



Short Communication

Development of a documentation instrument for movement-orientated Mind-Body-Therapies taking the example of Eurythmy-Therapy

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ABSTRACT

Introduction: Movement orientated Mind-Body-Interventions become more popular. But there are no standardized documentation tools to show if an improvement in movement could correlate with an improvement in health. Yet systematic documentation is a vital requirement to their efficacy.

Method: We developed a 5-module documentation structure including patients' perspective. Over a period of five months 11 therapists used the modules to document their treatments on 41 patients and evaluated their feasibility at hand a questionnaire.

Results: 10 therapists and 37 patients met the inclusion criteria. In a documented variety of treatment concepts moderate to large effect size in observed movement qualities was found. Furthermore large correlation of observed movement qualities and patients' self-reported Quality of Life indicators could be shown.

Conclusion: The modules were regarded feasible. Moreover, the outcomes showed initial sensitivity to change. They should therefore be tested in various movement orientated Mind-Body-Therapies.

1. Introduction

Promotion of health through movement interventions is widely investigated.^{1,2} Therefore, movement-orientated Mind-Body-Therapies (MMBT) become increasingly popular³ and are quite well investigated. Yet, what exactly was done, with which intentions and specific treatments (methodologies, exercises etc.), is often unclear. Accordingly, to proof therapy-efficacy, standardized documentation of intentions, practices, and outcomes is required⁴ – these are mostly lacking. Moreover, there are no established documentation tools for the routine application outside of clinical studies.

Eurythmy-Therapy (EYT) is a MMBT⁵ that offers diagnostic assessment on differentiated movement-qualities in patients. Improvement in those is assumed to relate to improvement of health status,⁶ but this connection has never been convincingly approved with respect to the patient's perspective. Also the effectiveness of specific exercises for specific symptoms is chiefly reported by the therapists only, rather than being additionally objectified by patient related parameters.⁷ Unlike

Thai Ci or Yoga, 8 documentation structures were invented for EYT since 1992, however none of them met specific criteria as standards in proof of concept.^{8,9}

We therefore aimed to establish a standardized short-documentation for MMBT that could be filled within 5 min after each treatment session and nevertheless deliver evaluable results for a scientific evaluation. An instrument was developed to document movement, specifications on symptoms, the specific exercises with therapist' treatment intentions, and patient reported health-related Quality of Life indicators (PRQoL). The practicability of this instrument was examined by 10 Eurythmy therapists with their patients. One goal was to show initial sensitivity to change in MQ-assessment.

2. Methods

The 5-module instrument EDET¹⁰ (acronym of the German title "Single Case Documentation in Embodiment Therapy¹") was developed based on literature research on standardized documentation tools, the

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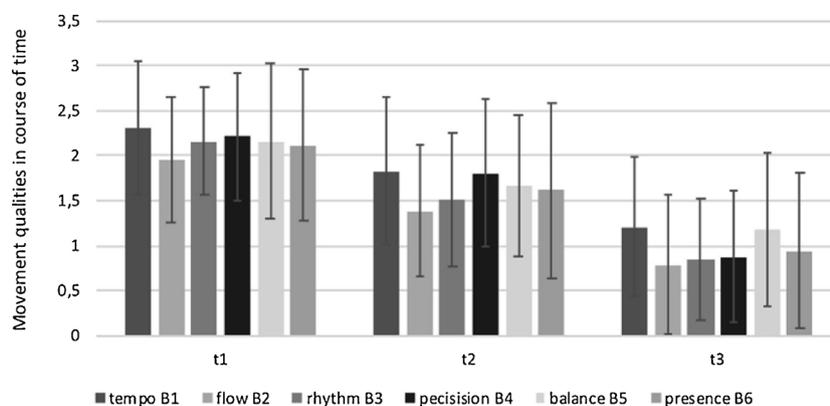


Fig. 1. Movement-qualities (MQ) in course of time (Mean value with standard deviation): movement qualities improvement in course of time.

CARE¹¹ and CARE/AAT¹² guidelines and own considerations². EDET-MOVE (Movement) records 6 movement qualities (MQ): tempo (slow or fast), flow (slack or obdurate), rhythm (static or hasty), precision (imitating or unprecise), balance (instable or stable) and mental presence (weak or strong), assessed of patients' movements on a 7-step bipolar rating-scale (3 = clearly, 2 = slightly, 1 = hardly differing from the 'healthy' state = 0) at 3 points in time of the individual treatment phase: t1 = first session, t2 = middle session, t3 = last session. EDET-DI (Clinical Diagnosis) collects anamnestic data. EDET-TREAT (Treatment, Exercises) gathers data on exercises with their intentions, on patients' development and therapists' reflection on course of therapy. EDET-DOC (Short Documentation) is an optional short version of EDET-TREAT, documenting only the 3 points in time as EDET-MOVE. EDET-QOL (Quality of Life) consists of the validated questionnaire to assess different aspects of life satisfaction in general (BMLSS-10), which has a very good reliability (Cronbachs alpha = .92)^{13,14} and the impact of EYT-interventions on life satisfaction. The study protocol was approved by the Ethics Committee, University Witten/Herdecke.

An expert team of clinical researchers, medical doctors and eurhythmy therapists (ET) assessed the 5 modules in a simple consent-process answering a 28-item questionnaire about its feasibility. After incorporation of this process' findings, the instrument was tested by 10 therapists in their routine application. Their patients had to be between 18 and 79 years old and diagnosed and referred to treatment by medical doctors, without diagnosis limitations. Concurrently they examined the handling of the modules with a 33-item questionnaire (feasibility testing either paper-pencil or computer aided). Patients gave signed consent for publication of the anonym data.

The collected data were analyzed regarding feasibility aspects and efficacy outcome. Correlations between MQ and PRHQoL were assessed. Sensitivity in change of MQ was calculated by Cohen's d.

3. Results

To analyze the application of the documentation structure, in this pilot study data of 37 individuals aged 26–79 were included. Diagnoses varied according to ICD-10 among diseases of the musculoskeletal system, neurological, psychological, behavioural and metabolic disorders, general fatigue and hypertension. Interestingly, findings show a huge variety in exercises with intentions even within the same diagnosis: e.g. diabetes was treated in 3 cases and each with a different main exercise.

Participating therapists considered the modules feasible, although some found it difficult to use a new computer-aided structure. The EDET-MOVE (100%), EDET-TREAT (70%) and EDET-QOL (80%) appeared to be most frequently used.

80% of the participating therapists regarded EDET-MOVE as the most effective and important one. With this module, a direct overview of the treatment cycle with its symptom improvements can be achieved. In this non-representative pilot study, all patients improved significantly ($p < 0.0001$) in all MQ within time (Fig. 1). The average of all MQ (BX) correlated moderately to largely ($p < 0.01$) with PRHQoL-items (EDET-QOL), e.g. satisfaction with perception of treatment effect ($r = -.54$), fitness ($r = -.44$) and health ($r = -.42$) (Table 1). The correlations are indicated negatively, because MQ are measured towards no movement impairment (= 0), while PRHQoL is measured towards higher satisfaction (6 = very satisfied). The effect size (ES) was calculated based on Cohen's d, interpreted using Cohen's d thresholds (ES < 0.2 trivial, ES between 0.2 and 0.5 small, ES between 0.5 and 0.8 moderate, ES > 0.8 large¹⁵). MQ within time (t1 to t3) ranged between ES = 0.7 and ES = 0.5 (Table 2).

Furthermore 70% of the therapists used EDET-MOVE as a therapeutic report. EDET-TREAT is regarded to allow a more content-related process overview.

4. Conclusion

Moderate to large effect size in MQ gives initial hints towards sensitivity to change as assessed with EDET-MOVE. Significant correlations between PRHQoL and MQ support the hypothesis that improvement in MQ may lead to improvement of health indicators and satisfaction with treatment effects. A limitation of this pilot study is that the study-population is rather small; therefore the instrument has to be applied in larger groups of therapist and all treatment effects should be regarded as trends to be verified in future trials. Therapists seem to work on an individual basis with patients, and thus their intentions, treatment decisions and exercises are highly individual. Now, this variety can be documented and related to the observed outcomes.

Overall, EDET appears to be a useful tool in documentation of MMBT. Further evaluations particularly with the EDET-MOVE, EDET-DOC and EDET-QOL are needed. They could be easily implemented in clinical trials comparing different MMBT (e.g. Yoga versus EYT).

² All 5 EDET-modules are available as downloads at www.well2move.de

Table 1
Correlation Average of MQ to PRQoL-items (patients' self-assessment).

Average of MQ	AL	SST	G1	G2	G3	G4	BMLSS-10
Daily-routine-efficacy	-.36**		-.42**	-.54**	-.32**	-.44**	Overall quality of Life Score
Correlation r Data sets	87	.35**	89	82	89	88	90

** p < 001 (Spearman rho). Calculated correlations are negative due to reverse measurement scales. The average of movement qualities correlates moderately to largely with patient reported Quality of Life-items.

Table 2

Sensitivity in Change of Movement Qualities in EDET-MOVE (as assessed by the ETs).

Item	Cohens d	Effect Size ES
Movement Rhythm	2.06	0.72
Movement Precision	1.83	0.68
Movement Flow	1.65	0.62
Movement Tempo	1.43	0.58
Movement Presence	1.37	0.57
Balance	1.14	0.50

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Conflict of interest

The authors declare that they have no conflict of interest.

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