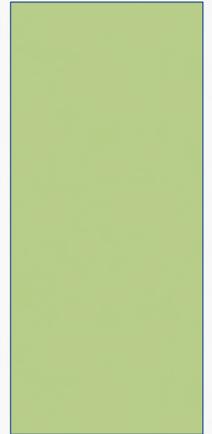


A SCIENTIFIC SURVEY OF THE FIELDS WHERE PEDIATRIC OSTEOPATHY IS PRACTICED AND THOUGHTS ABOUT FUTURE RESEARCH PRIORITIES

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BACKGROUND

- Osteopathy is a CAM that is growing in popularity in Quebec¹, especially for pediatric patients^{2,3}
- Common reasons for consultation include^{3,4,5} :
 - head shape and plagiocephaly
 - torticollis
 - post natal check-up
 - otitis media
 - digestive difficulties
 - musculoskeletal pain
- Unclear osteopathic research priorities cause lack of cohesiveness in osteopathic research⁶

¹Esmail, 2007; ²Jean & Cyr, 2007; ³Morin & Aubin, 2014; ⁴Lund and Carreiro, 2010; ⁵Fawkes et al., 2010; ⁶Degenhardt & Standley, 2013

OBJECTIVES OF THE STUDY

- Document the reasons for consultation in osteopathy for all new pediatric patients.
- Explore fields where osteopaths and physicians need more scientific evidences in context of interprofessional collaboration for pediatric patients care.

METHOD

- Prospective self-administrated survey was sent to all members of Ostéopathie Québec in 2013-2014 (n = 1061).
 - Demographic information about osteopaths
 - Patient data (age category, primary reason for consultation, source of referral) for each NEW pediatric patient seen for a two-week working period
 - Descriptive statistics
- Physicians and pediatricians survey
- 21 semi-guided individual interviews with osteopaths, family physicians and pediatricians.
 - Thematic analysis



Preliminary

RESULTS

Straight Ahead

Survey



OSTEOPATHS CHARACTERISTICS (N = 311)

	Osteopaths n = 311
Participation rate	41%
Gender female (%)	248 (80)
Experiences (%)	
0-4 years	55 (18)
5-9 years	98 (33)
10-14 years	64 (22)
15-20 years	43 (14)
+ 21 years	38 (13)
Working place* (%)	
Solo private	159 (53)
Group private	159 (53)
Physician in the clinic	38 (13)

* Same osteopath might work in more than one setting

RESULTS

- 1411 new pediatric patients seen in two weeks
- 20 % were referred directly by family physicians or pediatricians
- Nature of consultation:
 - 52.2 % Musculoskeletal (n = 737)
 - 31.2 % Non musculoskeletal (n = 441)
 - 10.4 % Prevention (post natal or post trauma) (n = 146)
 - 6.2 % Missing data: (n = 87)

0-1 YEAR (N = 782, 56%)

Reasons	Numbers (%)
Plagiocephaly	167 (21.3)
Torticollis	142 (18.1)
Prevention post natal/post fall	106 (13.5)
Reflux and regurgitation	90 (11.5)
Colic and constipation	55 (7.0)
* Other	170 (21.7)

* Complete results to be published

>1-6 YEARS (N = 225, 16%)

Reasons	Numbers (%)
Otitis media	50 (22.2)
Abnormalities of gait/posture	29 (12.9)
Prevention post fall/fracture/intervention	23 (10.2)
Pain extremities	21 (9.3)
Concentration/attention/anxiety/language	17 (7.5)
* Other	74 (32.9)

* Complete results to be published

>6-12 YEARS (N = 178, 13%)

Reasons	Numbers (%)
Head and neck pain or dysfunction	34 (19.1)
Back pain	29 (16.3)
Concentration/attention/anxiety	19 (10.7)
Extremities pain	18 (10.1)
Posture/scoliosis	17 (9.5)
Prevention post trauma	15 (8.4)
* Other	30 (16.9)

* Complete results to be published

>12-18 YEARS (N = 226, 16%)

Reasons	Numbers (%)
Back pain	66 (29.2)
Extremities pain	58 (25.7)
Head and neck pain or dysfunction	37 (16.4)
Prevention post trauma	24 (10.6)
Posture and scoliosis	12 (5.3)
* Other	21 (9.3)

* Complete results to be published

PHYSICIANS CHARACTERISTICS (N = 154)

	Physicians n = 154
Participation rate	13 %
Gender female (%)	117 (76)
Experiences (%)	
0-4 years	7 (5)
5-9 years	15 (10)
10-14 years	22 (14)
15-20 years	29 (19)
+ 21 years	152 (52)

CLINIC SITUATIONS

Usefulness of osteopathy/physicians (n = 154)	No. (%)
Post natal check up	86 (58,5)
General prevention	77 (52,0)
Torticollis and plagiocephaly	141 (94,6)
Musculoskeletal pain	138 (93,2)
Functional disorders	85 (57,8)
Colic	93 (62,8)



Preliminary

RESULTS

Straight Ahead



Interview

PARTICIPANTS CHARACTERISTICS (N = 21)

	Family physicians n = 4 and pediatricians n = 6	Osteopaths n = 11
Gender female (%)	10 (100)	8 (73)
Experience		
0-4 years	3	1
5-9 years	1	2
10-14 years	0	2
15-20 years	2	2
+ 21 years	4	4

RESULTS – THEME 1

- Credibility of anatomical and physiological explanations
 - *« From an anatomical point of view, I understand that if you move cranial structures ... I have trouble imagining only up to a certain point that one is able to move cranial structures. For us it is welded. We can move the head relative to the column, but the bone over bone, I have more trouble viewing and integrating this concept. » (physician 8)*

RESULTS – THEME 2

- Comfortable for torticollis, plagiocephaly and musculoskeletal pain (comments of physician survey)
 - *« Very useful to adjust things for which medicine has little to offer and very useful for musculoskeletal problems. »*
 - *« Sometimes very helpful eg : hip pain. Sometimes not credible eg : organs not aligned. »*
 - *« Only reference indication for me: congenital torticollis. »*

RESULTS – THEME 3

- Need proof for **digestion, otitis, visceral**, concentration and attention concerns and prevention
 - « *Since I have no data, there is no science, when people ask me for references reflux, ear infections, where I have nothing, because I have no science behind it, often at this point I am not referring.* » (physician 1)
 - « *We hear of ear infections, reflux, all that, but I admit it, I would like to know a little bit more about the evidence on it. I'm not closed to the idea that it could help, but to understand why and how, and what science says about it ... It is not something that appears a lot in the pediatric literature. For example, in the articles or guidelines, which I commonly used, the contribution of osteopathy is not necessarily emphasized.* » (physician 3)

RESULTS – THEME 3

- Need proof for digestion, otitis, visceral, **concentration and attention concerns** and prevention
 - « Even concentration problems in school, when we managed to give them a certain malleability, flexibility and a certain magnitude at the cranial rhythm, it makes changes. Parents tell me concretely that their children are better, so I guess it has an effect, but I am not able to measure objectively. » (osteo 4)

RESULTS – THEME 3

- Need proof for digestion, otitis, visceral, concentration and attention concerns and **prevention**
 - *« I am sceptical, because the problem is how do you know it's really a osteo treatment that has made prevention. » (physician 8)*

DISCUSSION - RESEARCH PRIORITIES

- Establish priorities according to most common reasons for consultation AND clinician needs
 - Anatomical and physiological plausibility
 - Links between dysfunctions et symptoms
 - Evidence specifically for digestive problems, otitis, concentration/attention and prevention care since it is popular reasons for consulting and little publication available or used by clinicians
- Ease accessibility of publications for clinicians

CONCLUSION

- This study highlight fields where pediatric osteopathy is commonly practiced and thoughts about future research priorities according to osteopaths and physicians involved with pediatric care.
- Next steps:
 - Use appropriate research design
 - Use appropriate inclusion criteria
 - Use of appropriate outcome
 - Collaborate



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