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The German experiences with MATE

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Research activities related to MATE-de

<table>
<thead>
<tr>
<th>Year</th>
<th>Project</th>
<th>Funding</th>
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| 2006 | **Project German MATE**
Translation, Psychometric Properties | Federal Ministry of Health                   |
| 2011 | **Project MATE-LOC**
Adaptation and Evaluation of matching guidelines based on MATE | Federal Ministry of Education and Research    |
| 2012 | **Project MATE-Pro**
MATE-Crimi in Forensic Psychiatry | DFG (German Research Foundation)             |
Implementation & Service activities

- MATE-de
- MATE-Crimi-de (including Manual & Protocol)
- MATE-Youth-de (almost finished!)
- Manual for Trainers including DVD
- MATE-Workshops at regional and nationwide congresses
- Supervision of Clinics implementing the MATE or MATE-Crimi
Overview

Is the MATE-de…

… reliable and valid?

… feasible?

… useful in the German addiction treatment services?

… implemented by German addiction care professionals?
Is the MATE-de reliable and valid?

Evaluated Psychometric Properties

- Test-retest reliability / Observer agreement
- Factorial validity
- Construct validity (MATE-ICN)
- Sensitivity to change
Is the MATE-de reliable and valid?

Methods

- $N = 270$ patients
  - in treatment for alcohol or illicit drug dependence
  - “qualified detoxification treatment“ (3 weeks) & long term inpatient
  - (3-6 months)

- Designs
  - MATE $\rightarrow$ max. 14 days $\rightarrow$ MATE
  - MATE $\rightarrow$ max. 14 days $\rightarrow$ WHODAS II + CIDI
  - MATE $\rightarrow$ treatment $\rightarrow$ MATE
Is the MATE-de reliable and valid?

Results

Test-retest reliability / Observer agreement ($n = 69$)

- standardized modules: $ICC \geq .64$
- MATE-ICN: $ICC_{\text{Limitations - Total}} .47$; (low ICCs for \textit{External influences} and \textit{Limitations-relationships})

Factorial validity ($n = 270$)

- Acceptable goodness of fit for all evaluated dimensions (Confirmatory Factor Analyses; $CFI \geq .91$; $RMSEA \leq .08$)
Is the MATE-de reliable and valid?

Results

Construct validity (MATE-ICN)

• Medium – large correlations in expected direction with *Functioning (WHODAS II)* and Quality of Life (WHOQOL-BREF)
  \[ r .20 - .57; p < .01 \]

• But: MATE-Score *Positive external influences* no associations

Sensitivity to change \((n = 113)\)

• Scores expected to be sensitive to change were significantly reduced at discharge from treatment
  \[ Cohen’s d .56 - .91 \]
Is the MATE-de reliable and valid?

Summary & Conclusions
• Most of the MATE-Scores showed to be reliable, valid & sensitive to change

• Problems occured in some subscores of the MATE-ICN
  ⇒ revision of the Manual & Protocol; development of standardized training
Is the MATE-de feasible?

Objectives

• Is the duration of the interview acceptable?
• Is the interview difficult / uncomfortable to conduct?
• MATE-ICN:
  – How „certain“ are interviewers in their ratings?
  – How suitable are the items to reflect the patients‘ situation?

• Is the assessed information useful for routine practice?
• Is the instrument feasible in routine practice?
Is the MATE-de feasible?

Methods / sources of information

• Project German MATE: questionnaire regarding feasibility after each MATE (N = 270)
  – Duration & difficulty of the interview
  – Certainty of ratings & suitability to reflect the patients‘ situation

• Project MATE-LOC: Focus group with interviewers (N = 5)
  – Open discussion about feasibility of MATE in routine practice

• Feedback from users

Project German MATE; MATE-LOC
Is the MATE-de feasible?

Results

• Duration
  – \( M = 58 \text{ min}; SD = 18 \text{ min} \)
  – 70.4% of the interviews had an acceptable duration

• Difficulty
  – 57.9% of the interviewees were rated as “comfortable to conduct”

• Certainty / Suitability
  – Mean values of a 4-point scale for all items > 3

Project German MATE; MATE-LOC
Is the MATE-de feasible?

Results

• Usefulness in routine practice
  – „Good summary of all relevant information“
  – MATE-ICN: important but often neglectet informations
  – Good to facilitate matching decisions and treatment planning
  – Increases transparency → fosters shared decision making

• Feasibility in routine practice
  – Interview takes too much time (esp. MATE-ICN)
  – Some information is captured already by other instruments
Is the MATE-de feasible?

Conclusions

• MATE is acceptable and comfortable to administer to most users
• MATE is judged as useful instrument in routine care
• Time constraints are an important barrier for implementation

⇒ Ideas by users to overcome this barrier
  – Split MATE in several sessions
  – Split MATE among different staff members (e.g. therapist, social worker, doctor, nurse…)

Project German MATE; MATE-LOC
Is the MATE-de useful in the German addiction treatment system?

Background

• Different treatment systems in Germany & the Netherlands
  – Accountability of different agents (health insurance, pension funds, social welfare)
  – Large regional differences in the structure of the addiction treatment systems

⇒ Is placement matching (*triage*) in this context useful?
Is the MATE-de useful in the German addiction treatment system?

**Methods**

- **Phase I:** adaptation of Dutch allocation guidelines using a Delphi methodology

- **Phase II:** evaluation of the adapted guideline with a randomized controlled design
  - Inpatient qualified withdrawal program (3 weeks)
  - Patients with a primary diagnosis of alcohol dependence
  - No fixed plans for further treatment

Project MATE-LOC
**Treatment intake**

Patient enters withdrawal treatment with a desire for help including his current state of motivation for further treatment.

Before using the allocation guidelines, the following criteria are reviewed:

- Is there a physical condition requiring medical treatment first?
- Is there a psychiatric condition requiring (other) psychiatric treatment first?
- Crisis intervention needed?

Only if all three criteria are not met, the patient can be referred to SAT and the allocation guidelines are used.

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**Treatment recommendation based on allocation guidelines**

- **History of substance use disorder treatment**
  - 0-1 treatments
  - 2 treatments
  - 3-5 treatments
  - > 5 treatments

- **Severity of the addiction**
  - Low severity
  - 0-1 treatments & high severity

- **Severity of psychiatric comorbidity**
  - Low severity
  - 0-1 treatments & high severity

- **Severity of social disintegration**
  - Low severity
  - 0-1 treatments & high severity
  - 2 treatments & high severity

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**Allocation**

Shared decision with the patient based on the recommended Level of Care (LOC), reactive and organisational factors.

- **LOC 1: Outpatient advice** (Physician/Drug counselling service)
- **LOC 2: Outpatient treatment** (addiction specialist)
- **LOC 3: Day/Residential** (≥ 8 weeks rehabilitation treatment)
- **LOC 4: Care** (Intensive in- or outpatient care)

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**Figure 1** Adapted allocation guidelines for referral decisions after detoxifications.
Is the MATE-de useful in the German addiction treatment system?

Figure 2 Flowchart of patient progress through the qualified withdrawal unit and study procedure; MATE = Measurements in the Addictions for Triage and Evaluation; CSSRI = Client Sociodemographic and Service Receipt Inventory; EQ5D = EQ-5D Health questionnaire; IG = Intervention group; CG = Control group.
Is the MATE-de useful in the German addiction treatment system?

Eligible patients
(n = 299)

Randomization
(n = 253)

Intervention group
(n = 125)

Control group
(n = 128)

6 month follow-up
(n = 87)

6 month follow-up
(n = 80)

dropped out (n = 40)

Reasons for dropout / decline:
- Lack of motivation
- Too much effort
- Early treatment discharge
- Mistrust
- Relapse

Reasons for dropout:
- Patients could not be reached
- Not enough time
- Bad health condition
- Incorrect phone number
- Relapse

Project MATE-LOC
Is the MATE-de useful in the German addiction treatment system?

**Figure 2** Flowchart of patient progress through the qualified withdrawal unit and study procedure; MATE = Measurements in the Addictions for Triage and Evaluation; CSSRI = Client Sociodemographic and Service Receipt Inventory; EQ5D = EQ-5D Health questionnaire; IG = Intervention group; CG = Control group.
MATE result

LOC 1
n=16
50%

LOC 2
n=35
66%

LOC 3
n=40
63%

LOC 4
n=29
48%

Staff recommendation

LOC 1
n=8

LOC 2
n=47

LOC 3
n=49

LOC 4
n=16

Match Less More

Project MATE-LOC
Main reasons for deviations from MATE-results

- more treatment because of… (n = 22)*
  - Psychiatric Comorbidity (n = 4)
  - Social disintegration (n = 12)
  - Severity of dependence (n = 10)
  - Other reasons (n = 6)

- Less treatment because of … (n = 31)*
  - Psychiatric Comorbidity (n = 1)
  - Social disintegration (n = 13)
  - Severity of dependence (n = 4)
  - Other reasons (n = 9)

* Therapists could quote multiple reasons
Is the MATE-de useful in the German addiction treatment system?

Focus group results

😊 MATE-results were most often plausible and reflected recommendations of the staff
😊 This approach enhances transparency to other staff members and the patient
😊 Can help to motivate patients for further treatment

😊 The „right moment“ for a MATE and feedback session is difficult to find
😊 Decisions regarding further treatment depend to a large degree on organizational factors
Is the MATE-de useful in the German addiction treatment system?

MATE-Crimi-de

• Implementation in a forensic psychiatry for delinquent patients with substance use problems
• Development of treatment pathways based on MATE-results at treatment entry

⇒ MATE-Crimi can be useful to identify patients at risk for early drop-out and to initiate treatment oriented at those patients needs

Project MATE-Pro
Intake unit (~ 3 months)

Intake → MATE-Crimi

- Risk profile of patient
- Diagnostic decisions
- Therapeutic decisions

Further diagnostics → Reevaluation of risk profile and – if necessary – other parts of MATE-Crimi, preliminary treatment plan

Case conference: Decision about treatment unit

Treatment unit
Is the MATE-de implemented by German addiction care professionals?

• No nationwide implementation

• It is hard to estimate! (open access)

• About 1-2 inhouse – MATE workshops per year
• Participants at congress workshops on a regular base
• E-Mail with requests of users on a regular base
Outlook

• Analysis of MATE-LOC results
  – Main effects: heavy drinking days & health economic costs
  – Analysis of decision processes
  – Additional psychometric analyses

• Funding of MATE-Youth development & implementation study

• Funding for a follow-up study for MATE-Pro
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Thank you for your attention!

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References


