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[Parkinson's Disease Treatment](#)

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The Effectiveness of the Bowen Technique as a [Parkinson's Disease Treatment](#), focusing on Motor Function and Quality of Life

ABSTRACT

This study evaluates the effectiveness of the Bowen Technique on motor function and quality of life for those with Parkinson's disease. Five participants diagnosed with idiopathic Parkinson's disease were recruited from three Parkinson's disease support groups on Sydney's North Shore and were assigned to the treatment group.

Each participant received five treatments each over a six week period. Outcome measures obtained at baseline and one week after final treatment consisted of the Parkinson's Disease Questionnaire (PDQ-39)¹ and the Motor subscale of the Unified Parkinson's Disease Rating Scale (UPDRS).²

Participants showed an average improvement of 3.0 points or 12.6% in quality of life (PDQ-39). Most notable improvements were bodily discomfort, mobility, activities of daily living and emotional well-being.

Participants had an average improvement of 6.4 points or 39.8% in motor function (UPDRS). Most notable improvements were tremor, rigidity, leg agility and posture.

INTRODUCTION

Parkinson's disease (PD) is a chronic neurodegenerative disease, characterised by tremor, rigidity, slow body movement and postural instability. Tremor is usually the most visible symptom in the early stages and is the most common marker for the disease. Parkinson's symptoms can manifest themselves in many ways including a stooped posture, an impassive face and a shuffling gait. For the most part people with this disease are described as having idiopathic Parkinson's disease i.e. having no known specific cause (Jenkinson 2008, p. 9).

Currently, the medical profession theorises that PD is caused by the death of dopamine producing neurons in the substantia nigra part of the brain. Dopamine, a neurotransmitter, allows smooth coordinated function of the body's muscles and movement.

The introduction of the drug, levodopa, in 1967 revolutionised treatment of Parkinson's disease. Levodopa, once absorbed in the gastrointestinal tract, is transported to the brain where it is converted

to dopamine, which can then affect normal function of the movement control centres of the brain, reducing the symptoms of slowness, stiffness and tremor. Levodopa comes with side-effects, the principle ones being: nausea, vomiting, diarrhoea, irregular heartbeat, mood changes, depression, suicidal thoughts and involuntary, abnormal, repetitive movements (dyskinesia).³

From his own clinical experience of working with Parkinson's disease and witnessing the difficulties and limitations of a family friend with Parkinson's, the researcher, Joshua Rasco, became interested in how the Bowen Technique could help reduce the symptoms and improve the quality of life of those with this disease. This interest peaked when reading of John Coleman's results with Bowen. In *Stop Parkin' and Start Livin'* John Coleman writes about the benefits he has seen in treating Parkinson's with the Bowen Technique, especially when combined with Aqua Hydration Formulas (a homeopathic remedy) to help rehydrate the tissues of the body (Coleman 2005, p12 and 140). Coleman believes that unresolved trauma – an incomplete physiological response to a threatening event due to the freezing response or inability to take action – occurring early in life “creates a redistribution of chemical energy and water from areas not needed during running and fighting into areas most needed for immediate action.” This is what he says is the “initiating circumstance that begins the long, usually slow, decline into a chronic nerve disorder.”⁵

In light of John Coleman's success in treating PD with the Bowen Technique, in both receiving treatments for his own symptoms and as a practitioner treating others with the disease, the researcher has looked into the results of other complementary and alternative therapy studies to see how they have fared in treating PD. Below are results from four studies:

- In 2002 a randomised controlled trial of 93 subjects receiving 24 Alexander Technique lessons over six months showed evidence through a self-assessed disability questionnaire that the lessons were likely to lead to sustained benefit over time.⁷
- In 2005 a double blind pilot study of 14 subjects receiving acupuncture showed no significant improvement on three different scales – motor function (UPDRS), quality of life (PDQ-39) and depression (Beck Depression Inventory).⁸
- In 2006 a study of 25 subjects receiving tui na massage, followed by acupuncture, followed by instrument delivered qi gong once a week over a six month duration showed a worsening of motor function score (-2.4 points on the UPDRS scale) and not significant but some improvement in quality of life (PDQ-39) and depression (Beck Depression Inventory) scores.⁹
- Also in 2006 a controlled pilot study of 36 subjects receiving neuromuscular therapy (NMT) twice a week for four weeks showed significant and sustained (at least one week) improvement in the Motor subscale of the UPDRS but no improvement in quality of life (PDQ-39) scores.¹⁰

Research into the effects of the Bowen Technique on PD is limited, with only one completed study that the researcher is aware of. In this study, conducted by Margaret Horn in Tasmania, Australia, in 2006/07, eight randomly selected Parkinson's patients received four Bowen treatments over a six to seven week period. It was found that the Bowen Technique could improve some symptoms of PD – quality of sleep and tremor being the most noted. It was reported by over 50% of subjects that quality of sleep was improved after each of the four sessions and after the fourth session five of the seven subjects experiencing tremor reported an improvement. Noted in this study were the correlation between daily water intake and improvement of PD symptoms. Horn also makes reference to Russell

Sturgess, developer of Fascial Kinetics (a particular school/branch of Bowen therapy), and his suggestion that Bowen rehydrates the fascia or connective tissue of the body at a cellular level.⁶

To summarise, the purpose of this study is to evaluate the effectiveness of the Bowen Technique on motor function and quality of life for those with Parkinson's. Also, a comparison of these results with the results obtained from the acupuncture, Alexander Technique and NMT studies will be made, as well as with the Bowen study in Tasmania.

METHODS

Seven participants diagnosed with idiopathic Parkinson's disease were recruited from three Parkinson's disease support groups on Sydney's North Shore. Two participants were found through personal contacts. The study began with nine participants but was reduced to five due to failing health in three individuals and another withdrawing for various reasons. Therefore five participants were assigned to the treatment group.

There was no funding received for this study and all treatments and assessments were provided free of charge. All participants gave informed consent and agreed to receive no other therapies (e.g. massage, acupuncture, chiropractic, etc) whilst participating in the research. Participants further agreed to begin new activities (e.g. yoga, pilates, tai chi, physiotherapy) and nutritional supplements at least two weeks prior to the first Bowen Technique treatment or wait until after the research period was complete. Participants also agreed to inform of any changes in medication during the research period and if possible to make changes two weeks prior to the first Bowen Technique treatment or after the treatments had been concluded. Four of the five participants were taking the PD related medication and were not denied medical treatment during the course of the research. The Research Consent Letter is included in Appendix A. Further, participants were fully aware of what the treatment entailed as they were either present during a live talk and demonstration of the Bowen Technique given by the researcher at a Parkinson's support group meeting or had experienced a Bowen treatment on a prior occasion.

The researcher conducted all of the motor examinations and treatments. He is a full member of both the Bowen Association of Australia and the Bowen Therapy Academy of Australia, holds a Certificate IV in Bowen Therapy obtained from the Border College of Natural Therapies, VIC, Australia and is currently undertaking the Diploma of Bowen Therapy.

Treatments were provided and outcome measures obtained by the researcher at two venues: the Crows Nest Complementary Health Centre, Sydney, Australia, (which offers multidisciplinary services such as Bowen therapy, osteopathy, massage, pilates and acupuncture) and at his private practice in Pymble (Sydney), which provided ground level access to participants not able to walk up stairs.

Participants received five treatments over a six week period from Jan – Mar 2009. The duration of each treatment ranged from 45 to 75 minutes. The Bowen procedures selected and used during each treatment were done so with an understanding that the presenting musculoskeletal conditions were a result of neurological dysfunction. The aim was to address the body and nervous system as a whole.

The Motor subscale of the Unified Parkinson’s Disease Rating Scale (UPDRS) was used to assess the motor function of each participant immediately preceding the first Bowen Technique treatment to establish an appropriate baseline, and then again one week after the fifth and final treatment. The second assessment was carried out at the same time of day as the initial assessment to approximate participant levodopa levels except in one case in which the assessment was done later in the day as it was not possible to schedule an earlier assessment.

The Motor subscale has a point score range of 0 (no PD symptoms) to 108 (full PD symptoms). To gain proficiency in assessing participants’ motor function using the UPDRS, the ‘UPDRS Training Video Tape’¹¹ was studied and the information practised on two individuals with Parkinson’s disease not participating in the research.

The UPDRS has been used extensively since 1987 by researchers and clinicians around the world for evaluating changes in motor function in those with PD. It has been shown to be valid and reliable.¹²

Each participant also completed the Parkinson’s Disease Questionnaire (PDQ-39) prior to their first treatment and then again one week after their last. The PDQ-39 has 39 questions developed specifically to assess quality of life for those with Parkinson’s disease. It is widely used in Parkinson’s research and has been shown to be valid and reliable (Jenkinson et al, 2008, pp. 25-28). Scoring was carried out in accordance with the guidance given in the PDQ-39 User Manual.¹³

It was attempted to conduct the PDQ-39 in such a way that the researcher would be unable to match a completed questionnaire with a particular participant, potentially allowing participants greater freedom and honesty in their responses. Participants derived their own three or more digit number, which they wrote on each of their completed PDQ-39’s. Each of these was posted to the researcher using pre-addressed and stamped envelopes supplied by the researcher. In the end it was not possible to maintain anonymity (from the researcher’s perspective) due to the small number of participants.

After the last treatment each participant was given a feedback form (Appendix B) where they could comment on the Bowen Technique and the research project.

RESULTS

The results from the motor function examination and quality of life questionnaire both show improvements in multiple categories of PD symptoms. The findings of each, as well as the participant characteristics and Bowen procedures used are outlined below.

Table 1 – Characteristics of Participants

Total Participants	5	
Gender	3 male	2 female
Age	64 – 67 (range)	65 (average)
Years with PD	3 – 16 (range)	7 (average)

Participants that had received PD surgical procedure

Deep brain stimulation	1
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Participants on PD & related medication

Sinemat	2 (levodopa)
Madopar	2 (levodopa)
Cabaser	1
Symmetrel	2
Zoloft	1
Participants not taking medication	1

Participants taking supplements

Coenzyme Q10	3
Omega 3	3
Aqua Hydration Formulas	2 (one currently, one previously)
Multivitamins	2

Participants receiving regular complementary therapies/exercise

Acupuncture	1
Bowen Therapy	2
Yoga	1

BOWEN TECHNIQUE (BOWTECH) PROCEDURES USED

As stated in the Methods section the intent was to not just treat the symptoms of PD but to address the cause – neurological dysfunction. It was found however, that addressing the most prominent symptoms of Parkinson’s for each individual such as hand tremor, gait and back stiffness as well as the CNS directly was necessary. It became evident that not all participants were responding to strong CNS-influencing procedures such as Upper Respiratory/TMJ, so a more gradual treatment approach was adopted to address the most immediate symptoms at hand. This led to a more satisfactory result for both the practitioner and the participant.

Table 2: BOWTECH Procedures Used

Procedure	No. of participants receiving it	Reason for use
3 Basic Relaxation Procedures	5	Prerequisite/Balancing
Upper Respiratory/TMJ	4	Strong influence on CNS
Kidney	4	Effect water redistribution/balance adrenals
Rhomboid	3	Improve posture/kyphosis
Sternal	3	Strong influence on CNS
Ankle	3	Improve gait/reduce tremor
Hamstring	2	Reduce tension
Respiratory	2	Beneficial for participant
Coccyx	2	Strong influence on CNS
Additional TMJ	1	Strong influence on CNS
Knee Reflex	1	Improve gait/influence on CNS

Shoulder	1	Reduce tremor/influence on CNS
Elbow/Wrist	1	Reduce tremor
Pelvic	1	Improve gait

MOTOR FUNCTION

There were marked improvements in the UPDRS Motor assessments considering the participant's relatively low initial scores and the short treatment period. Notable improvements: three out of four participants showed a decrease in tremor, three out of three showed a decrease in rigidity and improved leg agility, and two out of two participants had improved posture.

Table 3: UPDRS Motor Subscale Results – Point Range Each Item 0 - 4, 0 = normal, 4 = full PD symptom.
Motor Subscale Range 0 – 108, 0 = normal, 108 = full PD symptoms

	Participant A		Participant B		Participant C		Participant D		Participant E	
	Before	After	Before	After	Before	After	Before	After	Before	After
Speech	1	0	0	0	1	1	3	3	0	0
Facial Expression	0	0	0	0	0	0	1	1	0	0
Tremor at rest:										
Face, lips, chin	0	0	0	0	1	1	0	0	2	2
Right Hand	0	0	0	0	0	0	0	0	1	0
Left Hand	1	1	1	0	0	0	0	0	1	0
Right Foot	0	0	1	0	1	1	0	0	0	0
Left Foot	0	0	0	0	0	0	0	0	0	0
Action Tremor:										
Right Hand	0	0	0	0	1	0	0	0	1	0
Left Hand	1	1	1	0	1	0	0	0	1	0
Rigidity:										
Neck	0	0	2	1	0	0	0	0	3	2
Upper R. Extremity	0	0	0	0	0	0	0	0	1	0
Upper L. Extremity	2	1	1	0	0	0	0	0	1	0
Lower R. Extremity	0	0	0	0	0	0	0	0	0	0
Lower L. Extremity	1	0	0	0	0	0	0	0	0	0
Finger Taps – Right	1	0	1	1	0	0	0	0	2	1
Finger Taps – Left	2	2	2	2	0	0	0	0	2	1
Hand Grips – Right	0	0	1	1	0	0	0	0	1	1
Hand Grips – Left	1	1	2	2	0	0	0	0	1	1
R. Hand Pronate/Supinate	1	1	1	1	1	1	0	0	1	1
L. Hand Pronate/Supinate	2	1	2	2	0	0	0	0	1	1
Leg Agility – Right	0	0	0	0	0	0	0	0	2	1
Leg Agility – Left	1	0	1	0	0	0	0	0	1	0
Arise from chair	0	0	0	0	0	0	0	0	0	0
Posture	0	0	1	0	0	0	0	0	1	0
Gait	1	0	1	1	0	0	2	1	1	1
Postural stability	2	1	1	1	1	0	1	1	0	0
Body bradykinesia	1	0	1	1	0	0	1	0	0	1
Total	18	9	20	13	7	4	8	6	24	13
Point Change	-9		-7		-3		-2		-11	
Percentage Decrease	-50%		-35%		-43%		-25%		-46%	
Average Change	-6.4 points / -39.8%									

Key : Number in black = no change, green = improvement, red = worsening

QUALITY OF LIFE

Notable improvements on the PDQ-39 were Activities of Daily Living, Emotional Well Being, Bodily Discomfort and Mobility. Mobility improved in all cases except one (Participant E) with an average improvement of 9.4 points / 37.3% for the four participants who did see improvements.

Table 4: PDQ-39 Results – Single Index Score Range 0 – 100, 0 = no problem, 100 = maximum problem

Dimensions	Participant A		Participant B		Participant C		Participant D		Participant E		Avg. Change
	Before	After	Before	After	Before	After	Before	After	Before	After	
Mobility	7.5	2.5	17.5	15	35	22.5	50	32.5	30	42.5	-5.0
Activities of Daily Living	33.3	25	16.7	12.5	20.8	8.3	12.5	12.5	29	37.5	-3.3
Emotional Well Being	16.7	20.8	29	25	20.8	8.3	12.5	12.5	29	16.7	-4.9
Stigma	6.25	18.7	6.25	6.25	0	0	0	0	12.5	25	+5.0
Social Support	8.3	8.3	16.7	16.7	0	0	16.7	8.3	25	16.7	-3.3
Cognitions	18.7	18.7	37.5	25	18.7	12.5	37.5	37.5	12.5	12.5	-3.7
Communication	8.3	8.3	8.3	8.3	16.7	16.7	58.3	66.7	16.7	16.7	+1.7
Bodily Discomfort	16.7	16.7	41.7	41.7	41.7	41.7	50	16.7	25	8.3	-10.0
Single Index Score (avg. of above dimensions)	14.5	14.9	21.7	18.8	19.2	13.75	29.7	23.3	22.5	22.0	
Point Change	+0.4		-2.9		-5.4		-6.4		-0.5		
Percentage Change	+2.8%		-13.4%		-28.4%		-21.6%		-2.2%		
Average Change	-3.0 points / -12.6%										

Key : Numbers in black = no change, green = improvement, red = worsening

DISCUSSION

From the results of this study – the Bowen Technique’s ability to reduce the symptoms and suffering of those with Parkinson’s disease looks promising. Motor function improved for all five participants and quality of life for four participants. Tremor improved for three out of four participants and improvements were seen in various PD symptoms, which concur with the improvements in tremor found in the Bowen study undertaken by Margaret Horn. Further, quality of life improved in six of the eight areas surveyed.

In comparison with the results of the larger studies for acupuncture, the Alexander Technique and NMT, this small study showed higher percentages of improvement. However, due to the low number of participants the results are not statistically significant. It does possibly indicate however, that Bowen may be more beneficial than other therapies for those with Parkinson’s due to its ability to rehydrate the fascia as suggested by John Coleman and Russell Sturgess.

Margaret Horn’s study highlighted the need for objective assessment, regularisation and measurement of PD symptom progression. The current study addressed this by using the PDQ-39 and the Motor subscale of the UPDRS, which are both widely used in Parkinson’s research. The UPDRS Training Tape gave video examples of each rating (0 – 4) for each motor function to be assessed. Tremor, for example, is rated based on frequency and amplitude. The main consideration in using the UPDRS is

in endeavouring to rate individuals at the same point in their medication cycle to rule out as much as possible the effects of the medication. The researcher found, however, that the UPDRS could have been more clear and instructive in explaining the different ratings for each item being examined. Also, instruction for assessing rigidity was omitted from the UPDRS Training Tape and the UPDRS form. The researcher therefore developed his own measures for assessing rigidity. These were active shoulder (upper extremity), hip (lower extremity) and neck range of movements.

Upon further investigation it was found that the UPDRS weaknesses experienced by the researcher have also been experienced by other researchers and clinicians, and were formally collated in a 2001 survey conducted by the Movement Disorder Society (MDS), USA. In 2003 the MDS began work on a new UPDRS to address these shortcomings¹⁴. The new MDS-UPDRS was complete as of 1 Jul 08. The MDS-UPDRS addresses the ambiguities in some of the response-scale descriptors, gives thorough instruction for assessing rigidity and gives clearer instruction for assessing the items in the Motor subscale¹⁵.

As it is still new, the MDS-UPDRS has yet to go through the validation process. Although this is the case, the researcher recommends the use of the MDS-UPDRS in future studies of the Bowen Technique on Parkinson's disease in order to make the clearest and most informed assessments of PD symptoms before and after treatment. As each section of the UPDRS has been updated in the MDS-UPDRS, it may also be worthwhile to use other sections of the scale (than the Motor subscale) for assessing symptom progression.

The PDQ-39 proved a useful tool in measuring participant's quality of life. The only caveat to this statement is that Participant E reported worsening Mobility, ADL and Stigma scores and found that the words "Occasionally" and "Sometimes" used to describe the frequency of symptoms were very similar. The participant said they may have interchanged some of the questions on the second questionnaire resulting in higher scores. For example, Mobility improved in all cases except one (Participant E) with an average improvement of 9.4 points / 37.3% for the four participants that did see improvements. Another reason some of the symptoms/difficulties in the questions were ticked as occurring more frequently was that Participant E was experiencing more pronounced dyskinesia. It is commonly known that Bowen can affect an increased absorption rate of medications so it is very probable that the increased dyskinesia was attributable to an increased absorption of levodopa. This participant was on a higher dosage than other participants and was prescribed a different levodopa drug by the neurologist three weeks before the research was complete. The participant chose to wait until after the research before taking the new medication. Throughout the research Participant E remarked on how effective the treatments were, particularly in decreasing stiffness or rigidity. This probably accounts for their improved Bodily Discomfort and Emotional Well Being PDQ-39 scores.

One important measure of the success of the treatments was whether participants were motivated to continue on with further Bowen treatments and whether they would recommend Bowen to others. All five participants in this study were willing to or were actually receiving further treatment. The two participants receiving regular Bowen treatments before this study began continued to do so. One participant was sceptical of Bowen's effectiveness on Parkinson's came for further treatment of a musculo-skeletal condition. The other two participants were open to receiving further Bowen treatments at a later time, one of these was returning to the regular acupuncture treatments they were

receiving. Three participants “strongly agreed” that they “would recommend Bowen to friends or relatives” and two participants were “neutral” (see the participant feedback form, Appendix B).

CONCLUSION

This study appears to demonstrate that the Bowen Technique can be effective in improving symptoms of Parkinson’s disease. Tremor, rigidity and posture all improved notably, as well as quality of life in the dimensions of mobility, activities of daily living, emotional well-being and bodily discomfort. More generally, this study has shown, on a very small scale, that Bowen can improve motor function and/or quality of life. In this study motor function and quality of life improved by 6.4 points / 39.8% and 3.0 points / 12.6% respectively. Improvement in tremor and other PD symptoms seen in this study concurred with an earlier study on the Bowen Technique’s effects on PD.

In comparison with the results of the larger studies for acupuncture, the Alexander Technique and NMT, this small study showed higher percentages of improvement, possibly due to its ability to rehydrate the fascia.

A large, randomised, controlled study of the effects of the Bowen Technique on quality of life and motor function for those with Parkinson’s disease using the MDS-UPDRS and PDQ-39 as objective measures would be very informative and validate the findings of the two Bowen studies to date. Such a study also correlating results with subject’s daily water intake would be a useful step forward in testing the theory of Bowen’s ability to rehydrate the fascia and again compare its effectiveness with other therapies.

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APPENDIX A

Bowen Technique Research Consent Letter

Please read the following carefully. As a participant in this research I agree to:

- Attend and receive five Bowen Technique treatments each a week apart.
- Receive a motor examination (from Joshua Rasco) as outlined in the Unified Parkinson's Disease Rating Scale (UPDRS) section III 'Motor Examination' on the day of and directly prior to the first scheduled Bowen treatment and again one week after the last Bowen treatment.
- Fully complete the Parkinson's Disease Quality-of-Life Questionnaire (PDQ-39) prior to the first Bowen treatment and one week after the last Bowen treatment. Note: For the research to reach conclusive results it is important that every question receive a rating even if it does not seem to be applicable. The conducting of the PDQ-39 will be done in such a way that Joshua will not be able to match a participant to a completed questionnaire. This will potentially allow participants to be more free and honest in their responses.
- Not receive any other therapies (e.g. massage, acupuncture, chiropractic, etc) whilst participating in this research. If you have begun yoga, pilates, tai chi, physiotherapy or a new supplement at least two weeks prior to the first Bowen treatment then it is OK to continue with them. The point here is that Bowen will need to be able to be isolated as the cause of any changes that occur during the research period.
- Inform Joshua of any changes in medication during the research period. If possible, please make any changes in medication two weeks prior to the first Bowen treatment or after the treatments have been concluded.

Further, I consent to the use of the data collected from the UPDRS - Motor Examination and PDQ-39 to help evaluate the effects of the Bowen Technique on motor function and quality of life for those with Parkinson's disease. I understand that the results will be made publicly available. I understand that my personal information will not be made available to others.

Name (printed)

Name (signed)

Date

APPENDIX B – Bowen Technique Research Participant Feedback Form

What is your overall impression of the Bowen Technique?

What positive outcomes would you say you received from the treatments (if any)?

What negative outcomes would you say you received from the treatments (if any)?

What did you enjoy the most about the treatments and/or research project?

What could be improved?

I would recommend Bowen to friends and relatives (please circle one of the below):

Strongly Agree Agree Neutral Disagree Strongly Disagree

APPENDIX C - History, Values and Philosophy of the Bowen Technique

The Bowen Technique is named after the late Thomas Bowen who began developing the technique in Geelong, Victoria, in the early 1950's and continued to refine the technique until his death in 1982. Mr. Bowen received no formal health care training but claimed that the work was simply a "gift from God." During his peak Mr. Bowen was treating up to 13,000 patients a year.

Mr. Bowen invited four or five men to observe him as he practised in his clinic, to understand and learn his technique. One of these men, Oswald Rentsch, was explicitly asked by Mr. Bowen to teach his technique after he died. Beginning in 1986, Mr. Rentsch and his wife Elaine started teaching the technique throughout Australia. Since then the Bowen Technique has continued to grow and is now taught worldwide in 18 countries. Over 20,000 practitioners have been trained.

The key to the effectiveness of the Bowen Technique is the precise placement and accurateness of its moves, its integration time between sets of moves and its "less is more" philosophy. The Bowen Technique is one of the most holistic of the natural therapies in that a practitioner stimulates the body to heal itself rather than imposing his/her will on the body.¹⁶

APPENDIX D - Demographic Statistics

The population of Pymble, NSW, is 9,487 with one Bowtech Bowen Practitioner (myself). The population of Crows Nest - St Leonards, NSW, is 4,729 with two Bowtech Bowen Practitioners.

APPENDIX E - Sharing Knowledge

The sharing of knowledge for health care professionals is invaluable in providing the highest level of care for clients.

I have worked very closely over the past four and a half years with the chiropractor, Kevin Donohoe, who has over 30 years of experience in his field and that of kinesiology. He has been an informal mentor to me and I have learned a great deal from him in the subtleties of patient care and treatment. It was he who inspired me to perform research on Parkinson's disease, as he was first diagnosed with it eight years ago.

My wife Sharon Rasco, a counselling psychologist, has been the most influential person in my practise as a Bowen Technique practitioner and has been a wonderful mentor in the times I have been a bit unsure of how to proceed with a client. She has taught me the importance of really listening to my clients; being bright, friendly and receptive, and the art of counselling and being directive when it is appropriate.

Another source of knowledge and inspiration comes from my mother-in-law, Margaret North, a yoga and meditation teacher with over 30 years of experience. I continue to learn from her great knowledge of the movement of the body and love of life.

I have also learned a great deal from receiving natural therapy treatments from a variety of wonderful practitioners over the years. Kinesiology, acupuncture, cranial osteopathy and homeopathy have all been very beneficial.