Why I am using the McKenzie system in my daily clinic

...and I'm teaching it for 24 years

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Warning!

This manuscript is completely subjective and doesn't build on an extensive literature overview. It's the result of my personal brooding on the question why I'm doing what I'm doing professionally.

Since centuries researcher question therapeutic methods, approaches and systems for the treatment of musculoskeletal conditions.

Low Back Pain is primarily in the focus but also management of neck and extremity arouses interest. Randomized Controlled Trials and Systematic Reviews should answer the question if there is one management strategy that is superior to all others.

I could fill pages with tedious summaries, critical comments on included studies, methodological pitfalls and claims for further research. I don't do this. Everyone is free to get their own overview of the relevant literature on the topic.¹⁻¹⁴

Common sense and outcomes:

The superior method, the best approach, the most effective system doesn't exist.

The differences are marginal. Somehow statistically relevant at best but clinically questionable. 15

In the last 25 years, the efficacy of the McKenzie system was regularly a topic of research. 15-24 Long story short: there is no convincing evidence in favor of McKenzie when it comes to the topic of outcomes. Overall, Mechanical Diagnosis and Therapy (MDT) does not do any better than various comparative interventions; but not worse either

As long as clinicians use active intervention and provide education, researchers consistently measure improvements - however examiner and patient are defining these.^{25,26}

There are many ways to climb the tree!

I have been using the MDT system in examining and treating patients since 1994. I have been teaching clinicians in D / C H / A since 1999, and worldwide since 2017.

Does this make sense?

Why am I still a 'MDT guy' when other active approaches can be just as successful?

Here are my personal answers to that.

MDT in daily clinic

1. First things first! MDT is feasible



The structured approach leads to a reasonable conclusion in 20-30 minutes. A huge advantage over all approaches that are comprehensive and top evidence-oriented but fail to be implemented in everyday therapeutic work. The frequent use in orthopedic diagnostics by physiotherapists underlines the high practical value of the system.²⁷

- 2. MDT helps me to identify patients that I need to refer further

 The MDT evaluation system can identify hints for serious pathologies.²⁸
- 3. MDT allows me comment on prognosis



Patients want to know when they are getting better. If I identify phenomena such as Centralization of pain or Directional Preference, I can make statements in a good conscience. 20,29-32,32

4. Due to MDT, I need less appointments



of musculoskeletal conditions.34

Shortage of appointments in our part of the world, lack of access to resources in many other countries. Good reasons to choose an approach that requires fewer appointment than others.³³
Recent research found no clinically significant differences in pain, function, and QoL between single

and multiple physiotherapy sessions for management

5. MDT can save patients stressful, expensive examinations and interventions

Imaging can result in a cascade of interventions. These are not infrequently fraught with risk. Avoiding surgery is my top priority.³⁵⁻³⁹



MDT can enable patients to treat themselves in the case of recurrences

Preventing back pain is a pious wish.

In real life, we are far from being effective here.

MDT-instructed patients also have recurrences. It looks like they can treat themselves rather than seek medical help straight away. 40



7. MDT principles apply to the entire body

In an editorial 2016 valued Gwendolen Jull asked: 'Discord Between Approaches to Spinal and Extremity Disorders: Is It Logical?'.⁴¹

The answer is NO, of course not. In the MDT system, the same principles apply to the spine and the extremities. ⁴²

When it comes to spine vs. extremities, I'm using MDT based clinical reasoning instead of mostly useless classic orthopedic tests.⁴³⁻⁴⁹

8. MDT facilitates the exchange between colleagues

If all clinicians on a team use the MDT system, it helps to learn from one another and with one another.⁵⁰ If they have also reached a minimum level in training, reliability is good and the probability is high that we mostly talk about the same thing.⁵¹⁻⁵⁸



Teamwork is crucial in order to make long-term evidence-based work normal in daily clinic and to stop the trend towards questionable therapies.⁵⁹

9. MDT includes patients in decision-making



In my opinion one of the key points of MDT. With MDT, Shared Decision Making starts with the diagnostic process. This promotes therapeutic alliance and helps patients understand their state of health better and internalize adequate treatment strategies.⁶⁰

Teaching / learning MDT

1. MDT provides structure

Young therapists usually start their professional life with enormous theoretical expertise. Everything works wonderfully on paper, during presentations in training or in role-playing games. It becomes difficult as soon as real patients do not react to the tests as it is described in the textbook. Novices appreciate the common thread that the MDT system provides. Even if some things seem simple, the procedure gives safety, and this is fundamentally important for clinicians as well as for patients.

It helps 'science-laden' clinicians to put the evidence into practice. Experienced colleagues often tell me that MDT has simplified many things in their everyday work.



2. MDT promotes active therapy

The principle of self-treatment and the idea of progression of forces are fundamental components of the MDT system. Even if nothing else is convincing in the course, the focus on active therapy will be definitely remembered.

3. MDT makes biopsychosocial aspects understandable for practitionersIntegration of the Driver Model⁶¹ emphasizes clearly the biopsychosocial character of MDT⁶²⁻⁶⁴ and facilitates patient assessment.

4. MDT supports clinician in improving patient communication

Understanding a question is half an answer Socrates

In MDT, history taking and clinical examinations happen in constant communication with the patient. Patient demonstrations on the courses provide suggestions on how communication can work.

5. The magic solution might be a pseudo giant

Recently, it appeared that researchers found the road to 'backpain-happiness'. For the first time, an RCT concluded with a clear statement in favor of an intervention. 'Cognitive Functional Therapy can produce large and sustained improvements for people with chronic disabling low back pain at considerably lower societal cost than that of usual care'.64 Looking a bit closer, it appears that 73 % of patients in the CFT-group were either somewhat confident, confident, or very confident with the assigned treatment. Only 2 % were unconfident. In the usual care group only 25 % were somewhat confident, confident, or very confident with the assigned treatment and 29 % were very unconfident or

unconfident. Knowing about the major influence of expectations on possible outcomes⁶⁵, conclusions from this trial might have to be drawn with caution.

6. Classification systems in general, the MDT system in specific and quality control

When the systematic review of Tagliaferri et al¹⁵ was published, it looked like this is the final proof for the inefficiency of classification approaches. The review has shown that the outcomes of none of the researched approaches was superior compared to other classification approaches or compared to the use of a generic approach. The authors concluded that there is currently insufficient evidence supporting the use of classification systems for managing LBP in clinical practice.

In an interview with a German PT journal the senior author of the paper stated: *Until more* and qualitatively better evidence is available, strict application of these classification systems is discouraged...in this context, you should also think about resources. The implementation of the methods requires training and it costs time and money to learn them...it is questionable whether this makes sense.⁶⁶

The authors and many discussions following the publication missed some important aspects. Classification systems provide a framework for clinicians. Many clinicians appreciate some sort of guidance for their daily work. In a perfect world, clinicians would learn evidence-based practice in their primary PT education, improve their knowledge by reading relevant articles and apply this in their daily work. In reality, clinicians use courses and conversations to change practice, not journal articles.⁶⁷

Classification systems are usually taught in postgraduate courses. Some of these systems – like MDT - provide an ongoing educational process by offering specific and / or advanced courses. These courses provide great opportunities to update clinicians on current evidence. As the quoted systematic review shows, the fact that classification systems exist allows to evaluate their outcomes and eventually also to question their educational structure. In this context, quality control is a major issue and there already discussions if it is time for journals to peer-review courses to stay relevant.

Coming back to MDT; in this systematic review it was no better or worse than any other approach. Thinking about all the aspects I described earlier in this article, it remains still a great choice for me.⁶⁸

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