

Exploring the Effectiveness of
Chiropractic Treatments
for Young Infants with
Ongoing Breastfeeding Difficulties

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National public health goals promote BF throughout the 1st year of life.

- The majority of mothers exclusively BF after birth.
- 37% terminated BF by 2-weeks.
- 70% by 2-months.
- Early weaning (1st month) is related to infants' behaviors around feedings.

Suckling

- Facial muscles, pharynx, soft palate, tongue
- Cranial Nerves VII, IX, X and XII
- Subtle cranio-sacral trauma may be related to
 - positions in-utero
 - the labor/delivery process
- Neonatal assessments for BF problems include
 - abnormal: head postures tongue motions
 - suck reflexes stanima

BF Interventions

- Bulk of interventions are mother-directed:
 - Information pre- and post-delivery
 - Hospital-based BF clinics
 - La Leche league & other lay help groups
- Few interventions are infant-directed.
- Mothers are seeking chiropractic care for infants with ongoing BF difficulties.

Goals of study

- Describe the characteristics of dyads seeking chiropractic care for BF difficulties.
- Explore relationships between chiropractic assessments, treatments, and BF difficulties;
- Explore relationships between chiropractic care, infant weight gain, and infant's age when BF is terminated.

Methods

Preliminary study to assess the feasibility of research.

Convenience sample: Mothers seeking chiropractic care for breastfeeding difficulties at a private clinic.

Inclusion criteria:

Infant born at/near term,
AGA, typically developing

Exclusion criteria:

Health concerns likely to impact BF
BF difficulties presenting beyond
infant's age of 4-weeks.

Treatments modified for pediatric spine:

- ▶ Spinal adjustment (HVLA)
- ▶ Craniosacral therapy (LVLA).

Measures

- **Maternal reports**
 - Health history: Pregnancy, birth, infant behavior, demographics – xx items (BL).
 - BF practices, perceptions, infant behavior – 8 items (BL, follow-up 6m).
- **DC reports**
 - Musculoskeletal assessments: 12 ratings
0 = nl to 4 = very abnormal
(prior each Tx)

Participant Characteristics and Birth Experiences

12 dyads, 8 complete data sets

Mother	24 – 40 yrs;	Infant	37 – 41 wks
Age	M = 33 (5)	Gest. Age	M = 38.5 (1.5)
Education	7 College degree +	Birth wt.	5 – 9 lbs. 4oz. M = 7.7 (1.1)
L&D time	4 – 48 hrs M = 14 (13.4)	Age 1st Tx	1.5 – 9 wks M = 5.2 wks
L&D Interv't.	7 Inductions 6 Epidurals 3 CS	Consults w/ other HCP	9 Lact'n spec 6 Pediatrician 4 RN - hosp
		BF before?	5 Yes

Did assessments change BL → discharge?

Summed assessments	Initial visit M (SD)	Final visit M (SD)
Sucking action: suck strength & depth, TMJ excursion, gag	2.7 (1.6) range: 0 - 5	1.3 (1.2) range: 0 - 3
Spinal restriction: cervical, thoracic, lumbar, pelvic	1.5 (0.9) range: 1 - 4	0.3 (0.5) range: 1 - 4
Craniosacral exam: suture overlap, cranial, diaphragm, pelvic	2.3 (1.1) range: 0 - 4	0.8 (0.5) range: 0 - 1
# Assm't rated abnormal Max score = 12 $z = -2.53, \underline{p} = 0.012$	6.5 (7) range: 2 - 10	2.3 (3) range: 0 - 4

Group differences

	BF at 6-months n = 8		Not BF at 6-months n = 3	
	Initial Tx	Final Tx	Initial Tx	Final Tx
# Assm'ts rated as abnormal Max score = 12	6 (2.7) 2 – 9	1.6 (1.5) 0 – 3	7.3 (3.1) 4 – 10	3.3 (0.6) 3 – 4
Hrs in labor	21.5 (18) 9 – 48		13 (12.7) 2 – 22	
# Bottles/day reported at BL	5 (4.2) 2 – 8		4.3 (1.5) 3 – 6	
Total # TX	6.6 (2.3) 4 – 9		5 (2) 3 – 7	

Maternal reports: Baseline and at 6-months

	BF at 6-months n = 8		Not BF at 6-months n = 3	
	Baseline	6-month	Baseline	6-month
How well is BF going? 6 = very good	2.8 (1.5) 2 – 5	5.6 (0.8) 5 – 6	1.7 (1.2) 1 – 3	NA
# BF difficulties identified 12 possible	6 (0.8) 5 – 7	5.4 (1.7) 3 – 7	3.3 (1.5) 2 – 5	NA

Discussion

- Additional study is needed to refine measures.
- Modify inclusion criteria to clearly differentiate subtle birth trauma from colic.
- Collaboration with lactation specialists may facilitate participation of younger infants.

Thank you.