

Patterns of Chiropractic Treatment in the UK: Insights from the EBIC Survey

Ingram C. MPhys, Walker K. DC DHealth

Background:

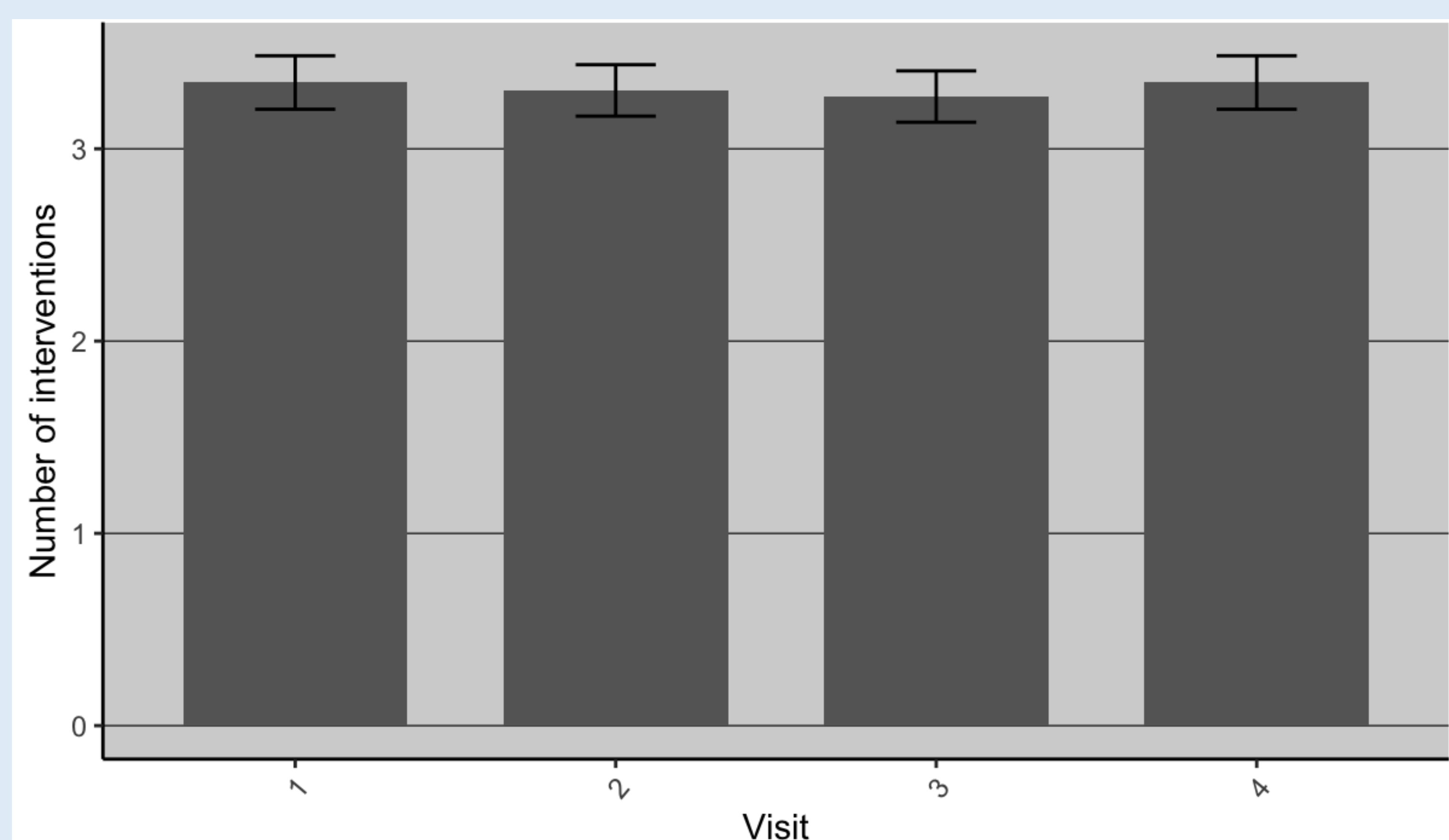
This study aims to describe chiropractic services using data from the Evidence-Based practice In Chiropractic (EBIC) survey to explore and analyse patterns of chiropractic treatment, focusing on demographic trends, patient diagnoses and treatment approaches over time. NICE recommendations do not directly reference chiropractic care, instead they include techniques that chiropractors use in their management, such as manual therapy in conjunction with exercise programmes (NICE, 2016) and dry needling (NICE, 2021). One of the difficulties in recommending chiropractic treatments is the inconsistent reporting of complex interventions within the evidence (Clar *et al.*, 2014). This study investigates treatment patterns and seeks correlations.

Method:

We used a retrospective analysis of quantitative data from the Evidence-Based practice In Chiropractic (EBIC) survey. This observational study was conducted in October 2016 and included 137 UK chiropractors. Participating chiropractors provided demographic information and details about their clinical practice. During the study period, data was collected from new patients for one month or four visits, whichever came first. The survey asked for the patient's complaint, diagnosis, and what interventions were used during treatment. Data analysis included descriptive statistics, repeated measures ANOVA, and a Generalised Linear Mixed Model (GLMM) to investigate the relationship between the number of visits and the interventions used.

Results:

Over four visits, the number of interventions per encounter ranged from 0 to 10. A repeated measures ANOVA showed no significant difference in the mean number of interventions across visits ($F(3,1744)=1.609$, $p=0.185$), with an average of three interventions per encounter. However, the mixed-effects logistic regression model indicated a significant fixed effect for the intercept ($p<0.001$) and visit ($p=0.041$), suggesting significant associations between both fixed and random effects and the presence of interventions. The model fit statistics indicate a reasonably good fit.



Mean number of interventions for each visit number.

Intervention	p-value
Dry needling	0.04 *
General Exercise	<0.01 *
Manipulation	0.61
Massage	<0.01 *
Mobilisation	0.02 *
Specific Exercise	0.02 *
Psychological Approaches	0.60
Trigger Point Therapy	0.80
Did not treat	0.42 *
Refer	0.66
Pain Education	<0.01 *
Other	0.03 *
*significant p-value ($p < 0.05$)	

Output of mixed-effects model for association between visit and the presence of each intervention.

Key Takeaway 1 - Chiropractors tend to use a consistent number of interventions throughout treatment.

The average number of interventions used was three, and this did not change significantly over the four visits recorded in the study.

Key Takeaway 2 - There is a potential over-reliance on passive treatments such as manipulation by chiropractors in the UK.

While manipulation was the most commonly used intervention for back pain (90.4%), the study highlighted the need for chiropractors to better integrate active self-management strategies, including exercise and education, into their treatment plans.

References

Clar, C., Tsertsvadze, A., Court, R., Hundt, G.L., Clarke, A. and Sutcliffe, P. (2014) 'Clinical effectiveness of manual therapy for the management of musculoskeletal and non-musculoskeletal conditions: Systematic review and update of UK evidence report', *Chiropractic and Manual Therapies*, 22(1).
National Institute for Health and Care Excellence (2016) *Low back pain and sciatica in over 16s: assessment and management*. NICE Guideline No. 59. Available at: www.nice.org.uk/guidance/ng59 (Accessed: 7th February 2023).
National Institute for Health and Care Excellence (2021) *Chronic pain (primary and secondary) in over 16s: assessment of all chronic pain and management of chronic primary pain*. NICE Guideline No. 193. Available at: www.nice.org.uk/guidance/ng193 (Accessed: 7th February 2023).