THE STUDY OF DEMOGRAPHY AND CO-PATHOLOGIES OF PATIENTS ATTENDING TWO PRIVATE OSTEOPATHIC MEDICINE CLINICS: A PILOT STUDY

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Journals

Standard journal article. List all authors when six or less; when seven or more, list only first three and add 'and co-workers'.

1. Russel R, Groves P, Taub N, O'Dowd J, Reynolds F. Assessing long term backache after childbirth. British Medical Journal. 1993;306:1299-1303.

Books

Personal author(s)

1. Mitchell FL, Jr. The Muscle Energy Manual. Volume 1. East Lansing, Mich: MET Press;1995:166-167.

2. Travell JG, Simons DG. Myofascial Pain and Dysfunction: The Trigger Point Manual. Baltimore: Williams & Wilkins Co.;1983.

Editor, compiler, chairman as author

3. Ward RC. Ed. Foundations for Osteopathic Medicine. Baltimore: Williams & Wilkins; 1997:1127.

Chapter in a book

Knapp ME. Massage. In: Kottke FJ, Lehmann JF, eds. Krusen's Handbook of Physical Medicine and Rehabilitation. 4th ed. Philadelphia, Penn: WB Saunders; 1990:433-435.

Symposium

4. Aston-Jones G, Valentino R. Brain noradrenergic neurons, nociception and stress: basic mechanisms and clinical implications. In: Willard FH, Patterson MM, eds. Nociception and the Neuroendocrine-Immune Connection, 1992 International Symposium. Indianapolis,Ind: American Academy of Osteopathy; 1992:107-132.

ABSTRACT

Background: As primary health care practitioners, and in order to improve the standard of care available to patients, osteopaths must have adequate training that teaches them about the range of conditions (both presenting conditions and co-pathologies) they are most likely to encounter in practice. It is important for osteopaths to be aware of co-pathologies as these diseases, their complications and treatment (such as medication), may interact with or be the cause of the patient's presenting complaint and consequently may influence the type and effectiveness of osteopathic treatment.

Objectives: The current study aims to investigate the types and frequency of previously-diagnosed and co-existing conditions seen by two private osteopathic clinics, to relate those to known national averages. The researchers' hope this study will encourage the beginning of a database reporting on co-pathologies in clinics throughout Victoria, and be used as a catalyst for future research.

Methods: A random sample of 102 patient files was taken from two private osteopathic clinics and data was collected retrospectively. The data recorded from the patient files included: age, sex, presenting complaint and diagnosed co-pathologies.

Results: The most common co-occurring pre-diagnosed conditions identified were asthma (8.9%), and hypertension (5.9%). These patterns generally corresponded with the national trends identified by the Australian Bureau of Statistics.

Conclusions: The main co-pathologies identified in this study increase in frequency with increased age. As such, the most prevalent conditions listed by the Australian Bureau of Statistics (2001 census) are perhaps not as strongly represented as co-pathologies in this study. The researchers' hope this study will encourage the beginning of a database reporting on co-pathologies in clinics throughout Victoria. Eventually, this database may be used to analyse the current osteopathic course curricula in detail.

Key indexing words

Osteopathy, co-pathology, patient profile, education

KEY TERMS

Co-pathology: A second diagnosable or pre-diagnosed condition existing at the same time, or independent to, the main presenting complaint. The patient may have recovered from this, or it may also exist at the time of osteopathic treatment.

INTRODUCTION

Demographic and epidemiological information on the evolving practice of osteopathy is important. The information attained from such studies can be used by students and educators alike. The type of patient being treated, as well as the key pathologies witnessed by practicing osteopaths, are two pieces of demographic/epidemiological information that will give students valuable insight into what awaits them in private practice, whilst allowing the opportunity for educators to better prepare students for this transition by way of a curricula that is reflective of professional osteopathic life.

The study of co-pathologies within private osteopathic practice, including past and present medical disorders of patients, has yet to be undertaken. It is important for osteopaths to be aware of such conditions. These diseases, their complications and treatment (such as medication), may interact with or be the cause of the patient's presenting complaint and consequently may influence the type and effectiveness of osteopathic treatment. Therefore a thorough knowledge of such disorders is necessary in order for appropriate management of the patient to occur. This study will focus on documenting the different co-pathologies seen in private practice whilst giving an insight into the reality of current osteopathic practice.

Osteopathy is a system of diagnosis and treatment which focuses on the structural and mechanical problems of the body. This is evident in the literature recording musculoskeletal presenting complaints of patients seen in private osteopathic practice.[1-4] From spinal joint ailments to peripheral joint sprains, the primary complaint of individuals has been well documented. To date, there have been no studies that have investigated the co-pathologies patients may possess. As such it is difficult to appreciate the types and relative frequencies of non-musculoskeletal conditions that osteopaths are exposed to.

North and co-workers[3] state that general practitioners are increasingly prepared to refer patients with certain medical conditions to health professionals such as osteopaths. This is further supported in a study by Peters et al, whereby the referral of patients to a musculoskeletal clinic was recorded. All referrals were via a general practitioner. With this increase in GP referrals, the likelihood of osteopaths observing co-pathologies increases concurrently. The lack of research into co-pathologies seen in osteopathic practice today makes it difficult for university academics to provide a curriculum that affords students with theoretical and practical knowledge which more clearly reflects the reality of the osteopathic workplace.

A study by Szmelskyj and Mathews[6] outlined the main reasons as to why general practitioners refer their patients to osteopaths. Interestingly, low back pain and neck pain clearly constituted the majority of referrals. To date research has focussed on conditions commonly presenting to Osteopaths and perhaps not enough on the wide range of conditions that Osteopaths are able to treat, including an array of conditions ranging from asthma to dysmenorrhea and infantile colic. It is possible that this narrow referral pattern has been influenced by the misperception created by such research. There is a clear need for research that shows osteopathy is a useful means to manage non-musculoskeletal conditions. By listing the co-pathologies seen in private practice, the researches hope to increase both the medical profession and the osteopathic professions understanding of the range of conditions osteopaths observe and manage in private practice, thus aiding in the accrual of data that will help paint a clearer picture of the reality of osteopathic practice.

As primary health care practitioners, and in order to improve the standard of care available to patients, osteopaths must have adequate training that teaches them about the range of

conditions (both presenting conditions and co-pathologies) they are most likely to encounter in practice. At present, the Victorian University osteopathic course curriculum somewhat mirrors a medical course in that the osteopathic techniques, theories and philosophy are taught in conjunction with mainstream medical sciences – predominantly pathology and clinical diagnosis and management. This study, by outlining the possible pathologic disorders presenting to osteopaths, may assist educators to form a more clinically reflective curriculum in regards to the main pathologies seen in private osteopathic practice.

Barbero[7] has suggested that there is an increasing gap between education and practice in the medical profession. Could this be the case within the osteopathic profession in terms of the medical sciences and osteopathic curricula being taught, and the reality of what is being seen by practicing osteopaths? The development of a well-structured knowledge framework is a critical step toward becoming an expert in a particular field. In the absence of any hard data regarding the medical conditions seen in private osteopathic practice at present, it is difficult to see how a current osteopathic curriculum could hope to provide an appropriate preparation for its graduates. This study will be the start of a database that is hoped to eventually resolve this issue.

Currently, there is no information regarding the types or relative frequencies of the non-musculoskeletal conditions that osteopaths are exposed to. The researchers hope to initiate a process of exploration that will ultimately help students and educators in gaining a broader understanding of patient demographics and the most common pathologies seen by osteopaths today. Documenting co-pathologies will eventually allow for analysis of the pathology and clinical diagnosis curriculum in order to decide if it adequately prepares graduates for private practice.

METHOD AND MATERIALS

Data Collection

The research was carried out at two private Osteopathic Medicine Clinics. The clinics will be referred to as Clinic A – inner western suburbs, and Clinic B – inner south eastern suburbs.

Prior to data collection the researchers obtained permission from the owner of each clinic to access the patient files (see Appendix 1). After this was granted, permission was then sought from the patients themselves to access their patient files by way of an information to participants form (see Appendix 2), and a consent form (see Appendix 3).

The "information to participants" forms and "participant consent" forms were given out by the receptionist allowing all patients to read and decide whether or not they wished to take part in the study. If patients chose to participate in the study, the completed consent forms were dropped within a sealed box located at the receptionist desk. Only the principal investigators of this research project had access to the collection box.

The data was collected retrospectively from patient files within the clinic. No patient files left the clinic premises.

The protocol was approved by the Victorian University Human Research Ethics Committee.

Data Classification

Data was recorded directly from the 102 patient files to computer using Microsoft Excel 98.

The data recorded from the patient files included, age, sex, presenting complaint and co-pathologies.

The presenting complaint was not the diagnosis recorded on the history sheet, nor was it formulated by the researcher. It was recorded from the "complains of" section of the case

history sheets used in both clinics as the anatomical location of the complaint. Whether the complaint was for pain or stiffness was not specified in the data.

The co-pathologies documented in this research project are conditions that patients have reported to the treating osteopath during the recording of their previous medical history. They were not determined by the practitioner treating them. The co-pathologies were classified according to the primary organ systems affected, and then further divided into subheadings according to specific diseases/disorders. Multiple co-pathologies listed in the history were also recorded.

No patient identifiers were recorded, thus all information obtained remained completely anonymous.

Data Analysis

Age, gender, and presenting complaints were compared between both clinics to identify any relationship between the demographic details and presenting complaints. To allow comparison with similar studies, age was separated into groups; 0-19 years, 20-39 years, 40-59 years and 60+ years.

Data analysis of co-pathologies involved grouping all recorded non-musculoskeletal conditions together in table form, with the frequency of each co-pathology identified as a percentage of the sample population.

RESULTS

Demographic characteristics

One hundred and two patients (36 male and 66 female) from two osteopathic clinics based in the Melbourne metropolitan area allowed access to their patient files in order for age, gender, presenting complaint and co-pathology data to be collected. The clinics will be referred to as Clinic A – inner western suburbs, and Clinic B – inner south-eastern suburbs.

Age and Gender

Female patients (64.7%) from both clinics far outweighed male patients (35.3%). The age and sex distribution of patients from both clinics is shown in Table 1. The majority of patients from both clinics were aged between 20 and 39 years of age, accounting for 51.8% of Clinic A's sample, and 45.7% of Clinic B's sample. The same age distribution accommodated 53% of all participating female patients, the highest ratio for females. In regards to males, the 20 - 39 year range and 40-59 year ranges were the most popular having almost equal ratios of patients each.

The mean age of Clinic A's patients were 45.2 years for males, and 36.2 years for females. The mean age of Clinic B's patients were 43.6 years for males, and 38.2 years for females. Out of the 102 participating patients, only three were 19 years or under, and only ten were over 60 years or over.

Table 1: Patients Attending Clinic A and B, age and sex distribution

Age Group (years)	Males		Females		*Total (percentage)*	
	Clinic A	Clinic B	Clinic A	Clinic B	Clinic A	Clinic B
0-19	-	1	-	2	-	3 (6.5)
20-39	9	6	20	15	29 (51.8)	21(45.7)
40-59	8	5	14	12	22 (39.3)	17(36.9)
60+	5	2	-	3	5 (8.9)	5(10.9)
Total	**22**	**14**	**34**	**32**		
	Mean Age		Mean Age		**56 (100)**	**46(100)**
	43.2	**43.6**	**36.2**	**38.2**		

Presenting Complaints

The most common presenting complaints by percentage of the sample population from both clinics are shown in Table 2. The most common presenting complaint for Clinic A was cervical spine/headache complaints, comprising of 36.4% of all presenting complaints observed. The next popular complaint was low back pain, making up 25.5% of all presenting complaints. The opposite is seen in Clinic B with low back pain being the main presenting complaint (37.0%) and cervical spine/headache complaints following (23.9%). 13.9% of patients presented with shoulder pain, with a further 12.9% reporting thoracic pain. The remainder of the presenting complaints comprised of a variety of upper and lower limb complaints, including elbow, wrist, knee, abdominal and temporomandibular joint problems. The data collected shows that over three-quarters of all presenting complaints are those that entail the head/neck and spinal column.

Type and Frequency of Co-pathologies

All co-pathologies recorded did not necessarily relate to the patient's presenting complaint, and as such the patient may not have been suffering from the recorded co-morbid condition at the initial consultation. Table 3 illustrates the most common co-pathology according to specific organ systems by percentage of the sample population.

The greatest incidence of co-pathologies involved the respiratory system, with 10.9% of all co-pathologies recorded affecting this system.

Table 2: Presenting complaints by percentage of the sample population

Presenting Complaint – indicated as regions of the body	**Clinic A – Percentage of Sample**	**Clinic B – Percentage of Sample**	**Both Clinics – Percentage of Total Population**
Low Back Pain (LBP)	25.5	37.0	30.7
Cervical Spine/Headache	36.4	23.9	30.7
Shoulder	16.4	10.9	13.9
Thoracic Spine	12.7	13.0	12.9
Lower Limb	3.6	8.7	5.9
Upper Limb	3.6	2.2	3.0
Other	1.8	4.4	0.03

Note: The "other" category comprises of tempormandibular joint, abdominal and sinus complaints from both clinics.

Table 3: Most common co-pathology according to specific organ system

Organ System	Incidence of co-pathology – percentage within particular system	Most common co-pathology encountered – percentage of sample population	Next most common co-pathologies
Respiratory	10.9	Asthma (8.9%)	Pneumonia, Bronchitis
Cardiovascular System	9.9	Hypertension (5.9%)	Hypercholesterolemia,
Endocrine System	6.9	Diabetes Type 1 and 2 (3.0%)	Hypothyroidism
Gastrointestinal System	5.9	Irritable Bowel Syndrome (2%)	Crohn's Disease, Peptic Ulcer
Reproductive System	4.0	Pregnancy* (2%)	Endometriosis
Optical/dental/auditory	4.0	Myopia (4%)	-
Bone Pathology/Arthitides	4.0	Osteoarthritis (2%)	Osteoporosis, Gout
Infection	3.0	Hay Fever (3%)	-
Trauma/Fracture	2.0	Ankle (2%)	-
Neurological system	0.01	Meningitis (1%)	-
Neoplasia	0.01	Breast (1%)	-
Dermatological	0.01	Psoriasis (1%)	-

*Note: Pregnancy is not a co-pathology, but has been recorded in this table to demonstrate a special situation that causes a variety of problems that are effectively treated by osteopathy such as back pain and leg pain

The cardiovascular system was second, accounting for 9.9% of all recorded co-pathologies. The least common organ systems included the neurological and dermatological systems, each of which only accommodated one co-pathology (0.01%). Neoplasia was also only noted in a single case history (0.01%).

Concurrently, the most common documented co-pathology was asthma, with 8.9% of patients having asthma. The second most common was hypertension (5.9%), and the third being myopia (4.0%). The least common co-pathologies included meningitis, breast cancer, and psoriasis each of which was only reported by one patient from the either clinic.

DISCUSSION

Patient Profiles

Patient ages ranged from 13 years to 81 years. Eighty-nine percent of all patients from both private practices were aged between 20-59 years, with 50% of these patients falling within the 20-39 year band. The average age of patients in this study was 40.3 years. These results concur with those of previous studies examining the demographics of osteopathic patients[2-5] which all stated the majority of patients seen were between 30-60 years of age. The large percentage of female patients attending both practices corresponds to the majority of the surveys referred to above.

Of interest is the absence of patients aged between 0-19 years in one clinic. Even though the previous studies[2-5] show this age group as being the least likely to attend, none had complete absence of patients. However, some important facts need to be taken into consideration. Firstly, there was a sample bias within the 0-19 year age range, as consent for data collection from younger patients could only be attained through a parent or guardian. As the consent forms used in this research project were directed towards an adult patient and not specifically the guardian of a patient, data within this age range is limited. Secondly, the principle practitioner's advertising has not been directed toward this age group or the parents/guardians of children within this age group. It has been concentrated more on specific conditions, such as low back pain. As people in this low age group are less likely to have such conditions compared to older age groups, patient numbers in the younger age group would be expected to suffer.

The small sample seen in the lowest age group from both Clinic A and B makes it clear, in this study at least, a substantial commercial opportunity is being lost by both clinics in regards to the youth market. This group has been shown to suffer the most acute injuries - sports

injuries.[8-9] As acute injuries respond far more favourably to treatment than chronic conditions, the principle practitioners are also missing out on a population cohort that in addition to being regularly hurt, are also quickly healed.

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Presenting Complaints

The primary complaints encountered by osteopaths in private practice have been documented repeatedly as mainly musculoskeletal problems.[1-4] In the present study, both low back pain (30.7%) and cervical/headache complaints (30.7%) made up nearly two thirds of the overall presenting complaints, after which the number of cases for other presenting complaints dropped sharply. This is consistent with previous findings in all the above studies, with the presenting complaint of low back pain ranging from 21%–52% of all complaints documented, with the neck/headache site ranging from 20%-29% of all complaints. It is clear both are much more frequent than any other site or complaint witnessed in private osteopathic practice.

Co-pathologies

The most common co-pathology from both clinics was asthma, which represented 8.9% of all co-pathologies recorded. Findings from the Australian Bureau of Statistics (ABS)[10] from the 2001 census show that 12 % of the Australian population had asthma. The discrepancy between both studies could be explained by the lack of 0-19 year old patients in this study. According to the ABS,[10] asthma is more prevalent in the younger years, with 14% of sufferers between 0-19 years. The lack of younger patients may have limited the participation of asthmatic sufferers in this study.

The second most common co-pathology recorded was hypertension, representing 5.9% all co-pathologies documented. According to the ABS[10] in 2001, 10% of the population suffered from long-standing hypertension. The discrepancy again may be explained through age.

According to the ABS[10], the prevalence rate of cardiovascular disease increased with age, peaking at 40% for people aged 65years and over. The prevalence rate of essential hypertension mirrors cardiovascular disease, and peaks at 65-74 years of age. In this study, only 9.8% of patients were 65 years or above, and as such the recording of cardiovascular disease, including hypertension, may be lower than normal.

The ABS[10] states that in 2001 arthritis sufferers (either osteoarthritis or rheumatoid arthritis) consisted 14% of the population. Interestingly in this study, arthritis constituted only 2% of all co-pathologies collected, including not one rheumatoid arthritis sufferer. In 2001 the ABS[10] reported 43% of all arthritis patients fell within the 65-74 age group, with 52% of patients over 75 years. The small number of patients aged 65 years and over may have played a role in this large discrepancy, limiting the incidence of osteoarthritic patients in this study.

It is clear that the most common co-pathologies identified in this study increase in frequency as patient age increases. The mean age of patients from both clinics was 39.7 years and 40.9 years respectively. As such, the most prevalent conditions listed by the ABS[10] (2001 census) are perhaps not as strongly represented as co-pathologies in this study.

The main aim of this study was to determine what co-pathologies were actually seen in private practice. Until a study documents the reality of the nature and incidence of co-pathologies in practice, no one can conduct a detailed analysis of the curriculum in order to decide if it adequately prepares the graduate for private practice. The researchers' hope this study will encourage the beginning of a database reporting on co-pathologies in clinics throughout Victoria, and be used as a catalyst for future research. Eventually, this database may be used to analyse the current osteopathic course curricula in detail.

Limitations of the study

Over a three month data collection period between two private osteopathic clinics, only 102 patients allowed access to their patient files. The low number of patient files investigated may limit the accuracy of the findings of this study in representing the patient population within the wider osteopathic community. However, being a pilot study, the data collected is hoped to initiate a Victoria – wide database that may eventually represent the patient population more accurately.

The main reason as to why there was such low numbers within the 0-19 years of age range was because there was a sample bias within this age group. Data collection from younger patient files can only be attained through permission from a parent or guardian. As the consent forms used in this research project were directed towards an adult patient and not specifically the guardian of a patient, data within this age range is limited. This may have skewed the findings of the current study. Future studies could incorporate consent forms that are directed towards parents/guardians to specifically allow the investigation of patient files that fall within a young age range. This will allow for a wider patient population to be investigated.

Unfortunately there was a major discrepancy between the history taking methods from both clinics in terms of the co-pathologies reported. One clinics' history taking procedure required the principle practitioner to ask the patient about non-musculoskeletal conditions they may have had or have at present. The other clinics' history taking procedure required the patient to write down any medical conditions they may have on the history taking sheet themselves, before the practitioner even speaks to them. The main problem for the researchers is the data written by the patient may contain less information than what a skilled practitioner could extract from the patient themselves. Consequently, the co-pathologies recorded and

documented in this research project may be incomplete. If similar studies are undertaken in the future, the private clinics utilized should only employ history forms completed by the principle practitioner. In this way data collection may be more accurate.

CONCLUSION

In recent years there have been calls for objective research into osteopathy to substantiate claims it has a health benefit.[11-12] This research paper investigated a topic yet to be explored - information regarding the types and relative frequencies of the co-pathologies that osteopaths are exposed to in private practice.

The demographics and presenting complaints recorded in this study resembled that found in previous studies investigating the osteopathic patient. In regards to recorded co-pathologies, a comparison to the Australian Bureau of Statistics Census[10] 2001 was undertaken as no prior co-morbid study had been completed. The incidence of the recorded conditions differed slightly and could be explained by the small number of patients who fell within the youngest (0-19) and eldest (65+) years of age brackets. Both of the most common co-pathologies recorded (asthma and hypertension respectively) increased in incidence within these age ranges.

The information accumulated in this study is important as co-pathologies can influence both the musculoskeletal complaints that so often present in private practice, as well as the mode and effectiveness of osteopathic treatment. Documenting co-pathologies also allows for analysis of the pathology and clinical diagnosis curriculum in order to decide if it adequately prepares graduates for private practice.

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APPENDIX 1: Clinic consent letter

August 1, 2004

Dear Sir or Madam:

My name is _____ and I am currently undertaking my Masters degree in Osteopathy at Victoria University. My masters title is "The Study Of Demography And Co-pathologies Of Patients Attending Two Private Osteopathic Medicine Clinics: A Pilot Study."

I would like to invite you and your clinic to be a part of my study. For my study I will require access to current and new patient files. I will be analysing and documenting:

- Age/Sex
- Primary Complaint
- Medication History
- Co-pathologies – these will be sub-divided according to appropriate systems, i.e. cardiovascular such as angina

No patient identifiers such as names or addresses will be disclosed in compliance with the Privacy Act, with all information being recorded directly onto Microsoft Excel on the clinics premises.
If you are willing to participate, your signature is required at the end of this document. Any queries may be directed to the project supervisor, _____on _____or myself, on _____where a message can be left.

Your clinic's involvement in this research would be greatly appreciated, as this study will provide a valuable tool for both Osteopathic students and the Osteopathic profession.

Sincerely,

Student Osteopath

I ....of
.....(clinic name), give consent to participate in the following study titled *"The Study Of Demography And Co-pathologies Of Patients Attending Two Private Osteopathic Medicine Clinics: A Pilot Study."*

Signature..... Date.....

If you have any queries or complaints about the way you have been treated, you may contact the Secretary, University Human Research Ethics Committee, Victoria University of Technology, PO Box 14428 MC, Melbourne, 8001 (telephone no: 03-9688 4710).

APPENDIX 2: Information to Potential Participants form

Information to Potential Participants

Title of Study: ***"The Study Of Demography And Co-pathologies Of Patients Attending Two Private Osteopathic Medicine Clinics: A Pilot Study".***

Investigators:

_____(Project Supervisor)
_____ (Year 5 Osteopathic Student)

Purpose and Plan:

I would like to invite you to be a part of my study. For my study I will require access to your patient file. I will be analysing and documenting:

- Age/Sex
- Primary Complaint
- Medication History
- *Co-pathologies* - co-occurrence of another disorder/s, either related to or independent of a patient's primary complaint. E.g. A patient suffering from headaches (primary complaint) may also have been previously diagnosed with diabetes (co-morbidity).

As primary health practitioners, osteopaths will be exposed to a variety of musculoskeletal complaints and other diseases. The recording of co-pathologies can lead to osteopathic students improving their understanding of the major disease processes affecting the musculoskeletal system.
As this research project only involves the recording of strictly de-identified data from patient files, there are no potential risks involved. No patient files will leave the clinic area thus removing the possibility that patient anonymity will be compromised. No patient identifiers (such as your name, phone number and address) will be recorded, as all information will be held in confidence in compliance with the Privacy Act.
You are free to withdrawal from this study at any stage.
Any queries may be directed to the project supervisor, _____on_____.

Sincerely,

Student Osteopath

If you have any queries or complaints about the way you have been treated, you may contact the Secretary, University Human Research Ethics Committee, Victoria University of Technology, PO Box 14428 MC, Melbourne, 8001 (telephone no: 03-9688 4710).

APPENDIX 3: Patient consent letter

Dear Sir or Madam:

My name is _____and I am currently undertaking my Masters degree in Osteopathy at Victoria University. My masters title is *"The Study Of Demography And Co-pathologies Of Patients Attending Two Private Osteopathic Medicine Clinics: A Pilot Study."*

I would like to invite you to be a part of my study. For my study I will require access to your patient file. I will be analysing and documenting:

- Age/Sex
- Primary Complaint
- Medication History
- Co-pathologies - co-occurrence of another disorder/s, either related to or independent of a patient's primary complaint. E.g. A patient suffering from headaches (primary complaint) may also have been previously diagnosed with diabetes (co-morbidity).

As primary health practitioners, osteopaths will be exposed to a variety of musculoskeletal complaints and other diseases. The recording of co-pathologies can lead to osteopathic students improving their understanding of the major disease processes affecting the musculoskeletal system.

As this research project only involves the recording of strictly de-identified data from patient files, there are no potential risks involved. No patient files will leave the clinic area thus removing the possibility that patient anonymity will be compromised. No patient identifiers (such as your name, phone number and address) will be recorded, as all information will be held in confidence in compliance with the Privacy Act.

If you are willing to participate, your signature is required at the end of this document. Attached is your copy of the studies details and contact information. You are free to withdrawal from this study at any stage. Any queries may be directed to the project supervisor, _____on_____. Your participation in this research would be greatly appreciated, as this study will provide a valuable tool for both Osteopathic students and the Osteopathic profession.

Sincerely,

Student Osteopath

I .....of
.....(address), give consent to participate in the following study titled "The Study Of Demography And Co-pathologies Of Patients Attending Two Private Osteopathic Medicine Clinics: A Pilot Study."

Signature.....Date.....

If you have any queries or complaints about the way you have been treated, you may contact the Secretary, University Human Research Ethics Committee, Victoria University of Technology, PO Box 14428 MC, Melbourne, 8001 (telephone no: 03-9688 4710

APPENDIX 4: Raw Data

Clinic 1

Age		PC	#	Presenting Complaint	%	CVS	9.1%
Mean	39	Cervical	16	Neck/HA	36.4	Hypertension	2
Medi an		LBP	13	Low Back	25.5	Hypercholest - erolaemia	2
Mode		Shoulder	9	Shoulder	16.4	Cramps	1
Std Dev.		Thoracics	7	Thoracics	12.7		
		HA	4	Upper Limb	3.6		
Sex		Knee	1	Lower Limb	3.6		
Male	22	Wrist	1	Other	1.8		
Fem ale	34	Elbow	1		**100 %**		
		Thigh	1				
		Sciatica	1				
		Sinuses	1				
			56				

RESP	7.8%	GIT	5.5%	REPRO	5.5%
Asthmatic	4	IBS	1	Endometriosos	1
		Indigestion	1	Dysmmenorhea	1
		Reflux	1	Pregnancy	1

ENDO/METABOLIC	5.5%	OP/DEN/AUD	1.8%	INFECTIONS	3.6%	Bone disease/Arthridities	3.6%
Diabetes Type 1	2	Myopia	1	Hay Fever	2	OA	1
Diabetes Type 2	1					Gout	1

Clinic 2

Age		PC	#	Presenting Complaint	%
Mean	39	LBP	17	LBP	37.0
Median		Cervical	9	Neck/HA	23.9
Mode		Thoracic	6	Thoracic	13.0
Std Dev.		Shoulder	5	Shoulder	10.9
		HA	2	Lower Limb	8.7
Sex		Thigh	2	Upper Limb	2.2
Male	14	Knee	1	Abdominal	2.2
Female	32	Ankle	1	TMJ	2.2
		Abdominal	1		**100%**
		Elbow	1		
		TMJ	1		
			46		

CVS	10.9%	RESP	15.2%	GIT	6.5%
Hypertension	4	Asthma	5	Crohns Disease	1
Hypercholesterolemia	1	Pneumonia	1	Indigestion	1
		Bronchitis	1	Pwptic Ulcers	1

REPRO	2.2%	NEURO	2.2%	ENDO/METABOLIC	8.7%	OP/DEN/AUD	6.5%	DERMA
Pregnant	1	Meningitis	1	Diabetes Type 2	2	Myopia	3	Psoriasis
				Diabetes Type 1	1			
				Hypothyroidism	1			

INFECTIONS	2.2%	bone diseases/Arthridities	4.3%	trauma/fractures	4.3%
Hay Fever	1	OA	1	Ankle Fracture	2
		Osteoporosis	1		