



Article

Characteristics of New Zealand Osteopaths Who Discuss Occupational Health and Safety with Patients

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Abstract

The aim of the study was to identify the characteristics of Aotearoa/New Zealand osteopaths who report often discussing occupational health and safety (OHS) issues with patients. Participants completed a questionnaire, through a practice-based research network, exploring their demographic, practice, and clinical management characteristics. Backward logistic regression was used to identify statistically significant predictors of often discussing OHS issues with patients. Two hundred and seventy-seven ($N = 277$) completed the questionnaire. One hundred and fourteen participants (41.2%) reported often discussing OHS with patients. Predictors associated with lower odds of often discussing OHS included more years in osteopathy practice (aOR 0.95, 95% CI 0.92–0.98), volunteering as an osteopath (aOR 0.40, 95% CI 0.19–0.91), sending referrals to a massage therapist (aOR 0.49, 95% CI 0.26–0.91) or naturopath (aOR 0.43, 95% CI 0.24–0.79), and working across more than one practice location (aOR 0.46, 95% CI 0.24–0.87). Predictors associated with higher odds included receiving referrals from another osteopath (aOR 2.72, 95% CI 1.33–5.58), often treating work-related injuries (aOR 2.26, 95% CI 1.19–4.30), often discussing medications (aOR 2.21, 95% CI 1.20–4.07), and often discussing physical activity (aOR 7.74, 95% CI 2.42–24.80), though the latter estimate carries considerable imprecision. A significant proportion of Aotearoa/New Zealand osteopaths report discussing OHS issues with their patients. These findings reflect self-reported consultation behaviours and should not be interpreted as evidence of formal occupational health competence or effectiveness. Further research on the nature, content, and outcomes of osteopathic engagement with OHS concerns is needed.

Keywords: allied health; health workforce; musculoskeletal manipulations; public health



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1. Introduction

Work-related musculoskeletal disorders (WMSDs) are a group of painful disorders of muscles, tendons, and nerves—including carpal tunnel syndrome, tendinitis, thoracic

outlet syndrome, and tension neck syndrome—and remain a leading contributor to pain, functional limitation, work absence, and reduced productivity internationally [1,2]. The principal biomechanical risk factors include excessive repetition, awkward postures, heavy lifting, vibration, and cold exposure, with psychosocial stressors also a reported risk factor [3]. For many individuals with WMSDs, a biopsychosocial approach that considers work tasks, beliefs, and coping strategies is recommended [4].

Osteopaths are a regulated musculoskeletal workforce in Aotearoa/New Zealand [5] and are commonly consulted for neuro-musculoskeletal conditions and pain [6]. In Aotearoa/New Zealand, as in Australia and the United Kingdom, osteopaths function as statutorily regulated primary-contact practitioners; this regulatory context differs substantially from some other jurisdictions, and the findings of this study should not be extrapolated internationally without careful consideration of these differences. Osteopathic practice is characterised by a person-centred, biopsychosocial approach that extends beyond manual therapy to include advice, education, and rehabilitation planning [7–9]. A typical osteopathic consultation in Aotearoa/New Zealand encompasses case history physical examination and, where appropriate, manual therapy, exercise prescription, and patient education [6]. This consultation structure provides natural opportunities for occupational factors to be identified and discussed, particularly where the presenting complaint has a plausible relationship to work tasks or workplace exposures [10,11]. However, the extent to which occupational factors are systematically assessed is likely to vary considerably between practitioners and practice settings.

The conditions most commonly managed by osteopaths, including low back pain, neck pain, shoulder disorders, and upper-limb tendinopathies [6], are among those most strongly associated with occupational exposures. Ergonomic risk factors such as sustained postures, repetitive movements, forceful exertion, and manual handling, alongside psychosocial stressors including high job demands and low decision-making control, are recognised as independent and interacting contributors to musculoskeletal symptom onset and persistence [12]. This overlap between the clinical caseload of osteopaths and the conditions of greatest concern in occupational health creates a natural intersection between osteopathic practice and OHS.

Occupational health and safety discussions in clinical care can include a spectrum of topics [13]: identifying hazardous tasks and exposures; advising on safe movement and manual handling; supporting graded activity progression; providing guidance on workstation ergonomics; and facilitating return-to-work planning. Such conversations are particularly relevant where symptom exacerbation is linked to repeated loading, sustained postures, or high physical demands [3] and may also be pivotal in persistent pain contexts where workplace pressures reinforce disability and prolonged work absence [14]. It is important to note that these individual-level clinical conversations complement, but do not replace, the workplace-level interventions (including job redesign and environmental risk assessment) that fall within the remit of occupational physicians, ergonomists, and occupational hygienists.

Occupational health discussions in clinical practice can be understood within a broader health promotion framework which encompasses the process of enabling people to increase control over the social, environmental, and occupational determinants of wellbeing [15]. Osteopathic practice, with its emphasis on person-centred, biopsychosocial care, may be particularly well-suited to integrating health promotion principles into clinical encounters [16,17]. Personal factors such as practice style, time constraints, and access to referral networks may act as facilitators or barriers to OHS advice [9]. Despite the relevance of workplace exposures to musculoskeletal health, limited evidence describes how frequently osteopaths in Aotearoa/New Zealand address OHS issues. Identifying the practitioner

and practice characteristics associated with OHS discussions is an important step toward understanding osteopathy's contribution to occupational health promotion and toward informing education, policy, and interprofessional collaboration.

2. Materials and Methods

This draws on data derived from a practice-based research network (PBRN) established specifically for the osteopathic profession in Aotearoa/New Zealand [6]. Ethical approval was obtained from the Human Research Ethics Committee at the University of Technology Sydney (reference: ETH19-3435). All participating practitioners provided written informed consent prior to data collection for the PBRN. It is acknowledged that ethical approval was obtained from an Australian institution and did not incorporate a Te Tiriti o Waitangi-informed review process. This represents a limitation of the study's ethical framework, as research conducted in Aotearoa New Zealand carries obligations under Te Tiriti o Waitangi, particularly in health contexts where Māori communities experience significant disparities in access to and outcomes from health services [18,19]. Future research in this setting should seek ethical oversight that explicitly incorporates Te Tiriti principles, including partnership, participation, and protection [20].

2.1. Study Population

Participants were recruited from the Osteopathy Research Connect New Zealand (ORC-NZ) PBRN, which was established in 2018. Recruitment occurred between August and December 2018 [6]. Of the 277 osteopaths who completed the baseline questionnaire, 253 subsequently consented to participate in the network, representing a 48.7% response rate across the profession [6]. Participants were able to consent to complete the questionnaire only and not participate in the wider activity of the PBRN.

2.2. Data Collection Instrument

The data collection instrument comprised items developed specifically for baseline assessment within the ORC-NZ PBRN and described in the work by Steel, Peng, Sibbritt and Adams [6]. Participants provided information across three domains: practitioner characteristics, practice environment, and clinical management approaches. Practitioner-level data included age, gender, professional qualifications, and years of clinical experience. Practice-level information encompassed weekly hours of patient contact, patient volume, presence of allied healthcare professionals, and patterns of inter-professional referral. Clinical management data captured the frequency of treatment across anatomical regions, utilisation of specific therapeutic techniques and complementary modalities, and management approaches for distinct patient populations.

2.3. Variables of Interest

The primary measure was the reported frequency of discussing OHS with patients. Participants indicated their frequency on a four-point ordinal scale (never, rarely, sometimes, often). For the analysis, the first three categories collapsed into a binary "not often" category, whilst "often" constituted the alternative binary outcome [21]. This dichotomisation was justified on two grounds. First, it reflects a clinically meaningful threshold: the distinction of primary interest was between practitioners for whom OHS discussion is a routine part of practice (i.e., those responding "often") and those for whom such discussions are inconsistent or absent, regardless of whether they responded "sometimes", "rarely", or "never". Collapsing these three categories into a single "not often" group captures this clinically relevant contrast. Second, the distribution of responses was expected to be skewed, with relatively few practitioners in the "never" category, which would have rendered ordinal or multinomial modelling unstable and difficult to interpret in a sample

of this size [22]. It is acknowledged that this approach may have reduced sensitivity and obscured gradations in practice behaviour, and that the single threshold chosen may not capture the full spectrum of OHS engagement across the profession. Predictor variables encompassed the demographic and practice characteristics described above, collected as frequency responses, binary (yes/no) items, or continuous measures. Missing binary responses were treated as missing completely at random and recoded as “not often”.

2.4. Data Analysis

Frequencies and percentages were generated for categorical variables, and means with standard deviations were reported for continuous variables. Bivariate analyses examined associations between OHS discussions and individual practice characteristics. Continuous frequency responses were analysed using independent-samples *t*-tests, whilst binary responses were examined using chi-square tests. Variables achieving a significance threshold of $p < 0.20$ [23] were retained for inclusion in multivariate logistic regression modelling. This threshold, recommended by Hosmer [23] for exploratory logistic regression model building, is intentionally more liberal than the conventional $p < 0.05$ criterion. A $p < 0.05$ threshold at the bivariate stage risks excluding variables that may become important predictors after adjustment for other covariates. The $p < 0.20$ threshold serves as a conservative inclusion criterion designed to reduce the risk of omitting relevant predictors from the multivariable model, rather than as a threshold for inferring statistical significance. Backward stepwise elimination was applied to identify the primary predictors of often discussing OHS with patients. This approach was used as an exploratory model-building strategy given the absence of prior literature identifying predictors of OHS discussion in osteopathy practice. Adjusted odds ratios with 95% confidence intervals and corresponding *p*-values were derived from the regression model. Statistical significance was established at $p < 0.05$. Bivariate analyses were performed using JASP (version 0.19), whilst regression modelling was conducted using SPSS (version 25, IBM Corp, Armonk, NY, USA).

3. Results

In total, 277 Aotearoa/New Zealand osteopaths were included, of whom 114 (41.2%) reported often discussing OHS with patients and 163 (58.8%) reported not often. Entry-to-practice training in Aotearoa/New Zealand is delivered through accredited tertiary programmes, typically at Bachelor/Master level, with additional postgraduate study undertaken by some practitioners. The demographic characteristics of osteopaths who report often discussing OHS are presented in Table 1.

Osteopaths who often discussed OHS were older on average than those who did not (46.7 ± 11.7 vs. 43.6 ± 12.0 years; $p < 0.03$; $d = 0.26$, 95% CI 0.01–0.50), representing a small effect size. Volunteering as an osteopath was less common among those who often discussed OHS (11.4% vs. 22.7%; OR 0.44, 95% CI 0.22–0.87). No other demographic characteristics showed meaningful differences between groups.

3.1. Practice Characteristics

Across practice characteristics (Supplementary File S1), osteopaths who reported often discussing OHS were less likely to work across more than one practice location (26.3% vs. 38.6%; unadjusted OR 0.57, 95% CI 0.34–0.95) and less likely to be co-located with a naturopath (32.4% vs. 47.2%; unadjusted OR 0.54, 95% CI 0.33–0.89). No other practice co-location characteristics showed meaningful differences between groups.

Table 1. Demographic characteristics for Aotearoa/New Zealand osteopaths who report *often* discussing occupational health and safety with patients compared to osteopaths who *not often* discuss occupational health and safety with patients.

Characteristic	Often (n = 114)	Not Often (n = 163)	OR [95%CI]	p-Value
Gender				
Male (reference group)	51 (44.7%)	80 (49.1%)	1.19 [0.73–1.92]	0.47
Female	63 (55.2%)	83 (50.9%)		
Age (years) *				
Mean ($\pm$ SD)	46.7 ($\pm$ 11.7)	43.6 ($\pm$ 12.0)		<0.03 ^
Years in clinical practice *				
Mean ($\pm$ SD)	13.8 ($\pm$ 10.5)	16.1 ($\pm$ 10.4)		0.08
Patient care hours per week *				
Mean ($\pm$ SD)	27.1 ($\pm$ 8.0)	27.2 ($\pm$ 10.8)		0.68
Patient visits per week *				
Mean ($\pm$ SD)	31.7 ($\pm$ 22.4)	33.2 ($\pm$ 22.4)		0.62
Qualification (n, %)				
Diploma/Advanced Diploma	14 (30.4%)	32 (69.6%)		0.11
Bachelor's degree & Honours	33 (38.0%)	54 (62.0%)		
Post-graduate (Master's, PhD)	65 (46.8%)	74 (53.2%)		
Involved in as an osteopath (reference group: No)				
Clinical supervision (students)	12 (10.5%)	12 (7.3%)	1.48 [0.64–3.42]	0.35
Clinical supervision (associates)	17 (14.9%)	25 (15.3%)	0.97 [0.49–1.89]	0.92
Volunteer as an osteopath	13 (11.4%)	37 (22.7%)	0.44 [0.22–0.87]	0.01
Research	11 (9.6%)	10 (6.1%)	1.63 [0.67–3.99]	0.27

^ Cohen's d = 0.26 (95%CI [0.01–0.50]), * continuous variable.

3.2. Clinical Management Characteristics

Supplementary File S2 shows that osteopaths who often discuss OHS reported a clinical profile clustering with other counselling-oriented and work-related behaviours. They were substantially more likely to often discuss physical activity (96.5% vs. 76.7%; OR 8.36), to often discuss medications (49.1% vs. 26.4%; OR 2.70), and to often provide pain counselling/education (28.9% vs. 14.7%; OR 2.36). Associations with work-related injuries (77.2% vs. 57.1%; OR 2.54), sport-related injuries (60.5% vs. 44.1%; OR 1.94), and post-surgical patients (19.3% vs. 9.8%; OR 2.19) were all in a consistent direction. Full odds ratios and confidence intervals for all variables are reported in File S2.

3.3. Predictors

The multivariable model identifying independent predictors of often discussing OHS with patients are presented in Table 2. Higher odds of often discussing OHS were associated with often treating work-related injuries (aOR 2.26, 95% CI 1.19–4.30), often discussing physical activity (aOR 7.74, 95% CI 2.42–24.80; wide interval reflecting the small reference category), often discussing medications (aOR 2.21, 95% CI 1.20–4.07), and receiving referrals from another osteopath (aOR 2.72, 95% CI 1.33–5.58). Lower odds were associated with more years in osteopathy practice (aOR 0.95 per year, 95% CI 0.92–0.98), volunteering as an osteopath (aOR 0.40, 95% CI 0.19–0.91), sending referrals to a massage therapist (aOR 0.49, 95% CI 0.26–0.91) or naturopath (aOR 0.43, 95% CI 0.24–0.79), and working across more than one practice location (aOR 0.46, 95% CI 0.24–0.87).

Table 2. Statistically significant variables and their associated adjusted odds ratios for Aotearoa/New Zealand osteopaths who report *often* discussing occupational health and safety with patients compared to osteopaths who not often discuss occupational health and safety with patients.

	Odds Ratio (aOR)	95% Confidence Interval		<i>p</i> -Value
		Lower	Upper	
Years in osteopathy practice *	0.95	0.92	0.98	0.002
Volunteer as an osteopath (ref: no)	0.40	0.19	0.91	0.021
Send referrals to a massage therapist (ref: no)	0.49	0.26	0.91	0.015
Send referrals to a naturopath (ref: no)	0.43	0.24	0.79	0.006
Receive referrals from an osteopath (ref: no)	2.72	1.33	5.58	0.006
More than one practice location (ref: no)	0.46	0.24	0.87	0.018
Treat patients with work-related injuries (ref: not often)	2.26	1.19	4.30	0.012
Discuss physical activity with patients (ref: not often)	7.74	2.42	24.80	<0.001
Discuss medications with patients (ref: not often)	2.21	1.20	4.07	0.011

* continuous variable.

4. Discussion

Our findings indicate that OHS discussions were reported frequently but not universally among Aotearoa/New Zealand osteopaths, with around two in five indicating they often address OHS with patients. OHS engagement consistently aligned with a broader ‘health promotion and work-focused’ practice profile [9,16]: clinicians who often discussed OHS were much more likely to also counsel patients about physical activity and medications, to treat work-related injuries frequently, and to receive referrals from other osteopaths.

Osteopaths who often treated work-related injuries showed approximately doubled adjusted odds of frequently discussing OHS (aOR 2.26, 95% CI 1.19–4.30). This finding is encouraging and may indicate that Aotearoa/New Zealand osteopaths managing work-related injuries recognise the importance of occupational factors in patient recovery and prevention of recurrent injury [12]. Work-related injury presentations inherently necessitate consideration of the occupational context [24] and osteopaths may be using OHS discussions to address modifiable workplace factors contributing to injury or impeding recovery [25]. However, the current data cannot confirm the nature, depth, or clinical quality of such discussions, nor whether they reflect formally recognised occupational health competencies. These findings also raise questions about how health promotion competencies are developed through pre-professional education and continuing professional development.

A question that this study cannot answer is whether OHS discussions occur within any structured or protocol-based assessment framework, or whether they arise informally based on individual practitioner interest, clinical experience, or patient-initiated disclosure. To our knowledge, there is no standardised occupational screening tool or formal assessment protocol currently embedded within osteopathic practice guidelines in Aotearoa New Zealand, and the extent to which pre-professional education equips graduates with structured occupational health assessment skills remains unclear. This distinction has direct implications for the consistency and equity of care received by patients with work-related presentations, and for the design of workforce development and continuing education initiatives. Future research, including practitioner interviews and consultation observation studies, should clarify whether and how occupational assessment is structured within osteopathic practice.

The strong association between OHS discussions and physical activity counselling (aOR 7.74, 95% CI 2.42–24.80)—noting that the wide interval reflects the small reference category rather than uncertainty about the direction of association—may reflect some os-

teopaths contextualising musculoskeletal symptoms within the patient's full occupational and lifestyle situation. Physical activity and occupational health represent interconnected domains of lifestyle medicine [26], and osteopaths discussing physical activity are extending their health promotion remit to include workplace-related factors and occupational exposures [16]. Similarly, osteopaths who often discuss medications showed approximately doubled adjusted odds of frequently discussing OHS (aOR 2.21, 95% CI 1.20–4.07), suggesting that medication conversations may prompt consideration of occupational exposures and work-related health impacts [24]. Together, these associations suggest that OHS discussions form a significant part of a broader health promotion orientation among certain Aotearoa/New Zealand osteopaths, though practice audits and qualitative research are needed to confirm this.

Osteopaths receiving referrals from another osteopath showed higher adjusted odds of often discussing OHS (aOR 2.72, 95% CI 1.33–5.58). This finding may indicate that inter-professional networks facilitate shared clinical language and aligned health promotion priorities [27,28]. Conversely, osteopaths who refer patients to massage therapists (aOR 0.49, 95% CI 0.26–0.91) or naturopaths (aOR 0.43, 95% CI 0.24–0.79) showed lower adjusted odds of frequently discussing OHS possibly reflecting differences in therapeutic approach [29], practice organisation, or case-mix. Further qualitative research is required to clarify these mechanisms.

Each additional year of osteopathy practice was associated with a small but consistent reduction in the adjusted odds of often discussing OHS (aOR 0.95 per year, 95% CI 0.92–0.98). This may reflect generational differences in health promotion training, with more recently qualified osteopaths potentially receiving greater emphasis on occupational health within their professional education [30], or it may reflect entrenched clinical routines amongst longer-established osteopaths. Osteopaths who volunteer their clinical practice (aOR 0.40, 95% CI 0.19–0.91) and those working across multiple practice locations (aOR 0.46, 95% CI 0.24–0.87) showed lower adjusted odds, possibly reflecting time constraints, competing clinical priorities, or reduced continuity of care that may limit comprehensive health promotion conversations [31].

In Aotearoa/New Zealand, osteopaths function as primary-contact musculoskeletal practitioners and commonly manage presentations where work exposures contribute to symptom onset, persistence, or recurrence [6]. It is important to contextualise the role of osteopaths within the broader occupational health workforce. Occupational physicians, ergonomists, and occupational hygienists are the primary professionals responsible for workplace-level OHS assessment and intervention. The OHS discussions identified in this study are more appropriately understood as individual-level clinical conversations that may complement, but do not replace, the contributions of these specialist occupational health professionals. Osteopaths may be best positioned to contribute to OHS through early identification of work-related presentations, provision of relevant self-management advice, and facilitation of referral pathways potentially supporting earlier intervention, reduced work absence, and more sustainable return-to-work outcomes. Realising this potential would require clearer articulation of osteopathy's role within interprofessional occupational health networks, supported by education, practice guidelines, and referral infrastructure that connects osteopathic practice to the wider occupational health workforce.

4.1. Implications

The findings of this study should be interpreted with awareness of the broader equity context of health service delivery in Aotearoa New Zealand. Māori and Pacifica peoples experience disproportionate rates of work-related injury and musculoskeletal conditions, alongside well-documented barriers to accessing timely and culturally appropriate health-

care [32]. Further, Te Tiriti o Waitangi establishes obligations for health practitioners and researchers to actively work towards equitable health outcomes for Māori [33]. The current dataset does not include information on the ethnicity of practitioners or patients, nor on whether OHS discussions were adapted to meet the cultural needs of diverse patient populations. Future research should examine whether OHS engagement by osteopaths is equitably distributed across patient groups, and whether culturally responsive approaches to occupational health promotion are being developed and implemented within the profession.

4.2. Strengths and Limitations

The ORC-NZ PBRN achieved a response rate of 48.7% of the profession, representing a substantial proportion of Aotearoa/New Zealand osteopaths and enhancing the generalisability of the findings. The use of a standardised questionnaire with items specifically tailored for baseline data collection within the PBRN ensured consistency in data collection across participants.

Several limitations warrant discussion. The cross-sectional, self-report design is susceptible to social desirability and recall bias; practitioners may overestimate engagement in health promotion activities such as OHS discussions. How individual respondents defined OHS discussions when completing the questionnaire is open to interpretation and may have introduced response variability. The single-item OHS measure has not been formally validated. Dichotomising the four-point ordinal outcome into a binary variable, whilst analytically justified, may have reduced sensitivity and obscured gradations in practice behaviour.

The design does not permit analysis of the depth, duration, content, or clinical context of OHS discussions, nor whether practitioners tailor their approach to specific patient presentations. Critically, the dataset contains no variables relating to patients' occupations, working conditions, or occupational exposures, making it impossible to determine whether reported discussions were prompted by identifiable work-related risk factors or addressed workplace conditions and systemic risk reduction. The dataset also does not capture whether practitioners have received formal occupational health training, work in industry-connected settings, or routinely screen for work-relatedness in clinical assessments. The associations reported in Table 2 should therefore be understood as descriptive of practice patterns rather than explanatory of clinical reasoning or OHS competence.

Findings are limited to osteopaths registered in Aotearoa/New Zealand and should not be extrapolated to other jurisdictions given the substantial international heterogeneity in the professional status, regulatory frameworks, and scope of osteopathic practice.

A contextual consideration concerns the institutional affiliations listed for the authorship team at the time of submission, none of which are based in Aotearoa/New Zealand. The lead author (K.K.S.) has an extensive professional history in the country across osteopathy and physiotherapy until 2025, providing meaningful contextual grounding; however, the perspectives of currently practising Aotearoa/New Zealand osteopaths, Māori health communities, and other local stakeholders may not be fully represented, and future research involving New Zealand-based investigators and community partners would strengthen contextual validity.

A significant ethical limitation is the absence of a Te Tiriti o Waitangi framework in the design, conduct, and ethical oversight of this study. Te Tiriti establishes obligations of partnership, active protection, and equitable participation that are directly relevant to health research in Aotearoa/New Zealand [20]. The study does not report on the ethnicity of practitioners or patients, does not examine whether OHS discussions are equitably distributed across patient populations including Māori, and was not designed

in partnership with Māori communities. This is a material gap given that Māori workers are over-represented in physically demanding occupations and face structural barriers to accessing musculoskeletal and occupational health services [32,34]. Future research should be co-designed with Māori communities and health researchers, incorporate kaupapa Māori methodologies where appropriate, and seek ethical oversight from bodies with explicit competence in Te Tiriti obligations.

Finally, whilst this study demonstrates that OHS discussion clusters with a broader health promotion and work-focused practice profile, it cannot illuminate how these discussions arise, what topics are addressed, whether they are practitioner- or patient-initiated, or how they relate to diagnosis, treatment planning, or preventive advice. Future research should prioritise qualitative methodologies (e.g., practitioner interviews, focus groups, and consultation observation studies) to examine the knowledge, attitudes, and clinical reasoning underlying OHS communication. Practice audits would provide objective data to complement self-reported frequencies. Together, such research has the potential to inform pre- and post-professional education, clinical practice guidelines, and health policy regarding the role of osteopaths in occupational health promotion.

5. Conclusions

A significant proportion of Aotearoa/New Zealand osteopaths report often discussing OHS issues with their patients, with approximately two in five indicating this is a routine feature of their practice. OHS engagement was consistently associated with a broader health promotion and work-focused clinical profile, suggesting that for some practitioners, occupational health discussion forms part of an integrated preventive orientation rather than an isolated clinical activity. These findings reflect self-reported consultation behaviours and should not be interpreted as evidence of formal occupational health competence or effectiveness.

The associations identified, particularly with physical activity education, work-related injury management, and intra-professional referral, point to a subgroup of osteopaths who may be well positioned to contribute to early identification of work-related presentations and to support patients in navigating the interface between health and work. However, the absence of structured occupational screening frameworks within osteopathic practice guidelines, as well as the uncertainty regarding how occupational health content is addressed in pre-professional education, represent important gaps that limit the consistency and equity of this contribution.

Realising the potential of osteopaths as contributors to occupational health promotion in Aotearoa/New Zealand will require deliberate investment in workforce development. Educational initiatives within pre-professional curricula and continuing professional development frameworks should equip osteopaths with the knowledge, skills, and structured tools necessary to identify and respond to occupational health concerns in a consistent and culturally responsive manner. Prospective research is needed to evaluate whether OHS discussions undertaken by osteopaths translate into measurable improvements in patient outcomes, work participation, and sustainable return to work. This evidence that is currently absent but essential for informing policy, interprofessional collaboration, and the future scope of osteopathic practice in occupational health.

Supplementary Materials: The following supporting information can be downloaded at: <https://www.mdpi.com/article/10.3390/occuphealth1030035/s1>. File S1: Practice characteristics of Aotearoa/New Zealand osteopaths who report *often* discussing occupational health and safety with patients compared to osteopaths who *not often* discuss occupational health and safety with patients; File S2: Clinical management characteristics of Aotearoa/New Zealand osteopaths who

report *often* discussing occupational health and safety with patients compared to osteopaths who *not often* discuss occupational health and safety with patients.

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Informed Consent Statement: The manuscript is a secondary analysis of a dataset from a practice-based research network (PBRN). We have applied to the researchers to be able to use the deidentified data for a secondary analysis. All participating practitioners provided written informed consent prior to data collection for the PBRN.

Data Availability Statement: The data that support the findings of this study are available upon reasonable request from arccim@uts.edu.au.

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Abbreviations

The following abbreviations are used in this manuscript:

OHS	Occupational health and safety
OR	Odds ratio
PBRN	Practice-based research network
WMSD	Work-related musculoskeletal disorder

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