

Manibus

Developments in the History of Joint Manipulative Practice



Francis J.H. Wilson

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Cover illustration

The hands of a chiropractor, in this case those of the author

Photograph by Rachel Wilson

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This study is dedicated to those of all professions who practise joint manipulation in the hope that it will foster increased understanding and co-operation.

Francis Wilson, April 2022

PART 1
INTRODUCTION



Figure 1

A bone-setter using his knee to manipulate the spine

Photograph by Charles Géniaux, Brittany, late nineteenth century

CHAPTER 1

Preamble

“We cannot escape history. We are creatures of it. We cannot understand where we are or where we are likely to go in the future unless we know where we have been.” (Wardwell, 1992, p. 13)

Technology has transformed the practice of medicine. Today we are able to look inside the body, to see its structures and observe its functions without cutting into the patient. We are able to replace organs and influence internal processes in the pursuit of health. Advances in telemedicine allow practitioners to consult with patients remotely, overcoming geographical barriers and improving access to care. Text messages, apps and wearable devices are used to support patients trying to stop smoking, increase activity levels and eat more healthily. Technology has improved medicine and it has benefitted patients.

Manual medicine contrasts technological medicine. It is ancient and basic, yet it remains socially relevant. Before COVID-19 many people took physical interaction with others for granted. Touch was a normal part of everyday life, but that normality was challenged by the pandemic. Social distancing was encouraged and to a sizeable extent medicine moved to the telephone and online. The pandemic changed the way we live. The ability to communicate with others through electronic means was advantageous, but through it medicine became less personal. Relationships between clinicians and patients were fundamentally changed, at the expense of hands-on health care.

The Latin word ‘manibus’ is the ablative plural of manus, meaning ‘with hands’. Initially designed as a web-based project, manibus provided a succinct domain name, one that encapsulated a commonplace feature of manipulative practice, namely use of the hands. This treatise is concerned with the practice of joint manipulation and with the groups of practitioners who have employed it. The aim was to produce an overview history of developments in manipulative practice from ancient to modern times, emphasizing British context, highlighting sociology over technique, and accompanied by reflections on emergent themes.

Considered in a broad sense, joint manipulation describes examination and treatment approaches involving movement of the articulations of the body. As a treatment, manipulation has been used to reduce pain and disability by restoring normal bony alignment and easing joint stiffness. Among those health care occupations which today are subject to specific statutory regulation in Britain,

manipulation is a part of the history and contemporary practice of the medical profession, physiotherapy, osteopathy and chiropractic. Arguably, looked at from a historical perspective, these, together with bone-setting, have been the 'big five' of joint manipulative practice. Although manipulation has links to massage, and also forms a part of the care provided by other groups such as naprapaths and osteomyologists, it is the big five that form a major focus of this study.

Architecturally, the study is divided into parts, beginning with an analysis of meanings. This is followed by an outline of early developments in the history of joint manipulative practice, from possible origins to the formation of the modern medical profession. The *Medical Act* of 1858 distinguished the medical profession from other groups and subsequent legislation led to further delineation (UK Parliament, 1858). Rather than taking a purely chronological view of more recent events in the history of manipulative practice, the later chapters are arranged by discipline. For those wishing to better understand the evolution of specific modern health care groups this has advantages, offering focus and relative simplicity, but it is appropriate to recognize that this approach comes at a cost, for groups examined in this way may seem to be more disconnected from each other than was in fact the case. Emergent themes include problems of epistemology and tribalism. These are reflected upon before the investigation reaches its conclusion.

CHAPTER 2

Meanings

History as subjective

“The facts of history never come to us ‘pure’, since they do not and cannot exist in a pure form: they are always refracted through the mind of the recorder. It follows that when we take up a work of history, our first concern should be not with the facts which it contains but with the historian who wrote it.” (Carr, 1961, p. 24)

History is concerned with study of the past. It is about people and their actions. It involves not only the examination of documents, but also of other sources of evidence such as objects, photographs and oral testimonies. Rarely is history objective. Instead historians interpret the past. Although academics generally do their best to present history as it actually was, in searching for meaning and in explaining the past a degree of subjectivity can be inevitable. Historians are a part of their research. They are not separate from it.

Historians have conceptions and biases which influence their work. The author of this study is no exception. His writings emphasize the country of his birth and his native language, which is English. He is a chiropractor, a practitioner of joint manipulation. As such, he is positively disposed towards the practice of joint manipulation. He is opposed to unwarranted tribalism in health care and is a supporter of interprofessional collaboration. He believes in evidence-based health care, which involves the integration of best research evidence with clinical expertise and patient values. He sees joint manipulation as offering value in the management of musculoskeletal conditions, but thinks that it should be used selectively and normally as part of a multimodal approach to care.

Medicine: inclusive and exclusive meanings

The history of joint manipulation forms a part of the history of medicine and definitions of medicine are relevant to its understanding. As a practice medicine is concerned with the diagnosis, treatment and prevention of disease and with experts who carry out these functions. Considered in a narrow sense medicine focuses on the work of physicians, which is to say those doctors most strongly linked to the prescription of medicines. More broadly, medicine is often taken to include surgery. In Britain and in other countries physicians and surgeons study together at undergraduate level and after

graduation are regulated in unison under law. Today, with respect to the care of humans (for there is also veterinary medicine), there is a tendency to associate medicine with members of the medical profession, which in Britain refers to those practitioners who are regulated by the General Medical Council.

This was not always the case. Before the *Medical Act* of 1858 (UK Parliament, 1858), in the absence of legal definition, it was not always clear who was and who was not a medical doctor. In the seventeenth and eighteenth centuries there was considerable diversity in medical practice with ‘regulars’ and ‘irregulars’ working in a climate of medical pluralism (Harris, 2004, p. 92; Loudon, 1986, p. 13). The definition of medicine could therefore reasonably include orthodox and heterodox practices of various kinds. As medicine professionalized in the years leading up to the *Medical Act* the distinction between orthodox and heterodox practice became more apparent, while the social distance between physicians and surgeons decreased. In a lecture reported in the *Lancet* in 1826 the surgeon William Lawrence advised his fellows that they must “*be contented to use the word medicine, although it is equivocal, being frequently employed in contradistinction to surgery*” (Lawrence, 1826).

Today, although the word medicine is used to describe the regulated profession, it is still often applied in a wider, more inclusive manner. In this context dentistry can be considered a branch of medicine and chiropractic medicine is not a misnomer.

Meanings of manipulation

Definitions of medicine highlight the complexity of language, of words which are in everyday use and which for the most part we take for granted without further reflection. Like medicine, the meanings of ‘manipulation’ are multiple (Oxford English Dictionary, 2022). The word was used in the eighteenth century to describe both a method of digging for silver ore and the handling of apparatus and reagents in chemical experiments. These are archaic uses. More recently the term has been applied to handling more generally, to the subtle, skilful and devious control of people, and in human and veterinary medicine to actions involving movement of parts of the body, especially its articulations.

Joint manipulation is both an examination procedure and a treatment. Even in the context of treatment it is an expression that means different things to different people. Joint manipulation is generally done by hand, but it can involve the use of other body parts, or be instrument-assisted. It is a passive procedure applied by the practitioner to the patient, except where active participation of the patient is required. It involves a high velocity, low amplitude thrust, but can also describe a variety of mobilization techniques of varying speed and amplitude. Its aim is to restore normal joint movement

and function, but it is also utilized to realign and establish optimal joint position. Joint manipulation is used in the promotion of musculoskeletal health, but there are those who see value in its application for organic disease. It is both an ancient and modern practice, a form of alternative medicine and a constituent of medical orthodoxy.

A broad description of joint manipulation might encompass all of the above, but narrower definitions have also been proposed. In 1962, in a presentation to the Physiotherapists' Society of South Australia, Geoffrey Maitland reflected upon approaches to joint manipulation as a therapy and drew a distinction between those procedures that involved a "*forcible thrust*" and those that did not (Maitland, 1963). The latter he suggested should be termed mobilization rather than manipulation. In the preface to the first edition of his book *Vertebral Manipulation*, he wrote (Maitland, 1964, p. vii):

"There are two ways of manipulating the conscious patient. The first, better thought of as mobilization, is the gentler coaxing of a movement by passive rhythmical oscillations performed within or at the limit of the range: the second is the forcing of a movement from the limit of the range by a sudden thrust."

Maitland described four grades of mobilization and one of manipulation, a classification which came to be widely used in the teaching of physiotherapy.

The word 'adjustment' has been used as a synonym for manipulation by some practitioners. For others the word adjustment has been preferred in describing their techniques. Bartlett Palmer, the son of chiropractic's founder, wrote (Palmer, 1920, pp. 87-88):

"A Chiropractor is a hand practitioner; he adjusts displaced parts, he repairs a disordered human machine, he puts in order and sets to right the displaced bones of the skeletal frame which are not in their proper position ... We do not manipulate; the masseur, magnetic and the Osteopath do. We repair the human machine by adjusting."

It is worthy of note that Andrew Still, the founder of osteopathy, had previously advised that if in pain one should "*let a skilful engineer adjust your human machine, so that every part works in accordance with nature's requirements*", that engineer being an osteopath (Still, 1897, p. 289).

PART 2
FROM ANTIQUITY TO THE NINETEENTH CENTURY



Figure 2

Spinal manipulation using a Hippocratic board

From the *Nicetas Codex* (Schöne, 1896, plate XVII)

CHAPTER 3

Ancient Practices

Origins of manipulation

Aches and pains are a part of the human condition. It is reasonable to assume that in early human societies, in times before written records, there were those who rubbed, mobilized and manipulated in order to restore function and provide relief from pain. We cannot say how far back into the past use of these methods go, but we can consider the potential advantages of joint manipulation in evolutionary terms and identify the physical, cognitive and behavioural characteristics necessary for the practice to begin.

Imagine we travel back in time 19,000 years to a forest in what today is south west France. A group of humans are hunting deer when during a chase one of the party falls and dislocates his shoulder. He is a man known for his hunting prowess and this is his throwing arm. If the shoulder remains dislocated he will not recover normal function in his arm and his hunting skill will be lost to the group. Fortunately one of his companions knows what to do. He reduces the dislocated shoulder. Over the weeks that follow the man recovers from his injury and is able to use his shoulder as before. His skill as a hunter is not lost to the tribe.

In this fictional example the use of manipulation can be seen to have survival value. As hunting skills were taught and learnt, so the skill to manipulate fractures and joint dislocations would, we might reasonably assume, have been passed between people and between successive generations. Its use was dependent upon manual dexterity, which in humans was a product of bipedalism and the presence of opposable thumbs. It required intelligence and it required social skills.

Ancient writings about manipulation

It seems likely that the origins of joint manipulation predate organized medicine and that it began as a folk practice. Arguably, relevant knowledge and skills were communicated through observation and word of mouth, and so became oral tradition.

What is more certain is that as civilizations came into existence, as writing developed as a cultural practice, and as writing became a scholarly activity, manipulation was described. There is

documentary evidence to support the idea that ancient physicians set broken bones and reduced joint dislocations more than 3,500 years ago. The Babylonian *Code of Hammurabi*, which was carved into stone and is thought to date from about 1,750 BCE, included details of the fees to be paid to physicians who set broken bones (Harper, 1904, p. 79). The *Code of Hammurabi* did not refer to joint manipulation, but the *Edwin Smith Papyrus*, an ancient Egyptian medical text, did. Dating from about 1,600 BCE, it described the treatment of a dislocated mandible by means of manipulation in sufficient detail for the practice to be reproduced (Breasted, 1930, p. 304):

“If thou examinest a man having a dislocation in his mandible, shouldst thou find his mouth open (and) his mouth cannot close for him, thou shouldst put thy thumb(s) upon the ends of the two rami of the mandible in the inside of his mouth, (and) thy two claws (meaning two groups of fingers) under his chin, (and) thou shouldst cause them to fall back so that they rest in their places.” (English translation by J.H. Breasted)

In Europe significant information about the early application of joint manipulation can be found from documents originating in ancient Greece (Vasiliadis, Grivas and Kaspiris, 2009). Hippocrates of Kos (circa 460-370 BCE) was one of the most influential thinkers of classical Greece and today is considered by many as the father of Western medicine. Within the Hippocratic corpus, which is to say the writings associated with Hippocrates and his followers, are various descriptions of manipulation. These were included in treatises *On Fractures*, *On Joints* and on *Instruments of Reduction* (Withington, 1928).

Hippocratic works were reproduced and developed by others, including the Greco-Roman physician Galen of Pergamon (circa 129-210 CE). He and his students promoted use of manipulation and produced commentaries on Hippocratic treatises (Iuntas, 1576). They encouraged use of the Hippocratic board, a device that could be utilized to treat spinal deformities through a combination of traction and physical pressure on the spine. Galenic ideas themselves came to influence both Christian and Islamic thinkers in subsequent centuries.

CHAPTER 4

Medieval Practices

Manipulation in medieval Europe

By 500 CE the Roman Empire was no more. With its decline came cultural change. In the West there was political division and a blending of Greco-Roman and Germanic traditions. In the East the Roman Empire became the Byzantine Empire with its capital at Constantinople.

European medicine came to be influenced by Christianity. Christian teachers promoted the idea that spiritual wellbeing was more important than physical wellbeing and that disease was a product of sin. Those who practised medicine, who laid hands on patients, or performed manipulation without sanction of the Church were prone to criticism. In the sixth century Gregory, Bishop of Tours, who was later canonized by the Catholic Church, was disparaging of the treatment provided by a man whose name was Desiderius (Brehaut, 1916, pp. 205-206):

“There was in that year in the city of Tours a man named Desiderius who claimed to be great and said he could do many miracles. He boasted too that messengers were kept busy going to and fro between him and the apostles Peter and Paul. And as I was not at home, the common folk thronged to him bringing the blind and lame but he did not attempt to cure them by holiness but to fool them with the delusion of necromancy. For he ordered paralytics and other cripples to be vigorously stretched ... his attendants would lay hold of a man's hands and others his feet, and pull in opposite directions so that one would think their sinews would be broken, and when they were not cured they would be sent off half-dead ... his trickery was exposed and stopped by our people and he was cast out from the territory of the city.” (English translation by E. Brehaut)

Although we cannot know for certain, the stretching employed by the attendants of Desiderius may well have been based on Hippocratic methods. If so, then Gregory's denunciation of Desiderius might be seen as a rejection of Hippocratic practices, but it seems more likely that the issue of religious authority was paramount. Desiderius was seen as a pretender to the authority of the Church.

From the time before the printing press and before widespread use of paper, a time in which levels of literacy were low, relatively little information about the use of manipulative therapy has come down to us. Even so, we do know that Greco-Roman techniques survived. Images of Hippocratic methods

appeared within the *Nicetas Codex*, an illustrated manuscript produced in Constantinople in or about 900 CE (Nicetas, circa 900 CE, pp. 182-223).

During the medieval period European monasteries and hospitals run by the religious were places of healing, both spiritual and physical, however during the twelfth and thirteenth centuries canon law discouraged 'regular' members of the Catholic clergy, those who were subject to a 'rule' of life, such as that of St. Benedict, from studying medicine in order that they concentrate their attention on spiritual matters (Amundsen, 1978). This left the way open for others to develop medical and surgical skills. Today there is a tendency to associate the practice of surgery with incision, but as the Dominican friar and bishop of Cervia Theodoric Borgognoni explained in his thirteenth century *Chirurgia*, the word surgery derived from the Greek 'cheiros' meaning hand and 'ourgia' meaning action (Campbell and Colton, 1955, p. XV; see also pp. 4-5). It included both the management of wounds and the treatment of fractures and dislocations by means of manipulation.

Manipulation and Arabic culture

Beyond Europe, as Arabic civilizations developed in the Middle East from the seventh century CE Greco-Roman manuscripts were acquired and translated by Muslim scholars. The Persian polymath Ibn Sina (circa 980-1037 CE) produced a five volume encyclopaedia of medicine in which was described manipulation inspired by Greco-Roman methods (Nassar, 2007, Book IV). Today in English we use the word 'algebra' to refer to a branch of mathematics. In fact the word 'algebra' comes from the Arabic term 'al-jabr' which referred not only to the branch of mathematics, but also in medical lexicon to the restoration of bony parts in cases of fracture or dislocation (Oxford English Dictionary, 2021).

During the crusades of the eleventh, twelfth and thirteenth centuries, when Western Europeans attempted to take lands which were under Islamic rule, Christian and Muslim scholars came to know of one another and ideas were exchanged. Arabic medicine influenced European medicine. Ancient texts which had been translated into Arabic, were translated once again, this time into Latin. Methods of joint manipulation were a part of the corpus of Islamic medical knowledge.



Figure 3

Manipulation of the shoulder

From *The Compleat Bone-Setter* (Turner, 1665, front matter)

CHAPTER 5

Bone-Setting

Bone-setting in Britain

In England, Ireland and Wales the dissolution of the monasteries during the reign of King Henry VIII brought to an end a way a life which for many had centred on religious communities. The place of Catholic monasteries in caring for the sick became for the most part a thing of the past. Hospitals with links to the Catholic Church were closed, to be replaced by remodelled civic institutions where medicine was practised and taught, but their capacity to provide for the needs of the public was incomplete. From the time of the Renaissance the term ‘bone-setter’ was used in written English to describe folk practitioners who engaged in the treatment of fractures, dislocations and other musculoskeletal conditions using manipulation. Lacking in formal training, the knowledge and skills of bone-setters were passed on through oral tradition, often within families.

The nature of bone-setting was such that little was written about it by its practitioners, but some texts do exist. The *Compleat Bone-Setter*, ostensibly by Friar Thomas Moulton, but revised and translated by Robert Turner, was published in English in 1656, with a second edition issued nine years later (Turner, 1665). According to the preface it was written so that every man, learned or leud, rich or poor, could come to be their own physician in time of need. It prescribed remedies for a variety of conditions, including broken bones and dislocated joints.

Typically bone-setters were ordinary people who were seen to have a gift for dealing with injuries by those in their community. The idea that such people provided a useful service was contested by some, including Richard Wiseman, surgeon to King Charles II. He wrote of (Wiseman, 1676, p. 478):

“the inconvenience many people have fallen into through the wickedness of those who pretend to reducing luxated joints by the peculiar name of bone-setters: who (that they may not want employment) do usually represent every bone dislocated they are called to look upon; though possibly it be but a ganglion, or other crude tumour or preternatural protuberance of some part of a joint.”

Most bone-setters did not become well-known, but there were exceptions. Sarah Mapp was one, a woman memorialized by the London press. In 1736 she was the subject of the following verses of a

comedy performed at the Theatre Royal, Lincoln's Inn Fields, London (Gentleman's Magazine, 1736, p. 618):

"You surgeons of London who puzzle your pates, to ride in your coaches and purchase estates, give over for shame, for your pride has a fall, the doctress of Epsom has outdone you all.

What signifies learning or going to school, when a woman can do without learning a rule, what puts you to nonplus and baffles your art, for petticoat practice has now got the start.

Dame nature has given her a doctor's degree, she gets all the patients and pockets the fee, so if you don't instantly prove her a cheat, she'll loll in her chariot whilst you walk the street."

The contribution of bone-setters was perhaps most appreciated in communities that were not centres of medical learning. Bone-setters often plied their trade in places where academic medicine was less influential and where there was the most need. In rural communities, and when Britain came to industrialize, in industrial communities, bone-setters provided care for workers and for others who could not afford the attentions of 'educated' doctors. The epitaph of Benjamin Taylor, who was buried at Watermillock, in what today is the English Lake District, read as follows:

"Benjamin. Who was an eminent and successful bonesetter, equalled by few, not perhaps surpassed by any in his time. Having exemplified in his practice the art of replacing broken and dislocated bones in every part of the human body. His benevolent disposition to the unfortunate poor particularly endeared him to patients of that description. He lived at Stainton in the parish of Dacre and died universally lamented on the 4th day of Jan. 1808 in the 62nd year of his age." (Inscription from a headstone at All Saints' Church, Watermillock, Cumbria)

Bone-setting in international context

In Spain, during the Renaissance and afterwards, the word 'algebrista' was used to describe a bone-setter. The French equivalent was 'renoüeur', which meant to tie again or re-join (Oudin, 1607; Boyer, 1699). Another French word for bone-setter was 'Bailleul', which was actually a family name. Jean de Bailleul was Abbot of Joyenval and almoner to King Henry II (Scévole de Sainte-Marthe, 1630, p. 155). It seems that he and members of his family were so well known for their skill at bone-setting that the Bailleul name came to be used to describe bone-setters more generally.

As Europeans colonized other parts of the world, explorers and settlers came across indigenous peoples who practised manual therapies. While visiting the Pacific island of Tahiti in 1777, James

Cook informs us that he received a physical treatment called ‘romee’ from a group of local women (Cook, 1784, pp. 63-64). In North America, European settlers encountered the healing practices of the native American peoples. It has been argued that these native healing traditions may have informed the subsequent development of osteopathy (Zegarra-Parodi et al., 2019). In this regard it is important to recognize the interplay that would have existed. There can be little doubt that the settlers would have been influenced by the practices of indigenous peoples, but they also brought with them practices founded in European traditions. According to Hazard (1879), James Sweet came to America from Wales in 1630 and settled in North Kingstown, Rhode Island. His family came to be known for their “*natural gift*” in setting dislocated and broken bones.

CHAPTER 6

Regular and Irregular Medicine

Guilds

Roots of modern manipulative medicine are to be found in the practices of bone-setters. They are also to be found in surgery as well as in the work of barbers, for historically the functions of barbers and surgeons overlapped. In addition to cutting and dressing hair, from the Middle Ages to early modern times barbers employed surgical and dental practices, including use of joint manipulation.

Over time barbers and surgeons came to be distinguished from bone-setters in part because of the guild system. Guilds were associations of skilled workers and traders who organized themselves in order to protect what they saw as their area of expertise and standards of practice within it. In London, both barbers and surgeons had formed guilds as early as the twelfth century (Power, 1886, p. XXVI). In 1540, during the reign of King Henry VIII, the Barbers' Company and the Guild of Surgeons were incorporated into the Company of Barbers and Surgeons. There was no equivalent organization for bone-setters.

It is of historical significance that bone-setters did not become effectively organized, but barbers and surgeons did, and also that the practices of barbers and surgeons came to be integrated. Guilds existed in Britain and also in other European nations. Their ability to wield power varied between countries and between occupations. During the eighteenth century, in spite of increasing organization, pluralism remained a feature of health care with regulars and irregulars vying for trade under systems of administration which applied either greater or lesser restrictions (Porter, 2000, pp. 34-39). Within this context, physicians (who diagnosed and offered remedies of various sorts), surgeons (who incised and manipulated) and apothecaries (who prepared and prescribed drugs) became increasingly established as regulars. Folk practitioners, including bone-setters, fell outside of the fold.

Comorbidity and risk

Joint manipulation was a part of irregular practice and that hindered its development. As medical education grew to be more academic, those practitioners without formal training who treated fractures and dislocations were frowned upon by the learned. With advances in medical knowledge, the risks and benefits of manipulation became more apparent. Educated medical practitioners recognized that

there were circumstances in which the use of joint manipulation could be advantageous, but that in the presence of certain underlying diseases its application could be harmful. Regarding the treatment of spinal dislocations, Wiseman (1676, p. 498) wrote:

“Luxations of the spine, which are most usually from inward causes, as in rickety children, also in the King’s evil, and other tumours, happening upon those bones, require internal remedies, so are referable to a physician. The chirurgical part consisteth in the application of plasters ... also in good bandage, which chiefly belongs to the bodice-maker. When it happens from force, a speedy re-position is required, about which Galen, Hippocrates, Oribasius, Celsus, &c. speak much, who all may be consulted.”

The King’s evil, also known as scrofula, was a condition which resulted in glandular swellings. It had been believed by some that the touch of the monarch could cure it. The King’s evil was in fact tuberculosis. In the spine it also came to be known as Pott’s disease following Percivall Pott’s description of it. Like Wiseman, Pott was forthright in his views regarding fractures and dislocations and on those he considered qualified to treat them. For him, learning, ability and integrity were the hallmarks of a good surgeon. He wrote of bone-setting (Pott, 1769, p. 1):

“No part of surgery is thought to be so easy to understand, as that which relates to fractures and dislocations. Every, the most inexpert, and least instructed practitioner, deems himself perfectly qualified to fulfil this part of the chirurgic art; and the majority, even of these, are affronted by the offer of instruction, on a subject with which they think themselves already so well acquainted.

This is also the opinion of a considerable part of the people. They regard bone-setting (as it is called) as no matter of science; as a thing which the most ignorant farrier may with the utmost ease become soon and perfectly master of; nay, that he may receive it from his father and family, as a kind of heritage. We all remember the great, though short-lived reputation, of the late Mrs. Mapp. We all remember, that even the absurdity and impracticability of her own promises and engagements were by no means equal to the expectations and credulity of those who ran after her, that is, of all ranks and degrees of people, from the lowest labourer or mechanic, up to those of the most exalted rank and station; several of whom not only did not hesitate to believe implicitly the most extravagant assertions of an ignorant, illiberal, drunken female savage, but even solicited her company, and at least seemed to enjoy her conversation.”

CHAPTER 7

The Medical Profession

Subluxation

“Some dislocations are complete and perfect, as when the bone wholly falls out of its cavity: othersome are unperfect, as when it is only lightly moved, and not wholly fallen out; wherfore we only call them subluxations or strains.” (Johnson, 1649, p. 380)

There is evidence to show that from the sixteenth century the Latin word ‘luxation’ was used in written English to describe complete dislocations of joints and that from the seventeenth century the word ‘subluxation’ was used to describe incomplete dislocations (Oxford English Dictionary, 2022).

In the 1820s the concept of the subluxation and its implications received focused attention in the writings of a British physician named Edward Harrison. He proposed a link between the subluxation of spinal joints and organic disease, suggesting that diseases of organs might result from spinal deformity through interference to vascular and nervous communications. On the subject of neurological compromise caused by spinal subluxation he wrote (Harrison, 1820, p. 369):

“A small irregularity in the height and disposition of some particular vertebrae is perceptible, on examination, in most delicate females. This disorderly arrangement and disposition of the component parts of the spinal column, though hitherto overlooked and wholly neglected, are, I am persuaded, of great consequence to future health. The effects of this subluxation, not being distinguishable by the symptoms, have never been traced to their origin in the spine. A very slight and partial compression of the cord, or some of its nerves, will disturb the organs to which they run. If we admit the operation of this cause upon all the vertebrae of the neck, back, and loins, in different persons, we shall be at no loss to account for the almost infinite variety and endless complication of nervous symptoms which harass many individuals through life, and baffle the most eminent of the faculty. When we take into account the number, the size, and the distribution of the spinal nerves among the viscera and muscles, we are led to conclude that scarcely a complaint can arise in which they do not participate.”

In writing these words Harrison paved the way for the thinking of others who later wrote about the ‘irritation’ of spinal nerves, including Thomas Brown and John Evans Riadore (Brown, 1828; Riadore, 1842). Perhaps more importantly, in making a link between spinal subluxations and diseased

organs, Harrison preceded the thinking of Andrew Still (the founder of osteopathy) and Daniel Palmer (the founder of chiropractic) and he did so by more than fifty years. Harrison employed manipulative techniques along the lines of those used by the ancient Greeks (Harrison, 1824, p. 354). It was his view that (Harrison, 1821, p. 113):

“the obvious indication for the care of spinal affections consists of restoring the displaced bones to their natural situations, that the spinal cord and its nerves, relieved from injurious pressure and disturbance may be re-instated in their former abilities.”

Statutory regulation

Although Harrison was a formally educated physician, it would be wrong to assume that his ideas were well received by all within the medical community. As a matter of fact his book *Pathological and Practical Observations on Spinal Diseases* (1827) was subject to serious criticism in the *Medico-Chirurgical Review* (1828). Its appraiser went as far as to claim to be ashamed to record its existence. Not only were Harrison’s views on spinal disorders unpalatable to some, so also were his opinions on medical reform. In 1806 he had reported findings from a survey of medical practice in Lincolnshire, which drew attention to the high proportion of ‘irregular’ medical practitioners working in the county. With respect to the district of Horncastle, the following was recorded (Harrison, 1806, p. 38):

*“5 Physicians, all graduates of Scotland, reside in this division.
11 Surgeon-apothecaries exercise medicine in this division.
25 Druggists. Probably one served an apprenticeship.
40 Irregulars, of both sexes, over and above the druggists.
63 Midwives. Not one has received any instruction.”*

Harrison called for change, for a suitable course of preparatory study as a precondition for the practice of medicine and for standards to be made consistent not only in every part of the United Kingdom, but also, in so far as possible, across the British Empire. As part of his vision he recommended widening the recognition of medical schools. This brought him into conflict with elites within the Royal College of Physicians of London, who required members to be graduates of either Oxford or Cambridge (Weiner and Silver, 2008). Harrison’s medical doctorate was from Edinburgh.

Ironically Harrison’s efforts to afford social closure, to exclude those he considered to be irregulars from the practice of medicine, met with opposition from London physicians who did not consider him appropriately qualified to be a part of their group. Even so, perhaps inevitably, calls for change did in time lead to increased integration and regulation of medicine at national level. The statutory

regulation of medical practice progressed from the *Apothecaries Act* of 1815 (UK Parliament, 1815), and political agitation led to the *Medical Act* of 1858 (UK Parliament, 1858) through which a distinction was drawn between legally qualified medical practitioners and others. A single register of medical practitioners, which included physicians, surgeons and apothecaries, was established under the authority of what would become the General Medical Council. The Act helped to protect the public from quacks and charlatans. It enabled those in need of medical attention to identify qualified practitioners. At the same time, it is fitting to recognize, it came to protect the interests of the registered at the expense of the unregistered.

Medical science

In attempting to distinguish truth from falsehood, evidence adds strength to a position. Observations on personal clinical experiences, such as those described by Harrison in his assessment of spinal disorders, are of value, but conclusions drawn from reflections on personal experiences are open to criticism where more rigorous and systematic examination of a situation is possible. In circumstances such as these scientific study provides a level of justification for claims to knowledge that is not achievable through other means.

During the nineteenth century the value of scientific evidence was recognized and applied to medicine in a way not seen before. Its application affected the training of medical practitioners and the practice of medicine. In Britain, prior to the nineteenth century, the social status of a medical practitioner was determined, to a greater or lesser extent, by family background, lifestyle and the status of one's patients, the elites of medicine archetypally fashioning themselves as 'gentlemen'. Notwithstanding the teaching of medicine at Cambridge, Oxford, and at other universities, medical education was of inconsistent quality. In many ways, medicine was more art than science. During the nineteenth century however, an increasing scientific underpinning of medical claims to knowledge occurred. As science came to be more valued within society, and as scientific medicine achieved diagnostic and therapeutic results, so this foundation helped to transform medicine in Britain and in other countries into a practice that was in itself more prestigious (Bynum, 1994; Shorter, 1993; Starr, 1982).

PART 3
THE DEVELOPMENT OF MODERN PRACTICES



Figure 4

Rehabilitation at the Bath War Hospital

Credit: Greyscale of a watercolour by E. Horton, circa 1918. Wellcome Collection. CC BY-NC 4.0.

CHAPTER 8

Orthopaedics

L' orthopédie

Through the course of the nineteenth century the volume of medical knowledge increased and specialization in a particular field of medicine became the norm for medical doctors. One of the specialties which evolved was orthopaedics. The word orthopaedics derives from a two volume monograph by Nicolas Andry de Bois-Regard entitled *L'Orthopédie ou L'Art de Prévenir et Corriger dans les Enfants les Difformités du Corps*, which was first published in Paris in 1741. It was written for parents who wished to prevent and correct deformities in their children, the term 'orthopédie' coming from a combination of Greek words meaning right or straight child. Translated into English, it was republished in London in 1743. Over time, the term orthopaedics came to describe not only the treatment and prevention of deformities in children, but also a branch of surgery which focused more generally on disorders of the musculoskeletal system. The treatment of fractures, dislocations and joint injuries became a part of orthopaedics.

Rest versus activity

For many centuries it had been understood that when a joint was dislocated and its supporting soft tissues damaged, reduction of the bony parts was essential to recovery. Following reduction of the joint a period of convalescence was required to allow processes of healing and stabilization to take place, but during convalescence the relative value of rest and activity was not always obvious. Within the developing field of orthopaedics there were disagreements between those who emphasized the value of activity and those who emphasized the value of rest in the management of mechanical joint conditions.

Andry had encouraged moderate exercise for the promotion of health, but nineteenth century orthopaedic practitioners recognized that in acute joint conditions exercise was oftentimes painful and could result in increased inflammation. Between 1860 and 1862 John Hilton gave a series of lectures for the Royal College of Surgeons of England in which he highlighted the recuperative power of rest, arguing that rest was "*the most important therapeutic agent in the cure of accidents and surgical diseases*" (Hilton, 1863, p. 488). An effect of Hilton's assessment, and the opinions of others who

argued in a similar vein, was to diminish the perceived therapeutic value of movement, both through exercise and joint manipulation.

In Britain and on the European continent the contrasting teachings of individuals such as Hugh Owen Thomas, an advocate of rest, and Just Lucas-Championnière, who favoured movement, were a source of discord (Buckwalter, 1995). Even so, it is reasonable to assume that practising orthopaedic surgeons recognized that rest and movement both had a place. In the clinical setting the judgement generally came down to questions of timing and intensity. To rigorously mobilize a newly injured painful and inflamed joint made little sense, but to encourage rest in the longer term risked extending the period of disability. What was required was practical wisdom on the part of the clinician, good judgment in the context of complexity. Be that as it may, the idea of rest as a treatment became established within orthopaedics. Writing in the 1920s and reflecting on the history of orthopaedics, the surgeon Timbrell Fisher was disapproving of this fact (Fisher, 1925, pp. 3-7). As he saw it, the emphasis on rest, fear of injuring a tuberculous joint, and a reluctance to accept that any good could come of a method practised by “*unqualified persons*”, resulted in unwarranted neglect of manipulation in cases where it might have been helpful.

Anaesthesia

Developments in orthopaedics were paralleled by advances in the understanding of anaesthetics. Through the use of general anaesthesia joint manipulations which would otherwise have been painful for the patient were performed more comfortably by those surgeons who favoured them. Ether and chloroform were used in the reduction of dislocations and in the treatment of stiffness involving large joints such as knees and shoulders (for example see Paget, 1867). Ether and chloroform not only reduced pain, they also brought about muscular relaxation. This was of benefit to diagnosis in distinguishing muscular from other causes of joint stiffness and in treatment where in the absence of muscular resistance less force was required to mobilize the joint.

The use of general anaesthesia had advantages for practitioners of joint manipulation, some of whom came to describe themselves as ‘manipulative surgeons’, but its use was not without risk, most critically that the patient would not wake up after the operation. Had the use of anaesthetics such as ether, nitrous dioxide and chloroform been without risk it is likely that greater use would have been made of them by practitioners of joint manipulation, but as it was the risk was considerable. In 1915 William Williams Keen reflected on the early use of ether as an anaesthetic and on questions which might have haunted the minds of those pioneers who first made use of it for surgery (Keen, 1915, p.3):

“Lift the arm and it falls as if it were that of a corpse, touch the sensitive eye and the lids do not move. Cut the tender skin and it elicits no response. ‘Will he ever wake up!’ ‘May not the flickering flame of life gradually fade away for ever.’ ‘Have I not unwittingly killed this man!’”

CHAPTER 9

Modern Bone-Setting

Bone-setting and the medical profession

In Britain, following the *Medical Act* of 1858, the social distance between registered medical doctors and bone-setters increased. Technological advances in medicine made treatment by hand appear old fashioned. Bone-setting was seen to be unscientific, its practitioners lacking in proper education and professionalism. Bone-setting, as the surgeon Dacre Fox saw it, was “*almost exclusively employed by a class of persons who are without our pale*” (Fox 1882, p. 843). Registered medical doctors were permitted to use manipulation themselves, but were discouraged from interacting with others who legally applied manual therapies under the provision of common law, rather than through specific state sanction. Bone-setting had a stigma about it and the practice of manipulation was tarnished by association.

Even so, there were registered medical practitioners who saw value in the bone-setters’ art. James Paget was one. Accepting that few of his colleagues were “*likely to practice without having a bone-setter for an enemy*”, he called upon them to “*imitate what is good and avoid what is bad in the practice of bone-setters*” (Paget, 1867). According to Paget, bone-setters had cured cases that good surgeons had failed to cure. They reduced fractures and dislocations, they treated locked, stiff and sprained joints, and they replaced dislodged tendons. That said, if Paget is to be believed, they saw every injured joint as “*put out*” and had a single method of cure, to “*wrench*” or manipulate the joint, so that what was thought to be “*out*” was “*put in*” again.

Wharton Hood was another medical practitioner who sought to understand and apply what he saw as good in bone-setting. His father, Peter Hood, also a medical doctor, had helped a bone-setter named Richard Hutton through a serious illness, but had refused to take a fee because of the benefit he saw in Hutton’s work for the poor (Wharton Hood, 1871a, v). To show his gratitude, Hutton offered to teach him bone-setting. Although that did not happen, the offer was extended to his son, which was accepted. Wharton Hood studied bone-setting and wrote a series of articles about it for the *Lancet* (1871b, 1871c, 1871d & 1871e), afterwards compiling the material into a book (1871a).

Paget and Hood are examples of medical practitioners who aided the absorption of ideas from bone-setting into regulated medicine. There were also persons from bone-setting families who became

registered medical doctors. The name of James Eastwood Taylor, who came from a family of Lancashire bone-setters, was included in the first medical register to be published after the *Medical Act* (General Council of Medical Education and Registration of the United Kingdom, 1859). So also was the name of Hugh Owen Thomas, whose forebears had been bone-setters on the Isle of Anglesey. As it happened, Thomas came to be critical of bone-setting. His experiences, as described in his *Principles of the Treatment of Diseased Joints*, led him to the conclusion that manipulation could often be more harmful than beneficial. He wrote (Thomas, 1883, pp. 74-75):

“During the last twenty-six years I have repeatedly tried manipulations to loosen joints crippled in their action, and have watched the practice of qualified and unqualified practitioners, famed for their skill as manipulators of diseased and injured joints; and, again, I have been educated with a bias in favour of such treatment yet, notwithstanding all this, unmistakable evidence of its evils has led me to discard it myself, and to advise others to avoid the adventurous treatment recommended by the author of the lecture ‘On Cases that Bone-setters Cure’ [James Paget].”

Herbert Barker

Bone-setting was discussed at the fiftieth annual meeting of the British Medical Association in 1882. Howard Marsh, of St. Bartholomew’s Hospital, London, described two groups of bone-setters. On the one hand, at one end of the scale, there were those who worked in remote areas, who, according to Marsh, had little concern for anatomical knowledge (Marsh, 1882):

“Some are blacksmiths on the Cumberland hills, or shepherds in the sequestered valleys of Wales. Practitioners of this kind, standing in the same relation to surgery that herbalists bear to medicine, have existed, in these remote districts, from immemorial times. They belong to the same order which in bygone days included fortune-tellers, ring-charmers, and the workers of all kinds of village miracles.”

On the other hand, at the other end of the scale, there were those who resided in large towns, individuals Marsh described as being “*less unsophisticated*”, for they, at least, equipped themselves with the names of the principal bones and muscles and with a few medical phrases.

Herbert Barker was a city bone-setter. He studied bone-setting in London under the guidance of his cousin John Atkinson, who in turn had studied under Robert Hutton, the nephew of Richard Hutton (Barker, 1927, p. 29). Following his apprenticeship, in 1889 Barker set up practice in Manchester, and later worked in Glasgow, but it was in London, following his return in 1905, that he became a focus of particular notoriety and controversy.

Barker encouraged registered medical doctors to observe his work. One of those invited to his practice was a man named Fredrick William Axham, who came to be so impressed with what he saw that he agreed to assist Barker in treating patients where anaesthesia could usefully be used. While Axham saw value in Barker's methods, others were more sceptical. Embittered by the criticism of his work by certain members of the medical profession, in 1906 Barker made the decision to have his skills tested (Barker, 1927, p. 62). He wrote to the editor of the *Daily Express* and proposed that he treat a small group of patients with joint injuries that had not responded effectively to therapy at London hospitals and by private practitioners. He offered a thousand pounds, which he agreed to forfeit to a charity of the editor's choice, should his methods fail to achieve better results than those which had gone before. Two medical doctors were to act as arbiters. In the event, both they and the newspaper judged Barker's methods successful, but rather than leading to further examination of his approach, as Barker had hoped, the results divided opinion and led to new criticism. In his autobiography Barker wrote (Barker, 1927, p. 63):

“My fond illusions that I had only to show that the work I was doing was beneficent to have it acknowledged were quickly being shattered, and I found to my disappointment that the fact that I was beginning to come into serious competition with surgeons and others, was an unforgivable offence, and success in relieving suffering as nothing in comparison.”

There can be little doubt that Barker courted publicity and openly challenged medical authority. He chose to describe himself as a manipulative surgeon even though he was not registered with the General Medical Council and in an open letter to the President of the Royal College of Surgeons of England he wrote (Barker, 1927, pp. 66-67):

“The qualified surgeon inflicts lameness, perpetuates lameness, or leaves lameness lame. The manipulative surgeon cures it. Science denounces him as a quack, but a word of abuse is of little consequence either to patient or to healer.”

Perhaps the most serious consequence of Barker's tussle with medical authorities did not involve him directly, but his anaesthetist. Axham's name was removed from the medical register in 1911 in view of the fact that he had acted as anaesthetist to an unregistered practitioner. Paradoxically, following distinguished service to patients during World War I and support from friends in high places, Barker was knighted in 1922. In 1936 he was invited to present his methods at a special meeting of the British Orthopaedic Association held at St. Thomas's Hospital, London (*British Medical Journal*, 1936).

The decline of bone-setting

In spite of Barker's renown, during the interwar period bone-setting was in decline in Britain. In its place, Henry Jones wrote of new manipulative practitioners who increasingly described themselves as osteopaths and chiropractors (Jones, 1926, pp. 9-10). In Europe and the United States the methods of bone-setters were incorporated into osteopathy and chiropractic, into emergency medicine, trauma and orthopaedic surgery, general practice and physiotherapy. Even so, folk healers continued to practise and to this day there are those who describe themselves as bone-setters, or by another similar name, the Karelian bone-setters of Finland and the *endireitas* of Portugal being examples. Across the world, especially in countries where the reach of biomedicine is less apparent, notably in developing nations, bone-setters continue to be utilized.

CHAPTER 10

Physiotherapy

Origins of physiotherapy

The origins of modern physiotherapy, or physical therapy as it tends to be called in the United States, cannot be traced to a single individual. Instead, its roots are to be found in the contributions of various people working in fields such as professional medicine, nursing, massage, gymnastics, electrotherapy and hydrotherapy (Barclay, 1994; Huijbregts, 2010; Pettman, 2007). Among them the name of Per Henrik Ling, who was instrumental in founding the Royal Central Gymnastics Institute in Stockholm in 1813, is noteworthy because of the influence he and followers such as Henrik Kellgren had on the development of both exercise and manual therapy. The name of the German physician Lorenz Gleich is also important, as his mid-nineteenth century writings included the term “*physiotherapie*” (Gleich, 1851, pp. 29-30).

In Britain the beginnings of organized physiotherapy can be traced to the last years of the nineteenth century. Concerns of links between massage and prostitution, which came to a head in 1894, acted as the incentive for a group of masseuses to become organized. The *British Medical Journal* wrote of “*massage shops*” that were “*little more than houses of accommodation*” (British Medical Journal, 1894). It raised concern for the wellbeing of the women involved, but counselled that official registration of masseuses “*would mean neither more nor less than a recognition of prostitution*”. Even so, Rosalind Paget, Lucy Robinson, Elizabeth Manley and Margaret Palmer were committed to forming a society of masseuses with the aim of making massage more respectable (Barclay, 1994, p. 23). Their efforts led to the formation of the Society of Trained Masseuses, which was incorporated in 1900. In 1920 the Incorporated Society of Trained Masseuses was amalgamated with the Institute of Massage and Remedial Gymnastics and under a Royal Charter became the Chartered Society of Massage and Medical Gymnastics. In 1944 that organization became the Chartered Society of Physiotherapy.

Medical authority

“The responsibility for the treatment of a patient rests entirely on the medical man. The only responsibility of the masseur is to see that orders are carried out implicitly, and, if dissatisfied with

the progress made as the result of the faithful performance of these orders, to report accordingly.”
(Mennell, 1917, p. 107)

From the beginning the Society of Trained Masseuses accepted to a greater or lesser extent a subordinate position with respect to the medical profession, thereby enabling acceptance of their work within the context of orthodoxy. In Britain, the history of those who would come to be known as physiotherapists was therefore linked to medicine and subject to interplay with medicine. One of the consequences of this was that physiotherapy developed in a climate where science was valued at the expense of more abstract notions. The belief that the successful practitioner required “*some mysterious gift*” (Romer, 1915, p. xi), an idea which had been a part of bone-setting, was less apparent in physiotherapy.

Through the course of the twentieth century, the medical profession came increasingly to depend upon an array of ancillary workers. From nurses and midwives, to radiographers and laboratory technicians, a multidisciplinary culture developed, a culture which was cemented following the formation of the National Health Service in 1948. Physiotherapy developed as part of this culture. Physiotherapists came to support the physical rehabilitation of patients with a variety of conditions, including cardio-thoracic, neurological and obstetric complaints, post-surgically and otherwise. Musculoskeletal care, including the management of sports injuries, became a key component of physiotherapy.

Manipulative physiotherapy

In the early part of the twentieth century manual therapies were influenced by British medical texts on manipulation included Romer’s *Modern Bonesetting for the Medical Profession* (1915) and Fisher’s *Manipulative Surgery* (1925), a book which came to be published in five editions between 1925 and 1948. Among other medical proponents of joint manipulation were Robert Jones and Morton Smart, but perhaps of more significance to the development of manipulative physiotherapy were Edgar Cyriax and James Mennell. Edgar Cyriax studied at the Royal Central Gymnastics Institute in Sweden, married the daughter of Henrik Kellgren, and made Kellgren’s approach to manual therapy the subject of his medical doctorate (Cyriax, 1903). James Mennell taught manipulation at St. Thomas’ Hospital in London and participated in the evolution of physiotherapy both within the teaching hospital and more widely through his involvement with the Chartered Society of Massage and Medical Gymnastics (British Medical Journal, 1957). From 1938 Edgar Cyriax’s son, James, continued Mennell’s work at St. Thomas’. He wrote (Schiötz and Cyriax, 1975, p. 69):

“During my time at St. Thomas’s Hospital, our medical and physiotherapy students were brought up

to regard manipulation as an integral part of everyday medical treatment, called for in a few common conditions and to be performed without further ado when required.”

It was James Cyriax's belief that the practice of manipulation called for more “*time and paraphernalia*” than most medical doctors could afford and that it was therefore important to train physiotherapists to undertake the work. He was an advocate of high velocity manipulative techniques and thought it a pity that guidance produced by the Chartered Society of Physiotherapy in 1973 expected that undergraduate students not apply movements to a point where they could not be controlled or prevented by the patient (Schiötz and Cyriax, 1975, p. 184). High velocity thrust techniques came to be predominantly the stuff of postgraduate rather than undergraduate study, the subject of special interest rather than of routine practice in physiotherapy, thereby providing market opportunity for chiropractors and osteopaths.

Between 1963 and 1992, when it became a part of the British Institute of Musculoskeletal Medicine, the British Association of Manipulative Medicine promoted the post-graduate training of medical doctors in manipulation. Similarly, the Manipulation Association of Chartered Physiotherapists, which became the Musculoskeletal Association of Chartered Physiotherapists in 2011, advocated the use of manipulation by physiotherapists.

Professional autonomy

The *Professions Supplementary to Medicine Act* of 1960 provided statutory regulation for physiotherapists in Britain (UK Parliament, 1960). Its title implied that physiotherapists, and those others included under the legislation such as chiropodists, dietitians and occupational therapists, were ‘additional’ to medicine. The Act provided legal recognition, but it did so in a context of medical hegemony. As part of his PhD study examining aspects of professionalization in physiotherapy, a study which was completed in 1978, John Mercer reflected on issues of place, autonomy and gender in physiotherapy. In conclusion he wrote (Mercer, 1978, p. 308):

“In clinical work, it was found that senior doctors were generally willing to understand, make use of and give greater autonomy to experienced physiotherapists. The therapists on the whole recognised this, accepted it and worked on it. It was the junior doctors who could prove difficult to the therapist who wanted to exercise her expertise within those professional limits possible for her. For this reason most therapists saw it as part of their clinical task to teach or socialise the junior doctor into the ways of physiotherapy. Sometimes this meant pointing out that physiotherapists would do less for a patient than the houseman hoped, more often it meant tactfully conveying to a registrar that the therapist could do more for the patient than he knew or understood. But always the therapist has to be tactful.

She is supplementary to medicine. Normally she has to treat after a doctor has made a diagnosis. Many doctors gave a diagnosis and expected and even encouraged the physiotherapist to assess and treat according to her expertise. Sometimes the physio did not want this responsibility. Sometimes the doctor made sure she never had it.”

Even so, Mercer recognized that the situation was changing. Year by year, in clinical settings, in management and in training, physiotherapists were becoming more autonomous. Having previously worked under the direction of medical doctors, they were accorded increased professional responsibility. They were to become practitioners to whom medical doctors could refer, rather than delegate. That is to say, they became personally accountable for the care they provided and responsible for their own clinical decision making in a way not previously seen.

CHAPTER 11

Osteopathy

Osteopathy in the United States

To understand the beginnings of osteopathy we need to look to the United States, to the time of the American Civil War, and to a tragedy that befell the family of a man named Andrew Taylor Still (Still, 1897, p. 98):

“It was in the spring of 1864; the distant thunders of the retreating war could be easily heard; but a new enemy appeared. War had been very merciful to me compared with this foe. War had left my family unharmed; but when the dark wings of spinal meningitis hovered over the land, it seemed to select my loved ones for its prey.

The doctors came and were faithful in their attendance. Day and night they nursed and cared for my sick, and administered their most trustworthy remedies, but all to no purpose. The loved ones sank lower and lower. The minister came and consoled us. Surely with the men of God to invoke divine aid, and men skilled in scientific research, my loved ones would be saved. Any one might hope that between prayers and pills the angel of death would be driven from our door. But he is a stubborn enemy, and when he has set his seal on a victim, prayers and pills will not avail.”

Still lost three members of his family to meningitis, two of his own children and one adopted child. He was a religious man and a medical practitioner, but these losses led him to question both his religious faith and his belief in medicine. He asked himself whether, when it came to sickness, God had left humanity guessing and whether medical doctors properly understood the causes of disease.

Through experience and reflection he came to believe that a loving and intelligent maker had deposited within each person remedies to cure infirmities, remedies which could be administered by “*adjusting*” the body. Skilled manipulation of the bony framework could bring about proper nervous communications and the proper circulation of blood and fluids, thereby assisting the body’s natural healing ability.

The word ‘osteopathy’ was derived from Greek words for ‘bone’ and ‘suffering’. Still recorded that the banner of osteopathy was “*flung to the breeze*” in 1874 (Still, 1897, p. 108), but the early history

of osteopathy was almost certainly more complicated than his autobiography would have us believe. In 1875 Still advertised himself as a magnetic healer, rather than as an osteopath (Still, 1875). At that time another magnetic healer named Paul Caster was practising in Iowa and it is quite likely that Still was influenced by him (Waterman, 1914, p. 238). Later he described himself as the “*lightning bonesetter*” (Booth, 1905, p. 27). Before the introduction of medical licensure in the United States, he practised as a medical doctor, though evidence of his formal training in medicine has not come to light (Gevitz, 2014).

As licensure became a requirement for the practice of medicine in a growing number of states, Still was successful in applying for registration as a medical doctor. Even so, he considered osteopathy a distinct body of knowledge. He sought to teach osteopathy to others and was instrumental in the founding of the American School of Osteopathy in Kirksville, Missouri, in 1892. For a while persons who had previously studied medicine were not encouraged to apply to the School. The *Journal of Osteopathy* announced (1894):

“Experience has proven that those who have previously studied medicine, and afterwards tried Osteopathy, have been but a hindrance to the science. An allegiance to drugs once established, is almost impossible to overcome. After careful consideration, therefore, it has been established that as a general rule no person shall be admitted as a student who has previously studied and practiced medicine.”

So began an uncomfortable relationship between osteopathy and medical orthodoxy. Still was a medical doctor in name, but his system of healing was philosophically opposed to the mainstream medical culture of its day. It was in essence an alternative medicine. Be that as it may, following Still’s death in 1917, osteopathic writings did come increasingly to acknowledge a place for prescribed drugs in the care of patients (Miller, 1998). In time, as the number of osteopaths practising in the United States increased, osteopathy came to be legally recognized both in itself and as a parallel branch of medicine. This did not happen overnight and it did not happen without resistance. One of those who opposed the acceptance of osteopathy was Morris Fishbein, who was editor of the *Journal of the American Medical Association* between 1924 and 1950. He described osteopathy as a medical folly, in essence an attempt to enter the practice of medicine via the back door (Fishbein, 1925, pp. 58-59).

Osteopathy in Britain

By the beginning of the twentieth century word of osteopathy had reached Britain. John Martin and James Buchan Littlejohn, students of Still, both visited from the United States before the turn of the

century (UK Passenger List, 1899a & 1899b). It was not long afterwards that the first American-trained osteopaths established practices in Britain (Collins, 2005, pp. 12-13; O'Brien, 2013, pp. 12-13). In due course they organized themselves, forming the British Osteopathic Society, which later became the British Osteopathic Association. Having taught osteopathy in the United States, John Martin Littlejohn, who was Glaswegian by birth, moved with his family to England where he worked to found an osteopathic school. The British School of Osteopathy was incorporated in 1917.

Osteopathy took a different path in Britain to the United States. In the United States osteopathy became analogous with the medical profession, but in Britain it did not. Whereas in the United States the legal basis for the profession of medicine was still being defined at the time of osteopathy's emergence, in Britain legal boundaries already existed and osteopathy fell outside of these. In Britain the professional journey of osteopathy was therefore that of a separate occupation, rather than a branch of medical orthodoxy.

There were attempts to achieve statutory regulation for osteopathy in Britain during the 1920s and 1930s. These culminated in an examination of osteopathy by a Select Committee of the House of Lords in 1935, but its findings would not have made comfortable reading for osteopaths. The committee found osteopathy inadequately differentiated from other spheres of activity and insufficiently established in Britain to warrant regulation (House of Lords Select Committee, 1935, p. iv). Their report was disparaging of John Martin Littlejohn and of his running of the British School of Osteopathy, which was deemed to be *"of negligible importance, inefficient for its purpose, and above all in thoroughly dishonest hands"*.

A bill to regulate the practice of osteopathy was introduced to the House of Lords in 1936, only to be withdrawn. It would be more than fifty years before Parliament once again gave serious consideration to the statutory regulation of osteopathy. By that time osteopathy was more established and attitudes had changed. Crucially, osteopathy was presented not as an 'alternative' to medical orthodoxy, but as a 'complementary' system concerned with the biomechanics of the body (King Edward's Hospital Fund for London, 1991, p. 10). This distinction was important for it represented an acknowledgment of orthodox medical authority. As Roberta Bivins has explained (2007, p. 38):

"Each position entails accepting a certain relationship with medical orthodoxy. If practitioners choose to regard their practices as 'complementary' to biomedicine, then they are accepting a more or less subordinate place within the orthodox hierarchy. The 'complementary' label accepts the universalizing claims of biomedicine; this has obvious implications in turn for the truth status of the 'complementary' system (particularly if it rests on another culture's cosmology or body model). On the other hand, the label 'alternative' expresses an oppositional relationship between the system or

practice to which it is applied, and biomedicine. Although this category resists incorporation and assimilation within biomedicine, and therefore escapes a lower status in the biomedical hierarchy of knowledge, it also hinders acceptance into the institutions of medical orthodoxy – the loci of most medical care in contemporary society.”

Political agitation and support from the medical profession resulted in the *Osteopaths Act* of 1993 (UK Parliament, 1993). The General Osteopathic Council was established to legally regulate osteopathic practice. The title ‘osteopath’ was protected under law, so that only those judged adequately qualified could use it.



Figure 5

Daniel David Palmer adjusting

Founder of chiropractic

From *The Science of Chiropractic* (Palmer and Palmer, 1906, illustration 89)

CHAPTER 12

Chiropractic

Daniel David Palmer

“When I was a baby I was cradled in a piece of hemlock bark. My mother was as full of superstition as an egg is full of meat, but my father was disposed to reason on the subjects pertaining to life.”

(Palmer, 1910, p. 17)

In this description of his parents, Daniel David Palmer, the founder of chiropractic, identified characteristics which were a part of himself. He was, on the one hand a practical man, ostensibly empirical and reasoned; but there was another side to him, a side which harboured supernatural beliefs which shaped not only his own personal life, but also the development of chiropractic.

Daniel Palmer was born in British North America, which today is Canada, in 1845. He immigrated to the United States with his brother Thomas in 1865. The American Civil War was coming to an end and the United States offered opportunities for work. Other members of his family, including his parents, had already made the journey. In Iowa he found employment as a teacher. In 1871 he married Abba Lord, and soon afterwards the couple purchased a plot of land where Palmer established an apiary and plant nursery. Palmer’s marriage to Abba Lord was short-lived, but her influence on him was considerable (Foley, Faulkner and Zins, 2017). She was a spiritualist who practised as a healer, advertising herself as *“Dr. Abba Lord Palmer ... Wonderful Psychometrist, and Clairvoyant Physician, Soul Reader and Business Medium.”* (Palmer, 1872a). Having been brought up a Christian, but having questioned his faith, Abba Lord helped to convince Palmer that: *“We live after the so-called death. Spirits can and do return. They give us any information that they have and desire to impart”* (Palmer, 1872b).

Palmer was entrepreneurial, but in common with many business owners he faced both successes and failures. The winter of 1880-1881 brought exceptionally cold weather to parts of the United States. After the winter, on 14th April 1881, Palmer wrote in his journal: *“Bees all dead”*. In the years that followed he moved between towns. During the 1880s, having had no formal training in medicine, he, like Abba Lord, became a practising healer. In 1887 he was listed under *“physicians”*, *“magnetic”* in the *Burlington City Directory* (Polk, p. 267). Not long afterwards he moved to Davenport.

Chiropractic in the United States

In becoming a magnetic healer, Palmer, like Andrew Still, was probably inspired directly or indirectly by Paul Caster, who in the 1870s had established an infirmary for magnetic healing in Ottumwa, Iowa (Waterman, 1914, p. 237). Paul Caster died in 1881, but before his death it appears he encouraged his son Jacob to practise the art for which he also was thought to have a gift. According to the *Biographical Review of Des Moines County, Iowa* (Hobart, 1905, pp. 230-233), during the 1880s while employed with the Chicago, Burlington and Quincy Railroad Company as a machinist, Jacob Caster treated patients in Burlington. It would seem that there was significant demand for his services, so much so that in or about 1889 the younger Caster came to focus full time on magnetic healing. It is reasonable to assume that while in Burlington Palmer knew of Jacob Caster.

In Davenport Palmer's practice took a new direction. It was there that he claimed to "*discover*" chiropractic in 1895, albeit inspired by the spirit of a man named Jim Atkinson (Palmer, 1914, p. 5). There can be little doubt that wittingly or unwittingly Palmer built upon the ideas of others (Wilson, 2012, pp. 35-47). Rightly or wrongly followers of Still alleged that chiropractic was based on osteopathy. In 1897 the *Journal of Osteopathy* charged (American School of Osteopathy, 1897):

"There is one fake magnetic healer in Iowa who issued a paper devoted to his alleged new system, and who until recently made up his entire publication from the contents of the Journal of Osteopathy, changing it only to insert the name of his own practice."

Palmer's chiropractic treatment involved joint manipulation, predominantly spinal joint manipulation. He understood that he was not the first to employ manipulation, something which he recognized had been practised for thousands of years (Palmer, 1910, p. 11). He did, however, claim to be the first to use the spinous and transverse processes of vertebrae as levers by which to restore the bones of the spinal column to their normal positions. He may not have been aware of it, but according to Little (1868, p. 57), Edward Harrison had done the same in the first half of the nineteenth century. Like Harrison, Palmer made a link between spinal subluxations and organic disease. According to Palmer, his first chiropractic patient was relieved of deafness following spinal adjustment. His second was relieved of "*heart trouble*" (Palmer, 1910, p. 18). It was his belief that these conditions were caused by nerve impingement, arising from vertebral misalignment, and that other conditions might have a similar cause.

Chiropractic was given its name by Samuel Weed, one of Palmer's patients. It was derived from Greek words, suggesting healing "*done by hand*" (Palmer and Palmer, 1906, front matter). In about 1897 Palmer began to teach his ideas to others. One of his first students was Bartlett Joshua Palmer,

his son. Like his father, Bartlett proclaimed the value of chiropractic adjustments for a wide range of health conditions, both musculoskeletal and organic. He was, like his father, a vitalist, believing in an immaterial force or "*Innate Intelligence*" which directed reparative processes within the body (Palmer, 1949, pp. 23-25). The focus of Palmerian chiropractic, like osteopathy, was to assist healing from within. The Palmers were less concerned with the study of environmental threats, including bacteria, as causative agents of disease, and more concerned with how human beings might be helped to respond to such threats. They were less concerned with the diagnosis of disease in itself, and more concerned with obstacles to nervous communication which might inhibit healing and thereby result in disease.

If chiropractic had emerged earlier Daniel Palmer might have practised as a medical doctor. As it was, he did not. In 1897 the State of Iowa introduced legislation which required medical practitioners to be licenced (State of Iowa, 1897). In order to be recognized, a record of formal medical education and successful completion of an examination was required. In Iowa and in other states, chiropractors were accused of practising medicine without a licence. They endured trials, convictions and imprisonment (Kimbrough, 1998). In the courts they argued that chiropractic was not medicine. They emphasized its differences. Chiropractic's founder went so far as to consider turning his creation into a religion in order to protect it (Palmer, 1914, pp. 1-12).

In spite of significant opposition, there were many who found Palmerian theories appealing and a growing number of chiropractic schools came into existence. In time chiropractors sought and achieved legal recognition in the United States, but memories of past battles lived on in the collective memory. For some, chiropractic would remain incompatible with medical orthodoxy. Others sought to become a part of that orthodoxy.

Chiropractic in Britain

Chiropractic came to Britain in 1908, or there abouts. In that year Arthur Eteson, who had studied at the Palmer School of Chiropractic in Davenport, wrote to Bartlett Palmer from Southport in the north west of England to explain that he had received and used a chiropractic adjusting table (Eteson, 1908). It is of historical note that Eteson went on to study osteopathy and that he used a variety of different healing methods in his practice. Eteson was what chiropractic purists referred to as a "*mixer*". In 1904 Daniel Palmer had accused another chiropractor, Solon Langworthy, of mixing chiropractic and osteopathic methods, of using an "*osteopath table and a stretching machine*", in spite of having been taught chiropractic "*without adjuncts*" (Palmer, 1904). Mixing was unacceptable to the Palmers. Even so, the first European school to include chiropractic in its name was the Looker College of Osteopathy and Chiropractic, based in Manchester, England, which was incorporated under that name in 1923

(Looker College of Osteopathy and Chiropractic, 1923a & 1923b). In education and practice chiropractic and osteopathy were not entirely separate. In the absence of statutory regulation, in Britain under common law any person could describe himself or herself as a chiropractor or osteopath, they could use one or both titles, or move between them.

In Europe and the United States chiropractors were divided between those who accepted Palmerian ideas and methods in their pure form and those who thought and practised differently. To begin with the British Chiropractors' Association, which was formed in 1925, was an organization of purists, an organization opposed to the blending of chiropractic and osteopathic ideas, but over time, especially in the years after World War II, the organization became more accepting of mixing. Not only that, the therapeutic claims of its members became less bold. There was growing acknowledgment that chiropractic did not offer the panacea envisioned by some of its pioneers. In 1961 the Norwegian chiropractor Arne Gjocih wrote (1961, p. 6):

“Concerning chiropractic as a cure for all, it must be assumed that all modern chiropractors do understand their healing art is of a rather limited scope. To specialise in the treatment of rather few disorders is the tendency today. In this connection one should not underestimate the common sense of the plain people. The man on the street will soon gather facts by experience and make up his mind what kind of treatment is good for his complaints.”

This way of thinking was in stark contrast to what went before. Palmerian chiropractic had represented a counter-culture to medical orthodoxy, an alternative system incompatible with biomedicine. By focusing care on a limited range of conditions and by emphasizing empiricism over supernaturalism, chiropractic could become complementary rather than alternative to mainstream medicine. As chiropractors came to accept the medical paradigm and acknowledge the power and authority of medical elites, there was greater recognition of their work within orthodox circles. In Britain this medicalization of chiropractic culminated in legal acceptance in the form of the *Chiropractors Act* (UK Parliament, 1994). Following the Act, the General Chiropractic Council was established to regulate chiropractic and to determine who could, and who could not, legally be described as a chiropractor. The General Chiropractic Council distanced itself from chiropractic traditionalism, preferring to emphasize partnership with the medical profession. The claim that subluxations caused organic disease was challenged by the regulator (General Chiropractic Council, 2010). Despite this, counter-currents of opinion continued to exist among those who practised chiropractic, resulting in ideological disunity.

CHAPTER 13

General Practice

Competition

In the past, as now, general practice has involved the application of more than one branch of medicine (Louden, 1983; Oxford English Dictionary, 2022). Rather than focusing on a particular medical specialty, such as neurology, orthopaedics, or psychiatry, the approach of the general practitioner has been broader. In the United Kingdom, those who first adopted the title general practitioner and who wished to be identified by the name, came to be a recognizable part of medicine during the nineteenth century.

In Britain the *Medical Act* of 1858 created a divide between members of the medical profession and other health care providers, but the reality was that members of the public could continue to see any practitioner they so wished. Bone-setters continued to practise, as did herbalists and the purveyors of a variety of pills and potions, prescribed without medical authority. These groups, and others, were in competition with registered medical doctors and took trade away from them (Digby, 1999, pp. 32-37). Consequently, there were those who thought that the Act had not gone far enough, for, they believed, it did not adequately protect either the public or the medical profession from ‘unqualified’ practice.

In the second half of the nineteenth century joint manipulation was not a mainstay of general practice. Sometimes general practitioners would have been called upon to reduce joint dislocations, but it would seem that few had the inclination or skill to regularly apply manipulation in the care of common musculoskeletal complaints. For the professional doctor the association between joint manipulation and folk practice was problematic, the risk of underlying tuberculous disease was real, and in the face of more serious illnesses the management of everyday musculoskeletal complaints may have seemed of relatively little consequence. In 1882 Dacre Fox noted that:

“Much credit was often gained by bone-setters from lack of care in diagnosis and treatment on the part of general practitioners, as small but troublesome injuries were often overlooked or treated in a very perfunctory way.”

Not only does it appear that few general practitioners practised manipulation routinely, it also appears that few sent their patients to ‘lay’ practitioners for manipulative therapy. Indeed, such action was

discouraged by the General Medical Council. Between the 1870s and the 1920s the Council developed and clarified its position on interaction between registered medical doctors and other health care workers, and in so doing it made it increasingly clear that assisting the ‘unqualified’ was unacceptable, a disciplinary offence which might result in an individual’s erasure from the medical register (Smith, 1993).

National health insurance

The early part of the twentieth century saw a series of welfare reforms in Britain. These included measures to support the wellbeing of children, the elderly, and the country’s workers. The *National Insurance Act* of 1911 introduced a compulsory system of health and unemployment insurance for lower paid workers (UK Parliament, 1911). A good number of general practitioners took on patients insured through the scheme and for those patients many of the services provided by general practitioners came to be free at the point of access. Their families, however, did not receive the same benefits.

It was not until after the Second World War that finance from general taxation was used to provide a more comprehensive health service for the whole nation. From the beginning the National Health Service (NHS), which came into being in 1948, faced the competing demands of provision and cost. The idea of a comprehensive system of health care may have been socially and politically appealing, but it was never going to be possible to offer everything that people wanted. General practitioners came to be central to the delivery of services at grass roots level, physiotherapy was included, but there was no place for osteopathy or chiropractic. In discussions that preceded the formation of the NHS, concerns had been raised that the service would limit patient choice. The British Health Freedom Society lobbied for greater inclusion and in 1946 the organization wrote to Members of Parliament outlining their reasons for disquiet:

“If the National Health Bill in its present form becomes law, a serious problem will arise affecting large numbers of the public. These people are at present in the habit, both when they are ill and as a preventative measure, of receiving treatment from unorthodox practitioners, because they find from experience that this is the only treatment that does them good. As such treatment will not be available under the National Health scheme, these patients will therefore be faced with the alternative of either submitting to orthodox treatment, to which they have strong conscientious objections, or taking their usual treatment at their own expense.

Well-to-do people are not concerned over this problem, accepting the Health Minister’s statement that people will be free to choose their own practitioner of any school of healing and that

practitioners will be free to continue giving advice and treatment. But workers cannot afford to pay both their insurance contributions and their unorthodox practitioners.”

In spite of the efforts of the British Health Freedom Society the *National Health Service Act* of November 1946 did not take significant account of their wishes (UK Parliament, 1946). A new division was therefore established between those health care services that were included under the NHS and those that were not. This had implications for the practice of joint manipulation.

Chiropractors and osteopaths were not able to offer publicly funded care and therefore became a private alternative. Their treatments were an option for those who could afford them, but for those who were less well off the general practitioner was generally the first port of call for musculoskeletal complaints. Bone-setting had been a folk practice, associated with the common people. As a consequence of the formation of the National Health Service, chiropractic and osteopathy grew to be less so.

After the Second World War there were general practitioners working in Britain who were interested in studying joint manipulation. The London College of Osteopathy was set up with the intention of teaching medical doctors the theory and practice of osteopathy, offering a nine month course of study (London College of Osteopathy, 1947). From the mid-1960s training courses in manipulation aimed at general practitioners were run by the British Association of Manipulative Medicine (BAMM), an organization founded in 1963 (Maxwell Robertson, 1981). The first chair of BAMM was Ronald Barbor, who having become interested in orthopaedics while working as a general practitioner, chose to specialize, studying under and working with James Cyriax (British Medical Journal, 1989).

A survey published in the *Lancet* in 1962 sheds light on the use and views of general practitioners with respect to the practice of manipulation (Wilson, 1962). David Wilson's survey focused on general practitioners registered with the Northern Home Counties Faculty of the College of General Practitioners, which included doctors working in Bedfordshire, Essex, Hertfordshire and Middlesex. Its findings suggested that a significant number of general practitioners believed manipulation had a place in orthodox practice. Some used manipulation, but few had had formal training in it.

The experiences of Michael Howitt Wilson

One general practitioner who did undertake formal study of joint manipulation was Michael Howitt Wilson (the father of the author). He qualified in medicine in 1962, having studied at King's College and Westminster Medical School, London (Wilson, 2017). In time he became a general practitioner and senior partner at a practice in Woking, in the south of England. There he developed an interest in chiropractic following positive experiences relayed to him by patients, so much so that in 1974 he left

general practice to study at the Anglo-European College of Chiropractic in Bournemouth, thereafter specializing in chiropractic.

Even after studying chiropractic he considered himself primarily a medical doctor. He took what he thought best from chiropractic, applying manipulation in the care of musculoskeletal conditions, while rejecting what he considered to be the more contentious claims made by some practitioners of manipulation. Interviewed in 2008, he recalled an occasion when a chiropractor came to see him with his daughter. The daughter had been suffering from earache, which had not got better in spite of repeated chiropractic adjustments. After examining her, he prescribed penicillin.

Michael Howitt Wilson wrote a guide for patients about chiropractic (1987). He defended chiropractic in the medical press (Howitt Wilson, 1979 & 1980). In 1980 when an article published in the *British Medical Journal* described chiropractic as a “*flight from science*” he denounced what he saw as prejudice on the part of some medical doctors. The reality, however, was that he found himself caught between chiropractic and the medical profession, not fitting neatly into either camp. He recollected that there were medical colleagues who thought him mad when he went to study chiropractic, and there were chiropractors who did not trust him because he was a medical doctor. There were those in the medical profession who said “*Oh yes, he’s a chiropractor*” and those within chiropractic who said “*He’s a medic and has no business doing chiropractic*”.

PART 4
REFLECTIONS



Figure 6

The Company of Undertakers (circa 1736)

William Hogarth's satirization of unorthodox medical practice in the eighteenth century
The figure located centrally at the top is often assumed to be Sarah Mapp, the bone-setter

CHAPTER 14

Epistemology

Faith as a basis for practice

Historically the benefits of joint manipulation have been disputed, so we might reasonably ask whether at different times those who made use of manipulation were justified in asserting that their methods had therapeutic value. Epistemology is the branch of philosophy which deals with claims to knowledge. From ancient to modern times it has been an indispensable part of philosophy. Scholars have long argued about claims to knowledge, about what constitutes knowledge and what does not. Some have contended that we can know things through inspiration, for example through divine revelation. Some have emphasized the value of personal experience. Others have highlighted the contribution of rational thinking. Yet others have argued that in order to better understand what is true and what is not we should systematically examine the natural world. There has been interplay between these different approaches.

As natural philosophy became science, especially in the nineteenth century, the foundations of established medical knowledge became more naturalistic. Supernaturalism was de-emphasized as scientific evidence was used to provide justification for belief. Systematic study of testable hypotheses added strength to claims to knowledge. Where they were found wanting, hypotheses were rejected or modified. Where verified, they provided a basis for practice. By the end of the twentieth century evidence-based medicine, involving the conscientious, explicit and judicious use of scientific research had become the vogue (Sackett et al., 1996).

Fundamental to the understanding of claims to knowledge in medicine generally, and in manipulative practice specifically, is the distinction between testable and untestable hypotheses. Over the centuries there have been practitioners of joint manipulation who have claimed that their ideas were developed through divine or spiritual inspiration. Their claims could not and cannot be tested. They were and remain unverifiable and unfalsifiable, subject to faith. When in the sixth century Bishop Gregory of Tours was critical of the practices of Desiderius, he believed his authority to come from God. When Andrew Still reflected on the loss of three members of his family to meningitis, his belief in a loving God shaped his response and the subsequent development of osteopathy. When Daniel Palmer founded chiropractic asserting that Jim Atkinson guided him, spiritualism influenced his claim to knowledge. Faith provided direction for these people, but faith in an idea does not in itself make the

idea true. The existence of conflicting religious and spiritual beliefs shows this to be the case. Consequentially, the notion that faith was or is a satisfactory foundation for the practice of joint manipulation is called into question.

Experience as a basis for practice

If after a fall a dislocated shoulder is not returned to its normal position experience has shown that it will not heal properly and function will be lost, therefore use of manipulation is justified. This, we might argue, is sensible even if we understand that there are risks involved in the procedure, including the possibility of compromise to nerves and blood vessels. Historically, many practitioners of manual therapy grounded their belief in manipulation on personal experience and on the cumulative experiences of others, maintaining that experience justified their belief. In effect the argument was that the proof of the pudding was in the eating. *We know that manipulation works because we have seen it work and because others have seen it work.* This was the attitude of the bone-setter Herbert Barker who encouraged medical doctors to come and observe him. It was also the attitude of many early chiropractors, who as Steven Martin (1994) noted, based their belief in the effectiveness of manipulation on observing the treatment of large numbers of patients.

When a patient attends with a stiff and painful neck, is adjusted, and immediately experiences improved movement and reduced pain, it is not unreasonable to assume that the adjustment caused the change, but when the change is more gradual then there is more reason to doubt cause and effect. Experiences can be misinterpreted. When a person's livelihood depends upon the use of manual therapy, and when that person is part of a culture that supports its use, having a positive disposition towards manipulation is to be expected. When a patient gets better following a course of manipulative treatment, both clinician and patient might assume that the treatment provided was responsible, but the fact that manipulation was used does not establish beyond doubt that manipulation was responsible for the improvement. Other factors might have influenced the outcome, including natural history and the placebo effect.

In the field of manipulative practice inspiration and experience gave rise to tradition and the institutionalization of belief. Charismatic leaders promoted the use of manipulation and were persuasive in their advocacy. The chiropractor Bartlett Palmer was one example. Sid Williams described how he was profoundly affected by him (Williams, 1990):

“When he began to speak there was no warm up or pussyfooting around: it was as if he were Moses himself. His voice had a sharp, crisp Midwestern tone and he was very authoritative. And he spoke as

if he were THE ONE in authority, as if he had been given the torch and the message straight from the source ...

When the full impact of B.J's "Big Idea" hit me, I was more excited and more uplifted than I have ever been before. I felt I had full authority. I knew I was right. It was as if I'd entered a new age. I could see the light."

Regrettably charismatic authority is no determinant of truth. Neither are eloquence or charm. When an idea is presented with flair it can be enticing, whether or not it is true. The key to improved understanding lies in critical thinking.

Science as a basis for practice

From the foregoing discussion we can conclude that there are limitations in using inspiration and experience as foundations for claims to knowledge, whether in manual therapy or in other fields. We cannot conclude that they are without value, but they are fallible. One response to their limitations has been science, which has involved testing the testable. With regard to manipulation, a scientific position might be formulated as follows: *If we wish to discover whether joint manipulation is of therapeutic value, we should not simply rely on hearsay, personal experience and/or inspiration, but undertake systematic and rigorous assessment of outcomes as they happen in the natural world.*

The application of rigorous scientific study to the practice of joint manipulation has been a relatively recent phenomenon. When in 1975 a workshop was convened by the National Institutes of Health in the United States to examine the research status of spinal manipulative therapy, no data from controlled clinical trials was presented to support or refute the efficacy of manipulation for low back pain (Goldstein, 1975, p. 6). Since 1975 an increasing number of articles have appeared in peer-reviewed journals that have provided substantive evidence for and against the use of joint manipulation for different conditions. That evidence has been subject to systematic review and has formed a part of practice guidelines. So, for example, in 2016, in Britain, the National Institute for Health and Care Excellence published guidance on the use of manual therapy for low back pain and sciatica. Their guidance recommended that manual therapy be considered for use in the management of low back pain with or without sciatica, but notably only as part of a treatment package including exercise, with or without psychological therapy. In other words, only as part of a multimodal strategy.

The scientific evidence favouring the use of joint manipulation for common musculoskeletal conditions, such as back pain, is modest (Bronfort et al., 2010; Clar et al. 2014). The scientific evidence favouring its use for non-musculoskeletal conditions is more limited and controversial (Côté

et al., 2021). Studies suggest that serious adverse effects of manipulation are rare, but do exist (Barrett and Breen, 2000; Ernst, 2007).

Science has increased our understanding of the benefits and risks of manipulation, but it is important to understand that science, like other claims to knowledge, is imperfect. An outcomes study undertaken at a particular time and place will only be meaningful to clinical decision making if its findings can usefully be applied subsequently and in other places. Reproducibility is a cornerstone of good science, but even where confirmatory studies exist, drawing general conclusions from particular observations remains problematic. As the philosopher Karl Popper pointed out (Popper, 1959, p. 27):

“it is far from obvious, from a logical point of view, that we are justified in inferring universal statements from singular ones, no matter how numerous; for any conclusion drawn in this way may always turn out to be false: no matter how many instances of white swans we may have observed, this does not justify the conclusion that all swans are white.”

In recent decades randomized controlled clinical trials have been considered by many to offer a gold standard in clinical outcomes research. In a randomized controlled trial selected patients are randomly assigned into two or more groups. One group is provided with the intervention under investigation, while the others receive an alternative or placebo intervention. Outcomes are then compared. Blinding has sometimes been used in order to reduce risk of bias. Where blinding is employed, subjects do not know which study group they are in. Sometimes blinding has been extended to include the researchers and those involved in statistical analysis. Unfortunately, blinding has presented practical challenges for those studying manipulation. In explanatory or fastidious trials contextual factors are controlled in an attempt to provide an optimal environment for assessment, but with exclusion criteria and highly controlled settings comes the risk that studies do not accurately reflect the complexities of real life. There are those who think that a more pragmatic approach to outcomes research, an approach that reflects routine practice conditions, has advantages. Moreover, aside from the fact that science can be influenced by other agendas, there are some who believe that the proof of the pudding really is in the eating, not in scientific examination of its constituent parts, nor in blinded comparison with a faux pudding.

Placebo

In 1990 the *British Medical Journal* reported the findings of a pragmatic randomized comparison of chiropractic and hospital outpatient management for ‘mechanical’ low back pain (Meade et al., 1990). The study compared the effectiveness of these approaches as they were utilized in everyday practice, rather than employing a more fastidious design. The results suggested chiropractic to be slightly more

effective, but there were those who believed this conclusion to be flawed. Among those who criticized the study was Michael Edgar, an orthopaedic surgeon. He questioned whether it was wise (Edgar, 1990):

“to compare the results of private and unhurried sessions of chiropractic treatment with those from the average overworked and usually understaffed service of an NHS hospital physiotherapy department.”

In doing so he drew attention to the effects of contextual factors on clinical outcomes. Might it have been the environment in which chiropractic was practised, rather than the chiropractic treatment itself, that formed the basis for its positive comparison with hospital outpatient management? In outcomes research there is a tendency to consider an intervention without merit if its benefit is no more than placebo, but in clinical practice any factor that can be used to improve outcomes is worthy of consideration. There is growing evidence that therapeutic context can play a role in symptom relief, producing meaningful changes within the brain and body (Ongaro and Kaptchuk, 2019). Placebo is the clinician’s friend. A positive and caring manner, a conducive environment, time, touch and the ‘crack’ of an adjustment – all of these might influence outcome.

The word placebo has its roots in classical Latin and has been translated into English as *“I shall be pleasing or acceptable”* (Oxford English Dictionary, 2022). In medicine, it is the patient that the doctor is endeavouring to please. In defining evidence-based medicine, David Sackett and his colleagues emphasized that good practice entailed not only the best use of research evidence, but also the ability to integrate clinical skills and the clinician’s past experiences with the patient’s own values and unique preferences (Sackett et al., 2000, p. 1). Scientific evidence was not enough. Scientism, extreme or excessive reliance on science, was to be avoided. The patient’s wishes were to be taken into account.

CHAPTER 15

Tribalism

The medical tribe

Occupations do not exist in isolation, but form part of a greater whole, an interdependent system in which they compete for influence. This was understood by Andrew Abbott who explored the interplay between occupations in his essay on the division of expert labour, published in 1988. Abbott recognized that fields of knowledge are in continuous dispute, subject to greater or lesser control by different occupational groups. As a result of social interactions, some occupations rise to positions of dominance, while others are subordinated, limited or excluded (Turner, 1995, pp. 138-139). In the English speaking world, those career producing occupations most successful in achieving market control and status in the social order are often referred to as ‘professions’ (Macdonald, 1995, p. 188). It is important to recognize that this way of seeing professions does not characterize them as being entirely benign. Rather than “*honoured servants of public need*” (Freidson, 1983, p. 19), they are instead depicted as accomplished competitors in a struggle for power, their authority coming at the expense of others.

The profession of medicine is archetypal, the dominant player in the field of health care, its area of expertise being extensive and subject to specialization. The medical profession plays a vital and respected role in the delivery of health care, but through its power and influence the development of other health care occupations has been shaped. In Britain it is generally the case that nurses are subordinate to medical doctors, dentists limit their scope of practice to diseases of the teeth and gums, and practitioners of alternative medicine, whose work is seen to be incongruent with medical orthodoxy, are excluded from mainstream funding and support. Within health care the history of inter-occupational dynamics has been driven by tribalism, the medical profession being the foremost tribe.

In the workplace, tribalism can be a force for survival and it can be a force for good. Shared values, organization and unity can be advantageous in the face of external threats. Loyalty to the group can lead to the establishment of principled behaviours within it. Even so, a strong culture of self-protection, elitism and misplaced collegiality can be unhelpful (Irvine, 2003, pp. 24-25). As well as resulting in reluctance to acknowledge error, such a culture can lead to prejudice against those external to the tribe.

Joint manipulation: a marginal practice

The practice of joint manipulation has been a contested domain. No single occupational group has dominated it. Instead a number of different groups have made use of it. Why, we might ask, given its strength, did the medical profession not dominate its use? Why didn't the medical profession make manipulation its own? The fundamental truth is that through the course of history there were not a sufficient number of medical doctors interested in, or practising manipulation, for it to become an essential component of medical orthodoxy. Aside from the reduction of frank dislocations, the practice of joint manipulation was not judged to be sufficiently important. Therefore it remained marginal and others were allowed to colonize the field.

For an occupation to flourish professionally there are those who have reasoned that a number of attributes are required (Greenwood, 1957; Wilensky, 1964). These include a field of specialized knowledge and expertise; a commitment to work in that field by a sufficient number of practitioners; the establishment of schools to train practitioners, ideally with links to the university sector; the development of active associations of practitioners; authority recognized by the clientele; and community sanction, typically with statutory regulation. If any of these are absent then the occupation is not likely to prosper and become a profession. Arguably, British bone-setters are a case in point. They lacked formal education, organization and legal protection. They did not adequately proliferate, nor professionalize, and they did not survive. Physiotherapists, osteopaths and chiropractors, on the other hand, became organized, establishing schools, associations and alliances. Through processes of political agitation they came to achieve statutory regulation, recognized by neo-Weberian sociologists as a key attainment in the professional journey (Saks, 2010).

Today the titles 'chiropractor', 'osteopath', 'physiotherapist' and 'physical therapist' are protected under law in Britain, but scope of practice is not. While it is illegal to call oneself an osteopath without being registered with the General Osteopathic Council, and it is illegal to call oneself a physiotherapist without being registered with the Health and Care Professions Council, anyone can practise joint manipulation. With respect to joint manipulative practice, there is incomplete protection of job territory.

In spite of their achievements, and accepting that the situation is not the same in the United States, in Britain the number of practising chiropractors and osteopaths has remained small and to date they have failed to become mainstream. This is evidenced by the fact that their services are, for the most part, excluded from the National Health Service. Working in the private sector, they have considerable autonomy, but this is at the expense of orthodoxy. By contrast, physiotherapists, who are

more numerous, are a part of the National Health Service. They are mainstream, but this was achieved through the sacrifice of autonomy, something that they still strive to resolve.

The patients' interest

"I will use treatments for the benefit of the ill in accordance with my ability and my judgement, but from what is to their harm or injustice I will keep them." (Extract from the Hippocratic Oath, Miles, 2004, p. 55)

A lens that sees professions as self-interested and power seeking calls for legal controls to be put in place to limit the most successful from monopoly, hence bureaucracy and accountability have become a part of the landscape of regulated professions, governments putting constraints on their ability to wield power. But power and action-based views of professions belie the fact that many aspiring medical doctors choose to study medicine because they see it as a caring profession. In other words, because of its humanitarian impact (Gillies et al., 2009). They become doctors not only because the medical career is respected, not only because the medical profession is a successful profession, but also because it is a profession that benefits society through caring for the sick. Key to the career choice of many would-be doctors is the idea of service, particularly service to the patient. This notion has been a part of the culture of medicine since Hippocratic times.

Seen in this light the medical profession's historical criticism of other disciplines, notably of bone-setters and chiropractors, takes on a new significance. Rather than being a demonstration of occupational imperialism, instead it can be viewed as an act of benevolence, undertaken to protect patients from unqualified practice. Bone-setters were seen to be a danger to the public because they lacked anatomical knowledge and formal training; and the claims of chiropractors to treat serious organic conditions, such as heart disease, by adjusting the spine, were not only patently ridiculous, they had the potential to keep patients from more appropriate care, thereby risking lives. The application of effective health care required specialized knowledge and skills. In view of its authority, the medical profession had a duty to help protect the public from the unqualified. It had a moral obligation to protect them from harm.

CHAPTER 16

Conclusion

Résumé

The practice of joint manipulation has ancient origins, having been a part of medicine for thousands of years. Some who have employed manipulation have been orthodox medical practitioners. Others have not. Bold claims have been made for its effectiveness, but its benefits have also been questioned and concerns about risk have limited its application. Historically, manipulation has been used as a treatment for both musculoskeletal and organic conditions. In the management of musculoskeletal conditions, scientific evidence has emerged to support its use, but for organic conditions the supporting evidence has been more tenuous.

The field of manipulative practice remains a controversial and contested domain, a sphere that has never been under the complete control of a single occupational group. In spite of technological advances in medicine, it has survived. Its development can be understood in terms of the interplay between occupations and in terms of processes of professionalization. The historical assertions of some of its advocates raise questions of justification in respect to claims to knowledge. Consequently, the history of manipulative practice prompts sociological and epistemological enquiry.

One of the strengths of this investigation is the information it provides to support contemporary decision making through enhanced understanding of the history of inter-occupational dynamics in the field of manipulative practice. The study highlights the competitive nature of professional relationships, and therefore, it might be argued, justifies the pursuit of continued offensive and defensive strategies on the part of occupational groups in order to ensure their furtherance. Likewise, it might be argued, it justifies the continued exercise of governmental controls in order to limit the power of elite professions. By contrast, it also draws us to consider the notion of service that is a part of professionalism, particularly service to the patient, and to ask whether in professional affairs group rivalries are inevitable. Professionalism entails a system of both tribal self-interest and concern for the wellbeing of others. This understanding is fundamental.

Final thoughts

At first self-interest might appear to be at odds with concern for others, but the truth is that they are not mutually exclusive as strategies exist for shared advantage. So, for example, in clinical practice the patient in pain benefits from the expertise of the clinician in providing a diagnosis, offering advice, and/or therapy. In return the clinician obtains esteem, satisfaction and financial reward. The result is win-win. Similarly, at the level of the profession, shared benefits can be achieved through statutory regulation. The public is provided with a service that people trust because it is recognized by the state, and through processes of law they are protected from charlatanry. In return for their valued service to society, members of the profession receive status in the social order and protection of job territory. Once again, the outcome is win-win. What is needed is phronesis, or practical wisdom, for the clinician who consistently puts his or her interests before those of patients does them a disservice, and the profession that abuses its power at the expense of its clientele is not worthy of admiration. Cooperation can be better than confrontation. Shared benefit is at the heart of professionalism.

The idea of shared benefit can also be applied to the interactions between occupational groups. Throughout their history chiropractors and osteopaths have been in competition. During the 1920s osteopaths working in Britain initiated processes of political activism with the aim of achieving statutory regulation. Their efforts were opposed by chiropractic purists. Concerned for their existence and advancement, chiropractors organized under the banner of the British Chiropractors' Association (Wilson, 2013). Rivalries ensued. This was the case even though chiropractors and osteopaths shared much in common. In spite of their similarities, and probably also because of them, they were adversarial towards one another. Osteopaths did not achieve statutory regulation in the 1920s, nor in the 1930s, and it was not until 1993 that the *Osteopaths Act* was passed (UK Parliament, 1993). Perhaps if the major groups of chiropractors and osteopaths had been more willing to work together they might have achieved more sooner. In other words, if they had focused more on what they shared in common, and less on those things that separated them. Where they are able to, great leaders choose their battles wisely.

Patients often ask what the difference is between an osteopath and a chiropractor. Since working in the north of England, my response has often been to say that they are analogous with rugby league and rugby union. In essence they play the same game, they both use their hands, they have a shared history, but they are opposing traditions. In 2008 I discussed with Lord Walton of Detchant the processes that led to the legal recognition of chiropractic and osteopathy in Britain, processes in which he had been personally involved. He told me that at one time he had thought it might be sensible to put forward a single bill to regulate osteopathy and chiropractic, but it became clear to him that lack of understanding between the two groups would have made that impossible. This raises a

question. What is more important, to be a chiropractor, an osteopath, a physiotherapist, or a medical doctor, and to be recognized as such under law, or to provide a worthwhile service to society? To put it another way, should occupational power and prestige be put before the principle of service? My own view, though it is a value judgement, is that they should not. In relations between professions, the state and its people, the people are most important. In health care it is the patient, not the profession, that should be the first priority.

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