistic and biopsychosocial practice from practitioners.[24]

The survey does not give information about patient response to treatment. There is a future need to collect patient reported outcomes to understand change and response to treatment to be able to use the data to discuss treatment response in comparison to other health care professions and reflect on osteopathic practice given to patients. This includes outcomes about global change, pain, function and satisfaction and experience (including unexpected response to treatment).

More work is needed to explore the osteopath's understanding of consent to determine ways of providing appropriate training and behaviour change techniques to encourage both better consenting procedures and recording of consent.

Recommendations summary

- Provision of formal education qualification opportunities to increase academic profile of osteopaths.
- Provision of continuing professional development in consent procedures and record keeping
- Development of osteopathic practice standards to benchmark practice procedures and behaviour.
- Monitor patient reported outcomes.
- Increase knowledge and skills of osteopaths in managing older people and long-term conditions.
- Encourage peer review, multi-practitioner and multi-disciplinary work practices.

CONCLUSIONS

CONCLUSIONS

This the most comprehensive survey of its kind conducted in Switzerland to date to describe the osteopathic profession. It indicates professional maturity to reflect on practice and identify strengths and challenges to address to promote patient care.

There is a role in the Swiss health care system for osteopathic care. The number of consultations provided to the Swiss population indicate that there is a demand for this kind of care and that osteopathy might be well placed to contribute more primary care provision to help accommodate the growing demand and the shortfall of care. In addition, osteopaths provide a specific niche of care especially to infants in the first 2 weeks of life and there is future potential in the under provision of care for the elderly.

Regulation of osteopathic care is yet to be formalised, there is a pressing need for further regulation and to benchmark osteopathic professional standards of practice as over half of the osteopaths practice in isolation. We found there are issues surrounding record keeping and consenting procedures, informed patient consent is a necessity in the delivery of any health care. The current professional bodies represent the practitioners but there appears an under representation of organisations to protect the patients.

Obtaining more information from patients will help develop understanding of care and the needs of the patients seeking and using osteopathic services.

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