The Rowland Universal Dementia Assessment Scale in Practise

Dr Jeff Rowland
Language vs Culture

• Language not = culture
  – Spain vs Argentina

• Heterogeneity within cultures
  – North vs South Italy

• Acculturation
  – Migration history
Education

- Literate vs Illiterate
- Any vs none
  - No. of yrs
  - Grade level
The MMSE

• Pros
  – Used since 1975
  – most popular of the short instruments
  – wide range of functions tested
  – quick & easy
    • little equipment required
  – over 1723 references to MMSE
  – Test -retest reliable 0.8-0.84
  – Interrater ~0.84
MMSE and Culture

- Versions in French, Swedish, Finnish, Spanish, Japanese, Bangla & Chinese
- Articles in Polish, Russian, Hungarian, Czech, Dutch, German, Hebrew, Portuguese, Serbo-Croatian & Norwegian
- African-American, Hispanic & Amish
The MMSE

- Cons
  - difficult to translate
  - effect of education, age and gender
  - effect of place of administration
  - can be confronting
RUDAS

- Designed to be:
  - translatable
  - little effect of education
  - no test of orientation
  - less confrontational
<table>
<thead>
<tr>
<th></th>
<th>Aim</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health 1</strong></td>
<td>Identify Cognitive Domains</td>
<td>List of Domains.</td>
</tr>
<tr>
<td><strong>NESB 1</strong></td>
<td>Explore meaning of 'culture'. Assess cultural relevance of domains.</td>
<td>All domains relevant and appropriate.</td>
</tr>
<tr>
<td><strong>Health 2</strong></td>
<td>Generate test items.</td>
<td>Extensive list of items.</td>
</tr>
<tr>
<td><strong>NESB 2</strong></td>
<td>Assess for 'cultural / linguistic' fairness.</td>
<td>Refined list of items</td>
</tr>
<tr>
<td><strong>Health 3</strong></td>
<td>Revise validity of modified items.</td>
<td>Final list of items</td>
</tr>
<tr>
<td><strong>NESB 3</strong></td>
<td>Final item review.</td>
<td>Final list of items</td>
</tr>
</tbody>
</table>
MCMMSE

- 6 items
- 12 domains (Memory, Learning, Praxis, Judgment, Planning, Attention, Gnosis, Language, Visuo-spatial/Construction, Perseveration, Initiation, Orientation)
- 10 mins
RUDAS

Item 1: 4 Item Grocery List
Item 2: Identify Body Parts
Item 3: Hand/Fist Alternating
Item 4: Cube Drawing
Item 5: Crossing the Road
Item 6: Animal Naming
Memory

• 4 grocery items
• repeat up to 5 times till learned

• Tea
• Cooking Oil
• Eggs
• Soap

• Score 2 for each correct
Body Parts

- Sit opposite patient
- Right Foot
- Left Hand
- with Right Hand touch Left Shoulder
- with Left Hand touch Right Ear
- my Left Knee
- my Right Elbow
- with Right Hand indicate my Left Eye
- with Left Hand indicate my Left Foot

- Score 1 for each correct up to a maximum of 5
Fist Palm

- Alternating hand movements
- Walking pace

- Score
  - Normal = 2
  - Partially Adequate = 1
  - Failed = 0
Cube

- Copy a drawing of a cube

- Score
  - Square = 1
  - Internal Lines = 1
  - External Lines = 1
Internal Lines
External Lines
Judgment

• “You need to cross a busy Street. There is no pedestrian crossing or lights. How would you proceed safely?”

• Score  Traffic  Normal  =  2
  Prompted  =  1

  Safety  Normal  =  2
  Prompted  =  1
Animal Naming

- Timed over 60 seconds
- Only new animals counted
- Foal vs horse

- Score 1 for each new animal up to 8
Scoring

- Memory: 8
- Body Parts: 5
- Fist Palm: 2
- Cube: 3
- Judgment: 4
- Animals: 8

- Total: 30