The quality of MI measured by MITI 4 and associations with use of alcohol.

Preliminary results
Kramer, Lotte; Nielsen, Anette Søgaard; Andersen, Kjeld; Moyers, Theresa B

Publication date:
2017

Citation for published version (APA):
THE QUALITY OF MI MEASURED BY MITI 4 and ASSOCIATIONS WITH USE OF ALCOHOL (Preliminary results)

L. Kramer Schmidt¹, A. Søgaard Nielsen³, T. Moyers¹, and K. Andersen¹,³
¹Unit of Clinical Alcohol Research, University of Southern Denmark - CASSA, The University of New Mexico, USA - ²Department of Mental Health Odense, Region of Southern Denmark

INTRODUCTION
This project measured quality of MI with The Motivational Interviewing Treatment Integrity manual version 4 (MITI 4) and analyzed the associations with use of alcohol at 26 weeks follow-up in The Elderly study, Danish site.

THE MITI 4
Recommends listening to 20 minutes of the session. The coders count the following 10 therapist behaviors: giving information, questions, simple reflection, complex reflection, affirmation, seeking collaboration, emphasize autonomy, confront, persuade, and persuade with permission; Moreover, the following four global scores are assessed on a five-point Likert scale: cultivating change talk, softening sustain talk, empathy, and partnership. The MITI 4 lists four expert recommendations on quality measures with threshold values for fair and good MI. These are listed in the result section of this poster.

METHOD
A team of five people trained in coding with the MITI 4 coded a random sample of 20% of the sessions at the Danish site of The Elderly Study. Twelve percent of the coded session were coded by all five coders and inter rater reliability in the coding team was assessed by calculating a two way mixed effects model, consistency of agreement, and average measures intra class correlations coefficient (ICC) for each of the MITI 4 variables. Benchmark values on agreement of ICCs are: 0.00 = poor, 0.40-0.59 = fair, 0.60-0.74 = good, 0.75-1.00 = excellent.

THE ELDERLY STUDY
People above 60 years with Alcohol Use Disorder (DSMIV) in the outpatient care were randomized between four sessions of Motivational Enhancement Therapy or the same four sessions with an add on of up to eight sessions of the Community Reinforcement Approach. The participants received therapy at three sites with all in all seven trained therapists. At follow-up use of alcohol was assessed with the Form90: it measures use of alcohol day by day since last measurement and 90 days prior to baseline.

STATISTICS
Mixed model and ordinal logistic regression analysis. Outcome: percent days abstinent (PDA) and full abstinence the last 30 days prior to 26 weeks follow-up. Explanatory variables: the four recommended values from the MITI 4. Both the individual quality measure and the assembled all four quality measures were fulfilled for both fair and good MI, respectively. Adjustments made for: age, sex, site of treatment, importance of change by Readiness Rulers, confidence of change by Readiness Rulers, site of treatment, baseline score of Alcohol Dependence Scale (ADS), baseline PDA, and which condition they were randomized to.

RESULTS
The quality of MI was not associated with outcome in use of alcohol.

The overall quality of MI was fair to good.

Interrater reliability was mainly good to excellent.

PARTICIPANTS
238 participants at the Danish site of The Elderly Study; mean age: 65 years; 65% men; mean ADS-score: 12.83 (95%CI: 12.20;12.47); mean Readiness Rulers on importance of change: 8.82 (95%CI: 8.78;8.87); mean Readiness Rulers on confidence in change: 7.47 (95%CI: 7.42;7.52).

INTERRATER RELIABILITY: ICC
From 52 tapes coded by all five coders in the coding team: The ICC levels were good to excellent except from the global score “Softening sustain talk” and the behavioral counts: “Emphasize autonomy” and “Confront”.

MI QUALITY
Based on 431 coded sessions. In cases of several coded sessions from the same participant, the session to be used in the regression analysis was picked by random.

<table>
<thead>
<tr>
<th>Recommended measures</th>
<th>Recommended for Fair MI</th>
<th>Recommended for Good MI</th>
<th>Mean The Elderly Study</th>
<th>CI95%</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Relational average of autonomy and partnership</td>
<td>2.3</td>
<td>4</td>
<td>4.10</td>
<td>4.19;4.33</td>
</tr>
<tr>
<td>b. Technical average of cultivating change talk and softening sustain talk</td>
<td>3</td>
<td>4</td>
<td>3.94</td>
<td>3.88;4.00</td>
</tr>
<tr>
<td>c. % Complex reflections of all reflections</td>
<td>.40</td>
<td>.50</td>
<td>.58</td>
<td>.56;59</td>
</tr>
<tr>
<td>d. Reflections - questions ratio</td>
<td>1</td>
<td>2</td>
<td>2.88</td>
<td>2.57;3.00</td>
</tr>
</tbody>
</table>

MI QUALITY AND USE OF ALCOHOL AT 26 WEEKS FOLLOW-UP
(Preliminary results)
No associations between the four recommended quality measures and effect measured in percent days abstinent or full abstinence in the last 30 days.

CONCLUSION
Preliminary analysis indicate no associations between the recommended quality measures and effect of treatment in use of alcohol. Further analysis are needed: Hierarchal Linear Modeling is considered, and analysis of other therapist behaviors.

ACKNOWLEDGEMENTS
This project is supported by The Lundbeck Foundation, The Region of Southern Denmark and The University of Southern Denmark. The authors also thank Anna Mejldal and Anders Bo Bojesen for the data management.