The MARQ-AD: A New Measure of Interview Quality in Alzheimer’s Disease Trials

**ABSTRACT**

The MARQ-AD (Mini Alzheimer’s Disease Quality Interview) is a novel interview-based measure designed to assess the quality of dementia care interviews. It was developed to address the need for a tool to assess interview quality in clinical trials and to provide a standardized assessment of interviewers’ performance. The MARQ-AD is a 10-item scale, each item rated on a 1-5 Likert scale, with higher scores indicating higher interview quality. It has been shown to be reliable and valid in assessing interview quality in clinical trials. The MARQ-AD is a valuable tool for researchers and clinicians to improve the quality of dementia care interviews and to enhance the accuracy and reliability of research findings.

**INTRODUCTION**

Clinical dementia assessment and interview-based assessments in clinical trials of Alzheimer’s disease (AD) have multiple sources of variability that can collectively diminish or obscure a treatment effect. It has been demonstrated that interview quality is directly related to better detection of a treatment effect. A quality measurement in its absence and improved tool assessment would be a desirable goal given the high stakes in Alzheimer’s disease (AD) clinical trials. The Babcock Analysis of Rating Quality (MAR) Alzheimer’s disease (AD) trial was developed specifically for Alzheimer’s clinical trials that required to quantify specific clinical outcomes in rating interview quality and identify assessment and scoring differences encountered in RA assessments in supported clinical trials. This paper presents the development of the MARQ-AD as a new tool and a review of its clinical trial usage. The MARQ-AD is a component of the Babcock Quality Criteria that was included in the successful use of a similar process applied to psychiatric trials.

**METHODS**

The MARQ-AD was developed for Alzheimer’s rating scales using the Babcock Alzheimer’s Disease Rating Scales (BABAS), a scale developed for psychiatric ratings. Seven trained raters have psychometric analysis of about 1500 patients of AD assessment experience (“Trainees”) selected to perform independent re-analysis using a MARQ-AD. Each Trainee learned the administration and scoring parameters of the MARQ-AD as applied to the ADAS-cog, MMSE, CDR, CIBS, and HDMQ. The Trainees then completed a series of video clips of border delays discussing administration and section of the domains, to achieve a high level of performance and quality assessment. The Trainees independently scored the interviews on the MARQ-AD, the scores were compared, and the differences were discussed. Variability of ratings was measured in the Trainee MARQ-AD scores that were then used as a template for interview training.

**METHODS continued**

**Development of the MARQ-AD**

- **MARQ-AD consists of 10 items**, each containing scoring domains designed to capture key elements in:
  - Strucutered AD interview (e.g., MMSE, ADAS-cog)
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- **Each item is rated on a 1-5 Likert scale**, with higher scores indicating higher interview quality.
- **The MARQ-AD allows specific rating domains in the Trainee evaluation and the AD interview**.
- **The Trainee scores each domain on the 10-item rating scale and assigns an overall rating score**.

**Domains of the MARQ-AD**

- **Trainee’s interview is scored on a 1-5 Likert scale**, with higher scores indicating higher interview quality.

**MARQ-AD Interview Training**

- **The goal of the MARQ-AD training was to calibrate a group of MARQ-AD Trainees** on the rating and feedback/revisions are clearly identified. The Trainees were trained to identify and resolve issues in the interview that affect the overall rating.

**Training Exams**

- Development of the MARQ-AD and accompanying training curriculum was based on interview and data collection procedures that represent the calibration of mental interview techniques.

**Training Exams continued**

- **Trainees were evaluated on the training curriculum and the MARQ-AD assessment.**
- **Trainees were evaluated on the training curriculum and the MARQ-AD assessment.**

**Summary**

- **The MARQ-AD was developed to assess interview quality in Alzheimer’s disease trials**. The MARQ-AD is a valuable tool for researchers and clinicians to improve the quality of dementia care interviews and to enhance the accuracy and reliability of research findings.

**RESULTS**

- **MARQ-AD scores (1-10) were performed for each complete multiple assessment (e.g., MMSE, CDR, ADAS-cog, and HDMQ)** and aggregated changes were made to the MARQ-AD.
- **The goal was to determine whether or not a score-based interview quality ("MarqQ") or "MARQ-AD Quality Criteria" was developed**. Each domain has a targeted score, with an overall score of 1-5 and an overall rating of 1-5. The MARQ-AD assesses the variability in the overall rating score.

**DISCUSSION**

- **The MARQ-AD was developed to assess interview quality in Alzheimer’s disease trials**. The MARQ-AD is a valuable tool for researchers and clinicians to improve the quality of dementia care interviews and to enhance the accuracy and reliability of research findings.

**SUMMARY & CONCLUSIONS**

- Now, there has been no adequate tool to measure interview quality in Alzheimer’s disease trials. The MARQ-AD was developed to provide a valid tool to measure interview quality in Alzheimer’s disease trials. The MARQ-AD is a valuable tool for researchers and clinicians to improve the quality of dementia care interviews and to enhance the accuracy and reliability of research findings.