RESEARCHING MANUAL THERAPY

With -

- **Danny Orchard**
  - Co-Founder, CORE Clapton
  - Practising Osteopath
  - Lecturer in Pain Science, University College of Osteopathy
  - MSc in Pain Science
- **Duncan Webster**
  - Director/Trustee, CORE Clapton
  - Practising Osteopath
  - MSc Osteopathy
  - Has a particular interest in the relationship between chronic pain, stress and visceral conditions
- **Simeon London**
  - Dean of Academic Development, University College of Osteopathy
  - Practising Osteopath
  - Has taught and examined across a range of subjects in UK and abroad

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About CORE

• The Centre for Osteopathy and Research Excellence (CORE) is a charitable organisation offering space for osteopathy treatments and amentoring services for new graduates. It also conducts research into the effectiveness of manual therapy.

• A 'pay-what-you-want' scheme is in place, helping make osteopathy available to people that could not access it otherwise.

• Mentoring felt to be important because four years training is not enough to learn the full scope of osteopathy.

• Has links to various groups, including South Bank University, the National Council for Osteopathic Research (NCOR) and University College of Osteopathy (UCO), among others. Initially accessed lottery funding to set up its office building.

• Has vacancies for mentors (senior osteopaths) and "mentees" (new graduates).

Perspectives on osteopathy

• Recent survey of GPs generated equally distributed responses: one third felt it saved many operations; one third felt that it made no difference; and another third felt it was "quack" medicine.

• Increased education will result to a more informed opinion about osteopathy.

• Only credible research will change negative perspectives.

• The Institute of Osteopathy is lobbying for a higher-level relationship with organisations like the Royal College of GPs and Physicians because it is from there that osteopaths can gain a lot more momentum in publicising what they do, and getting support for research and interest from external bodies.

Outcome measurement

• RCT: The Randomised Controlled Trial (RCT) is the gold standard for clinical studies, perceived to be the only trial worth doing. It has been dominant for many years within general health care and it is a very straightforward method of measuring outcomes.

- In manual therapy, it may not be the best way to produce convincing results, because each practitioner has different ways of administering treatment to patients suffering the same condition.

- Osteopaths are not homogenous in treatment styles; Manipultions by one may be barely felt, while those of another may be much stronger.

- This does not fit well with the mainstream medical model because it is not a single intervention. However, it reflects reality in osteopathic practice. Osteopathy is very hard to quantify in terms that would be acceptable as evidence by the NHS.

- The NHS approach to clinical research (eg outcome measures) is open to question. Under one contract outcome measures across providers were never analysed. The Bournemouth Questionnaire, widely approved for PROMs, is too technical for patient use.

- There is now a drive within healthcare reduce emphasis on the RCT (which fits the pharmacological model well) and adopt a more patient-centered approach, measuring treatment outcomes.

▪ Adaptable, qualitative approaches can also generate high quality research.

▪ A recently qualified practitioner from UCO has been doing a groundbreaking research on Acceptance and Commitment Therapy (ACT) alongside manual intervention to change and affect persistent/chronic pain.

• QALY: The NHS has developed a method for assessing the cost effectiveness of public health interventions. The health benefits are expressed as Quality-Adjusted Life Years (QALYs)[1]. Interventions costing the NHS less than £20,000 per QALY gained are cost effective. Those costing between £20,000 and £30,000 per QALY gained may also be deemed cost effective, if certain conditions are satisfied.

> **Example:** If a patient who received pharmacological treatment gets 50% improved quality life over a course of year then the treatment is then valued at half of one QALY.

• Another instrument for outcome measure is the EuroQol (EQ-5D)[2]. It is a standardised measure of health status developed by the EuroQol Group in order to provide a simple, generic measure of health for clinical and economic appraisal. It consists of

> – A descriptive system comprised of the following five dimensions: mobility, self-care, usual activities, pain/discomfort, and anxiety/depression. Each dimension has three levels: no problems, some problems, extreme problems. The respondent is asked to indicate his/her health state by ticking the relevant box.
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> – EQ visual analogue scale (EQ VAS), which records the respondent's self-rated health on a vertical, visual analogue scale with endpoints labelled 'Best imaginable health state' and 'Worst imaginable health state'. This information can be used as a quantitative measure of health outcome as judged by the individual respondents.

NCOR noted that patients did not like the EuroQol, as they felt it did not apply to their symptoms.

• MSK-HQ: The Musculoskeletal Health Questionnaire (MSK-HQ)[3] has been developed to assess outcomes in patients with a variety of musculoskeletal conditions. The questionnaire was also taken forward to quantitative testing in physiotherapy and orthopaedic cohorts. A small pilot was conducted by UCO to look at the feasibility of applying the questionnaire, the gathering of data, and how to do it effectively.

• NCOR has an app-based survey system that uses the Bournemouth questionnaire for gathering patient feedback in an effective and convenient way.

> – Each osteopath would get feedback for every 25 completed questionnaires.
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> – The app is linked by practitioner so there is a need to register/apply on the CORE website.
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> – The challenge for individual practitioners is to get a body of data big enough to be valuable in determining outcomes.

[1] https://www.nice.org.uk/advice/lgb10/chapter/judging-the-cost-effectiveness-of-public-health-activities
[2] https://euroqol.org/wp-content/uploads/2016/09/EQ-5D-5L_UserGuide_2015.pdf
[3] https://innovation.ox.ac.uk/outcome-measures/musculoskeletal-health-questionnaire-msk-hq/

▪ Alternative and simplified approaches that can help and support a small number of practitioners are needed at least in the initial data gathering.

Administering treatments

• Treatments and therapies should be aimed at affecting a person's own desires, functions, and values. They should also address the needs of the person, which is what manual therapists have always done.

• The complexity of pain felt by the patients needs to be understood completely by the practitioner. Interventions might involve manual treatment as much as it might involve giving advice/reassurance or simply allowing them to speak about their concerns. These things have therapeutic value, along with being touched and cared for. These are powerful tools when done effectively.

• Manual therapy is more than just a placebo intervention with medication or a psychological alteration. It actually facilitates recovery by normalising things, by helping patients feel that something has changed, and making them feel reassured – a combination of these things can create the outcome.

• Placebo can be powerful (red, octagonal pills have been found to be best) and remain effective even when the patient is informed that the intervention is a placebo, and the mechanism exlained.

• The biopsychosocial model is concerned with giving the body space and time to homeostatically organise itself and return to something that is akin to normal – without medication. It is about addressing the patients' psychology in their social surroundings while addressing their biology.

• At times, practitioners are so focused on the "bio" part that they overlooked the psychosocial part that is actually causing the patients' discomforts.

• There is no one-size-fits-all treatment in manual therapy for 'nonspecific pain', unlike in conventional medicine where treatments, for example, for nonspecific lung or liver tumor conditions are lumped together.

Example: For nonspecific back pain, there are myriad causes and contributing factors – could be several fibres of the annulus fibrosis with a few attachment muscles that are inflamed or sensitive tissues that are irritated, etc. - and trying to isolate one is almost impossible. Whether it is discal or facetal is very difficult to ascertain.

- For someone who is asymptomatic, one reasonable treatment option is to do nothing because the pain may just disappear in time of its own volition (if it is pain emanating from a small fiber of multifidus or ligament flavum). But if it is discal, catastrophising can be an option until further clinical tests, observations, and scan results affirm any abnormalities. **Note:** the time-frames and tests do not seem to match up with physiology.

• An integrative approach to patient care is what osteopaths do a lot. Collaborative approaches are being explored to evaluate effectiveness of intervention that is inclusive (not only osteopathy and chiropractic).

• The most common adverse reaction to treatment is soreness that lasts a day or longer. But practitioners should know how to measure adverse reactions to treatments (i.e. ascertain if those are anything since the treatment, not from the treatment).

- Some discomfort after treatment is not essential to a positive treatment outcome as it is not a question of 'no pain, no gain'.
- A therapist can inflict a bit of pain that is classed as 'good pain' and patients believe that it is doing them good, otherwise it will create a nocebo effect.

• It is important that the treatment interaction does involve the treatment as well.

Evidence for the use of manual therapy

• Evidence is essential for increased recognition of manual therapy. Twenty years ago the struggle was to prove that it is not quack medicine. Now, the struggle is to improve research showing the beneficial effects of manual therapy.

• Very little substantial evidence is generated in manual therapy that says any one particular treatment is effective over another. The same is true in medicine. There are always conflicting claims.

> **Example1:** An article was published on the BBC website which critiqued the intervention for knee arthroscopy saying that it was ineffective and should not be administered. Orthopedic surgeons were furious at the claim because they "knew" that it was effective.
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> **Example2:** Prof. Simon Lambert, from the Royal National Orthopedic Hospital, said that there is no evidence for the effectiveness of manipulation under anaesthetic for frozen shoulder, and it is actually dangerous. But the manipulation is still widely practised and nobody is complaining that it is bad medicine.

• Extraordinary claims require extraordinary evidence.

- Anecdotal evidence is useful on a personal marketing level only.

- Case reports are useful for proving that a particular treatment, on a particular individual, was effective. But this cannot be assumed to apply more widely.

• A significant number of patients can attest to the benefits of manual therapy. It is important that they are realistic about their outcomes. It is unrealistic for all outcomes to be positive.

• There is very little evidence that shows how practitioners address values, how they engage at the psychosocial level to affect change, and the outcomes of doing such.

• NCOR is running a data collection program where osteopaths can contribute. There are more papers about chiropractic techniques than osteopathic techniques because historically, chiropractic colleges produce a lot of research. Most of the treatments mentioned in that research concerns joint manipulation – which is applicable to what osteopaths do.

• There is a growing evidence that shows the effectiveness of calming the autonomic nervous system in reducing heart rate, blood pressure, and respiratory rate; and that it has positive effects on the body particularly in reducing pain.

The NHS - on the use of manual therapy

• Recently, there has been a move to look for innovative ways to improve the manner by which the NHS supports patients. The idea was introduced to engage a lot of private healthcare practitioners, osteopaths, chiropractors, podiatrists, occupational therapists to give support and provide care.

- The model has yet to be clearly delineated but essentially it is about maximising the skills and abilities of the healthcare practitioners to be useful to NHS patients. If the NHS can interact effectively with this group, they can diminish waiting times, improve patient outcomes through immediacy of care, among others.

- This initiative would then suggest that the government recognises the value of musculoskeletal therapists, osteopaths, and chiropractors in providing care and is keen to make use of that.