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An initial report of Chiropractic practice in India: The case-mix of 21,386 patients

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Abstract: This paper is a short, descriptive report of conventional Chiropractic practice in India. It is the first data reported to describe the Case-Mix of Chiropractic practice in India. It is noted that the data sets are drawn from 21,386 patients and are not analyses of 'patient visits', but of n=21,396 individual patients. This renders the number of patients documented in this report to be a very large sample.

In brief the most numerous presentation was LBP with male predominance. The male dominance held for all other conditions to a varying and lesser degree, and only reached parity with females at 50/50 for 'knee pain'.

An interesting finding is a greatly increased number of presentations due to seasonal conditions, peaking in June.

This report sets the baseline for future reports of Chiropractic practice throughout India and carries value to inform the distribution of learning objects in India's first formal program of Chiropractic education, commencing 2026.

Indexing Terms: Chiropractic; India; Case-Mix; Conventional Chiropractic; education; regulation.

Introduction

This paper presents the first report of the case-mix of conventional subluxation-inclusive Chiropractic in the nation on India. At the time of writing there is no Chiropractic-specific regulation, although common business practices must be adhered to.

There are 12 Chiropractors formally recognised across the nation on India yet evidence exists to show there are some 2,200 imposter clinics claiming to provide chiropractic services without any trained Chiropractor on-site. This is similar, but vastly larger in scale and potential damage, to the early situation in Australia where individuals could call themselves a 'chiropractor' regardless of not having any training. (1) The negative outcome of this was that on the

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eventual enactment of registration these folk became registered as Chiropractors under grandfathering provisions.

This must not be allowed to happen in India and the Government is urged to act immediately to protect the public in India.

In contrast, the dominant provider of Chiropractic services with recognised Chiropractors in India is a commercial operation called Dr Spine, and this report is drawn from the clinical data of that group.

Regulation

> There is no regulation of Chiropractic in India. The country cannot continue to let untrained and unsupervised hands learn physical techniques on the spines of its citizens. This paper calls for government to do what every serious health system before it has done: set a standard, protect a title, and build a profession in India, for India, by Indian-trained chiropractors.

The education is being built and the evidence is in. What remains is the law and the will to enact it as an urgent matter of public safety the State alone can deliver. This Journal will report updates on the development of the required legal framework in India as it happens.

The author recognises accredited, university-anchored Chiropractic education as the only legitimate pathway into the profession. To this end, Sri Sri University is starting the Post Graduate Diploma in Chiropractic Sciences & Masters Fellowship programs, to be followed by a 5½ year 'full' program of Chiropractic education for school-leavers.

Work is also under way to constitute a Council on Chiropractic in India to set standards, register practitioners, and shield patients from unqualified practice. The NGO Chiropractic India has formulated this to be handed over to the govt to further legitimise and regulate the profession.

About case-mix studies

Case-mix studies are the first approach to understanding the nature of Chiropractic practice in a particular environment and are specifically useful for identifying the variety of clinical presentations. First-level case-mix studies such as this report the broad range of clinical conditions for which patients seek care. At this point it is not known in the evidential sense whether the 12 Chiropractors in India manage patients with low-back pain or headache, for example. Neither anecdotal evidence nor assumptions drawn from Chiropractic practice in other countries constitute sufficient evidence to inform the profession's development in India.

Case-mix studies report essential foundational knowledge for informing further studies perhaps of the characteristics of a particular demographic with a particular clinical condition. Case-mix studies are also prime informants of the curriculum for Chiropractic education, ensuing that the real health needs of the nation will be met by Chiropractors specifically trained to identify and manage such conditions within the national health system.

In this manner they differ to demographic studies which report socio-economic information and express it statistically. (2) They also differ to descriptive studies, of which there are several for North America (3, 4, 5) and Europe (6, 7, 8) in that they represent exploratory research with a focus on clinical conditions and are readily undertaken by clinicians.

Case-mix studies also have value in informing public health decisions in developing countries by reporting a related group of patients; an example being a group of patients with tuberculosis. (9) Although common to medicine, case-mix studies are infrequently reported in the Chiropractic literature with the exception of the case-mix in teaching clinics, such as that of an Australian institution by Walsh in 1992. (10) Subsequent reports have been published for teaching clinics (11) in North America (12) and its West Coast region, (13) New Zealand, (14) Mexico (15) and Britain. (16) While not including statistical analysis they typically report a case-mix thought to be representative of private practice in each country. (17)

This paper also indicates future approaches for scholarly inquiry in India as the profession develops. The generation and publication of peer-reviewed descriptive studies and statistical reports is an important process for an emerging profession. It speaks to transparency in its practices and an accountability to the public.

Methods

This study reports prospective documentation of individual patients Chiropractic care provided by one clinic group in India. Providers included 5 Doctors of Chiropractic, 10 clinical technicians, and 3 physiotherapists.

The 1993 Case-Mix studies (18, 19) of Ebrall formed the seed template for data collection. The database of Dr Spine was interrogated to collate reports on case-mix and demographics of all patients registered over a 45-month-(August 2022 to April 2026)-year period. The top 13 reasons for patient presentation are given in Table 1. The percentage is the frequency of each category of all 13 categories. Categorisation by gender is given in Table 2.

Table 1: Distribution of presenting complaints

Condition	Patient Count	% of Top 13
Back Pain	6,135	22.6%
Lower Back Pain	5,352	19.7%
Neck Pain	2,605	9.6%
Shoulder Pain	1,499	5.5%
Disk Bulge	1,446	5.3%
Sciatica	1,222	4.5%
Full Body Alignment	671	2.5%
Knee Pain	529	1.9%
Upper Back Pain	519	1.9%
Leg Pain	471	1.7%
Neck And Back Pain	334	1.2%
Spinal Issues	324	1.2%
Cervical Spondylitis	280	1.0%
Total (Top 13):	**21,387**	

Table 2: Categories of presenting complaints

Condition	Male	Female	Total	% Male
Back Pain	361	237	598	60.4%
Lower Back Pain	844	361	1,205	70.0%
Neck Pain	286	132	418	68.4%
Shoulder Pain	149	80	229	65.1%
Sciatica	175	94	269	65.1%
Disk Bulge	176	103	279	63.1%
Knee Pain	49	49	98	50.0%
Cervical Spondylitis	57	29	86	66.3%
Upper Back Pain	56	22	78	71.8%
Posture	33	22	55	60.0%
Overall (these conditions):	**2,186**	**1,129**	**3,315**	

Figure 1: Percent distribution grouped complaints

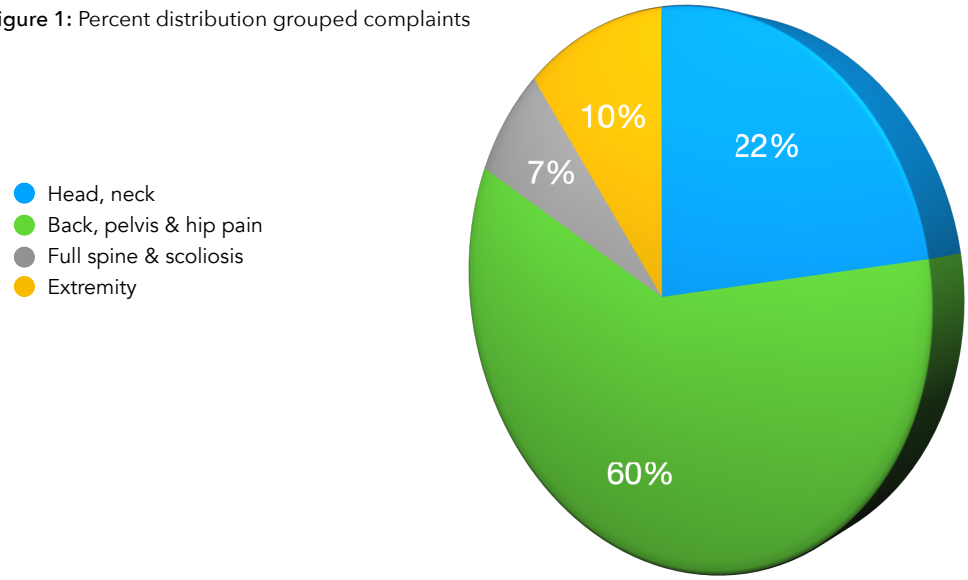
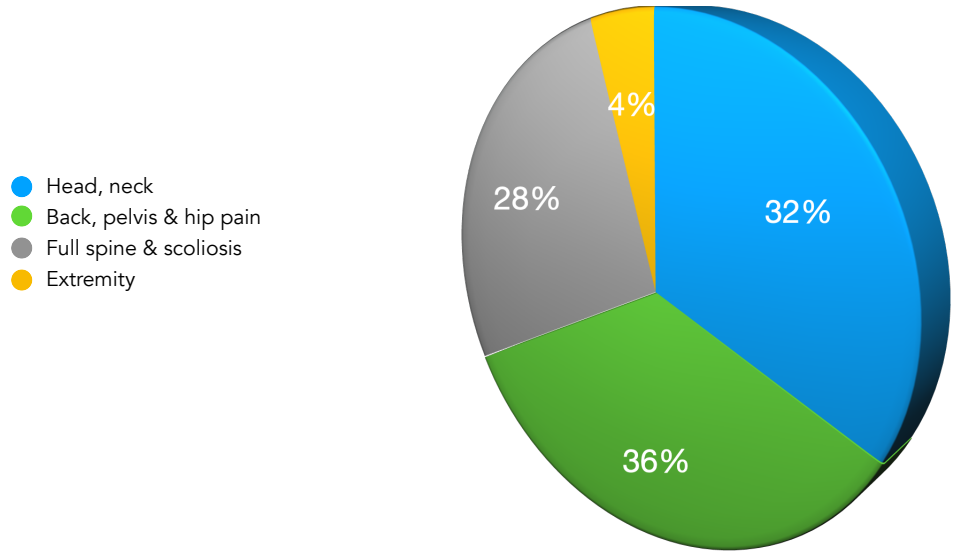


Figure 2: Comparison to Philippine data 2020 (20)



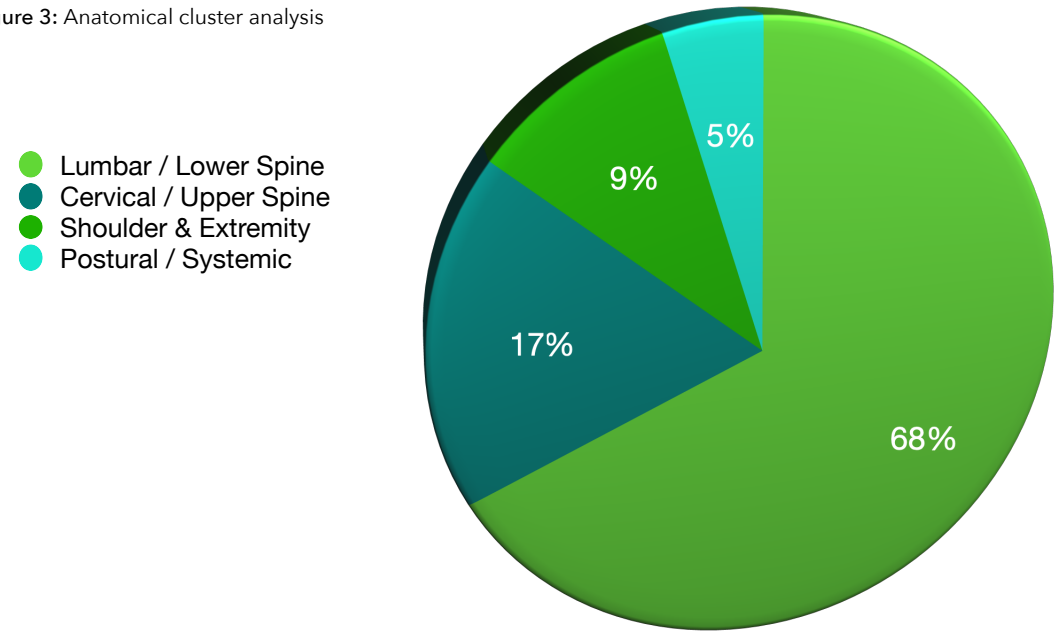
Results

Distribution of typical Chiropractic presentations

Table 3: Anatomical Cluster Analysis

Region	Conditions Included	Cases	% of Top-13
Lumbar / Lower Spine	Lower Back Pain, Back Pain, Sciatica, Disk Bulge, Leg Pain	14,626	68.4
Cervical / Upper Spine	Neck Pain, Cervical Spondylitis, Upper Back Pain, Neck & Back Pain	3,738	17.5
Shoulder & Extremity	Shoulder Pain, Knee Pain	2,028	9.5
Postural / Systemic	Full body Alignment, Spinal Issues	995	4.6
Total		21,387	100.0

Figure 3: Anatomical cluster analysis



A total of 21,387 patient-files were accepted from a 45-month window. The clinics were located in three Dr Spine centres:

- Bengaluru, Karnataka, New BEL Road (No. 385, opp. Starbucks, RMV 2nd Stage, 2nd Block, Geddalahalli, Sanjayanagara 560094;
- Whitefield (ThePlanet #302, 54 Whitefield Main Rd, Brooke Bond First Cross, Narayanappa Garden, Varthur 560066;
- Indiranagar (947, 12th Main Rd, above ICICI Bank, Sodepur, Appareddipalya 560008).

The CRM system remained constant. and recorded all details with consistency for case classification. Some variance is noted as clinicians refined their diagnostic statements.

Of all consecutive visits 65.9% were by males and 34.1% by females. India does not record transgender information. The mean age of female patients was 39.5y and of male patients, 39.7y. The all-patient age range was 8y to 72y.

Case-Mix analysis

Lower-back complaints dominate

Back Pain (n=6,135) + Lower Back Pain (n=5,352) n = 11,487 cases: This clinical category represents ~54% of all top-13 complaints. When we include Sciatica, Disk Bulge, Upper/Mid back and the lumbar region, these presentations drive the majority of visits.

Cervical (neck) issues are the #2 cluster

Neck Pain (n=2,605) + Cervical Spondylitis (n=280) + Shoulder Pain (n=1,499) n ≈ 4,384 cases. This is consistent with screen-heavy lifestyles and poor desk posture.

Skew toward males

Across the monthly samples, ~66% of patients are male. Lower Back Pain skews most male (70%); Knee Pain is the only category that is 50/50.

Nerve-root and spinal disc problems are of concern

Disk Bulge (n=1,446) + Sciatica (n=1,222) + 'Slip' Disk + Herniated disc n~2,750+ cases. These are structural issues, not just muscular and typically needed imaging-led care.

Lifestyle / posture conditions are growing

Full-body alignment, posture, scoliosis, frozen shoulder, TMJ and headache/migraine together represent a meaningful tail. We see this as evidence of sedentary, desk-bound presentations.

Seasonal pattern

Lower Back Pain peaks in Sep (n=216) and Aug (n=193); Back Pain peaks in Jun (n=233). Monsoon/post-monsoon months show the highest spine load, perhaps due to cold/damp weather and reduced individual activity.

Long tail of rare conditions

We recorded over 80 distinct complaints but the top 6 conditions accounted for over 85% of volume, a classic Pareto distribution. Care pathways can be standardised for the top 6 yet Chiropractors must remain vigilant for the presentation of serious and complex cases. The emerging education program is cognisant of these findings and its syllabus is appropriately tailored to the presentation profiles, including rare conditions, given in this report.

Critical insights from our findings

Insight 1: Disc disease is the fastest-growing spine condition in India

Disk bulge cases are up 126% and Sciatica up 93% comparing the first 12 months to the latest 12 months.

Together they are the single biggest growth story in our 4-year patient base. Indians are not just getting more back pain, they are presenting with more structural disc disease.

Insight 2: The diagnosis is sharpening, not the disease disappearing

Generic 'Back Pain' presentations dropped 46% over 4 years, while specific diagnoses (Disk Bulge, Sciatica, Lower Back Pain) rose.

The spine is not getting healthier, clinicians and patients are getting better at naming the actual condition. This is a maturity signal for Indian spine care.

Insight 3: Total spine volume is down 12%, but severity is up

Monthly visit volume fell from 549/mo (first year) to 481/mo (latest year), a 12.4% decline. But the mix has shifted decisively toward harder, imaging-grade cases (disc, sciatica).

This translates to fewer patients but with sicker spines: the case for specialist care has never been stronger.

Insight 4: Lower Back Pain is still the #1 condition and is growing

Lower Back Pain remains the single largest condition across the entire 45-month window and grew 14% comparing first-year to latest-year volumes.

> LBP is the most addressable, most preventable, and most under-managed condition in Indian primary spine care.

Insight 5: Peak demand: Jun-23 hit 1,029 complaints in a single month

The clinic's highest-ever monthly volume was June 2023 at n=1,029 patient complaints. This number is 10x the lowest month (Sep 2022, n=102).

We conclude that the demand for spine care is highly seasonal and event-driven. Future capacity planning must assume swings of this magnitude.

Insight 6: Neck and Shoulder cases are declining, and this may be the surprise

Neck Pain is down 12% and Shoulder Pain down 13% in the latest year vs the first year. Despite the screen-and-WFH narrative, our data shows cervical / upper-extremity complaints are actually flattening or contracting in this patient base.

We consider this finding merits investigation against national posture and ergonomics studies.

Insight 7: The cumulative spine burden: 24,099 patient complaints over 4 years

Across 45 months and 8 tracked conditions, the clinic has logged n=24,099 spine-related patient complaints, an average of n=535 every month. This is the largest continuously-tracked single-clinic spine dataset in the country we are aware of, and forms the empirical basis of the India Spine Report.

Insight 8: Knee and Upper Back are flat. The spine is the real story

Non-spine conditions (Knee +7%, Upper Back -24%) show no meaningful directional growth. The growth in patient demand is concentrated in the spinal column, lumbar disc and sciatic disease specifically, and that is where the next decade of clinical investment, training, and policy must focus.

Discussion

The purpose of a case-mix study is to take a snap shot of practice within a short time period, in this case 45 weeks from one location. This window is sufficiently long to allow data to reflect the influence of seasonal factors, a weakness with case-max reports over a shorter period. Also, political fluctuations were relatively stable during this longer period and there was no electioneering at the time of data collection.

> Figure 1 showing Indian data is compared with Figure 2, showing data from the first Philippine case -mix study. Although just 6y apart the variances are striking. While the categories are not precise matches, the broad groupings are, and these revel a startling doubling of the presentations of 'back, pelvis and hip pain' (India:Philippines). As noted in our insights above, it could be said that India is experiencing an epidemic of LBP and the effects on this on national productivity deserve serious attention from Government.

The practice style of the clinics

> The practice style of the clinic from which these data are reported can be described as a conventional, subluxation-inclusive, multimodal model of care. Spinal assessment and segment- specific adjustment form the core, drawing principally on the Gonstead (21) system integrated with structural posture rehabilitation, (22) therapeutic spinal decompression, whole-body vibration, and supervised physiotherapy. Imaging-led diagnosis informs care planning for structural disc and nerve-root presentations.

We consider this to be conventional subluxation-based Chiropractic care even though it is multi-modal and inclusive of physical therapies and other putative therapeutic interventions. This pattern of care delivery seems appropriate to the Indian community while maintaining a focus on the constitutional premise of Chiropractic that subluxation may be identified and corrected for the good of the patient's well-being.

This style of conventional subluxation-based Chiropractic practice typically prescribes a course of care based on known responses by other patients with similar presentations. On the other hand the extreme of concessional Chiropractic only provides care that is based on published evidence, usually relating to back pain and neck pain where the intervention is generic spinal manipulation instead of segment-specific adjustment. Given the lack of data pertinent to the Indian population it is not practical to fall-back onto a demand for specific case-based clinical evidence.

> The underlying premise in this conventional style of Chiropractic is the primacy of individualised or patient-centred care and to this end we are now appearing to validate standard approaches in conventional Chiropractic such as maintenance care. (23) This is a topic for a future report.

Conclusion

This paper is the first known report of chiropractic practice in India. It is a descriptive paper reporting pragmatic clinical data and categorising them as broadly similar to those reported elsewhere with some notable outliers we have addressed as Insights

The paper tells us that known patient presentations in Chiropractic practice in India approximate the patient presentations reported from other countries.

This paper allows the statements '*chiropractors in India largely manage male patients presenting with low-back pain with or without hip and pelvic pain*'. The beneficial outcomes as reported by these patients deserves further exploration to which we are attending.

It is considered important to understand that the outcomes reported in this study represent the only formal practice in India and we acknowledge a pollution of the idea of Chiropractic from unscrupulous people proving service in Chiropractic but without any training in Chiropractic. This is a matter of some urgency for Government to address in the interests of protecting India patients from perilous amateurish manipulation.

We intend to provide future reports examining matters such as cost:benefit ratios, patient health outcomes, and community health benefits. This knowledge is critical to the development of an appropriate education curriculum for Chiropractic in India.

A final matter warranting our comment is that the practice of Chiropractic institutions in other countries sending student outreach activities to India must cease immediately. Chiropractic in India has reached the stage where is is a rapidly growing professional discipline now delivering education at and beyond current international standards driven by a nascent professional association and impending National Law.

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