KICA

Kimberley Indigenous Cognitive Assessment
The KICA was developed in response to the need for a validated cognitive screening tool for older Indigenous Australians living in rural and remote areas.

The KICA-Cog section is validated with Indigenous Australians aged 45 yrs and above from the Kimberley and Northern Territory. A score of 33/39 and below indicates possible dementia. Those with a low KICA-Cog score should be referred to a doctor for medical screens to rule out other causes of cognitive impairment, some of which are reversible, or to substantiate dementia. The informant (carer) report is an important component of a cognitive assessment. The KICA-Carer has been validated with a score of 3/16 or above indicating that further investigations are required. Other sections of the KICA tool are for information gathering to assist in determining subtypes, severity, differential diagnoses and management.

The KICA-Cog pictures and other KICA information can be found at https://www.perkins.org.au/waechn/our-research/indigenous/kica/

As language skills are assessed in the cognitive section it is recommended that an interpreter be used when required. In the visual naming task if an individual is unable to name a certain picture (crocodile or emu) due to their own cultural reasons it can be replaced by the dog or horse pictures on the website. Prior to assessment begin with a social yarn with the older person to find common ground and establish trust.

Tools required:
- Comb
- Pannikin / cup
- Box of matches
- Plastic bottle with top
- Watch/ timer for verbal fluency question.

Acknowledgements
The KICA was developed with the assistance of many community members and organisations. Sincere thanks are extended to participating community members, councils and traditional owner of: Balgo, Beagle Bay, Bidyadanga, Bilihuna, Broome, Derby, Djarindjin, Fitzroy Crossing, Jarlmadangah, Junjuwa, Kalumburu, Kununurra, Lombadina, Looma, Mowanjum, Mulan, One Arm Point, Pandanus Park, Wangkatjungka, Warmun and Wyndham.

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Questions on the KICA can be directed to kate.smith@uwa.edu.au or dina.logiudice@mh.org.au
Date of Interview: ........................................

Name, Bush name, Skin name: .................................................................

Date of birth: .................................................................

Gender:                          female          male

Name of interviewer: .................................................................

Name of Community: .................................................................

Place of Interview:

Home
Home of relative
Clinic
Residential care
Hospital
Other .................................................................

Interpreter present:

None
Professional
Family
Other .................................................................

What languages do you speak? .................................................................

.................................................................................................

Language of interview: .................................................................

Name of carer or family member: .................................................................

Carers relationship to subject:

dau/son                      spouse                      brother/sister                      grandchild
niece/nephew                      cousin                      formal carer                      other .................................................................

Carer gender:                          female          male

Does the carer live with the subject?        yes          no
MEDICAL HISTORY
I want to ask you about any sicknesses you have had. (circle answer)

1. Are your eyes good? Can you see everything?
   yes no don’t know

2. Are your ears good? Can you hear everything?
   yes no don’t know

3. Have you ever had a stroke? (got weak down one side of your body)
   yes no don’t know

4. Have you got sugar sickness? (diabetes)
   yes no don’t know

5. Have you got high blood pressure?
   yes no don’t know

6. Have you got heart problems?
   yes no don’t know

7. Have you got kidney problems?
   yes no don’t know

8. Do you have trouble walking?
   yes no don’t know
   Write details

9. Do you have any pain?
   yes no don’t know
   9.1 if yes: sometimes most of the time

10. Do you fall down sometimes?
    yes no don’t know
    10.1 if yes: did you hurt yourself?

11. Have you ever been hit on the head and knocked out?
    yes no don’t know

12. Do you ever have gumbu (urine) problems?
    yes no don’t know
    12.1 if yes: Do you ever make gumbu (urine) in your clothes?

13. Have you been sick and gone to hospital? What for?
    yes no don’t know

14. What sort of medicines do you take? (list names or number of tablets)
SMOKING AND ALCOHOL HISTORY

1. Do you drink grog?  
   (If no go to 2)  
   no  yes
   1.1 How many times a week?  
      only sometimes  every day
   1.2 How much?  
      just few drinks  until you’re drunk
   1.3 How long have you been drinking for?  
      not long  long time
      (not long is less than 10 yrs, long time is more than 10 yrs)

2. Did you drink when you were young?  
   (If no go to 3)  
   no  yes
   2.1 Did you drink every day?  
      no  yes
   2.2 Did you used to get drunk?  
      no  yes
   2.3 (If they have quit ask) - when did you stop drinking?  
      long time ago  last year  this year

3. Do you smoke?  
   (If no go to 4)  
   no  yes
   3.1 Do you smoke every day  
      (If no go to 3.3)  
   3.2 How many in one day?  
      little bit: (less than 1 packet)  big mob: (1 packet or more)
   3.3 How long have you been smoking?  
      not long  long time
      (not long is less than 10 yrs, long time is more than 10 yrs)

4. Did you smoke when you were young?  
   (If no go to 5)  
   no  yes
   4.1 How many did you smoke in one day?  
      little bit: (less than 1 packet)  big mob: (1 packet or more)
   4.2 (If they have quit ask) - when did you stop smoking?  
      long time ago  last year  this year

5. Do you chew tobacco?  
   no  yes
   5.1 Did you chew when you were young?  
      no  yes
KICA-COG: COGNITIVE ASSESSMENT

I'd like to see if you can remember things. I'll ask you some questions.
Incorrect answer enter ...0 Correct answer enter...1

Orientation
1. Is this week pension/pay week? 0 1
   or can alternatively ask if suitable: What month is it?

2. What time of year is it now?
   (may need to prompt eg. wet time...dry time / hot......cold time?)

3. What is the name of this community/place
   0 1

For questions 4 & 5 you will need three items: comb, pannikin (cup) and matches.

Recognition and naming
4. Hold up each item in turn and ask
   What do you call this?
   4.1 comb 0 1
   4.2 pannikin (cup) 0 1
   4.3 matches 0 1

   (If the subject has poor vision put each object in their hand and ask them to recognise it.)

5. Hold up each item in turn and ask
   What is this one for?
   5.1 comb 0 1
   5.2 pannikin 0 1
   5.3 matches 0 1

   Hide each object in turn
I’m going to put this one here, this one here... Now don’t forget where I put them.
   (Omit this if poor vision, and name objects for them to remember.)

Registration
6. Tell me those things I showed you
   0 1 2 3

Verbal comprehension
7. Shut your eyes
   0 1

8. First point to the sky and then point to the ground.
   0 1 2
   5
Verbal fluency
9. Tell me the names of all the animals that people hunt.
   *Time for one minute (Can prompt with: any more? what about in the air? in the water?)*
   
   0 animals: 0
   1-4 animals: 1
   5-8 animals: 2
   9 animals or more: 3

Recall
10. Where did I put the comb? Where did I put the matches? Where did I put the pannikin?

Visual naming
11. I'll show you some pictures. You tell me what they are. Remember these pictures for later on.
   *Point to each picture and ask What's this? (Show boomerang as example)*
   Now remember them because I'll ask you one more time.
   boy, emu, billy/fire, crocodile, bicycle

Frontal/executive function
12. Look at this. Now you copy it.
   *Show alternating crosses and circles*

Free Recall
13. You remember those pictures I showed you before? What were those pictures?
   Tell me. *(Show boomerang as example)*

Cued Recall
14. Which one did I show you before? *(one of three pictures, use boomerang page as example)*

Praxis
15. Open this bottle and pour water into this cup
16. Show me how to use this comb

**KICA-COG TOTAL SCORE: _____/39**
Score of ≤33/39 indicates possible dementia, refer for medical review.
KICA - Dep Kimberley Indigenous Cognitive assessment - Depression Scale

I'm going to ask you some more questions now about how you have been feeling. Is that OK? Some of them might be a little bit personal. Remember that I won't tell anyone else about what we talk about.

For each question ask:

<table>
<thead>
<tr>
<th>Question</th>
<th>Never (0)</th>
<th>Sometimes (1)</th>
<th>A lot (2)</th>
<th>All The Time (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1. In the last week have you: felt down, sad, no good?</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>D2. Felt like not doing things that you usually like doing? (things that make you happy)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>If person has trouble answering, the interviewer may ask &quot;what things do you normally like doing?&quot; e.g. Fising, watching TV, spending time with family then &quot;how often have you enjoyed doing that/those things in the last week?&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D3. In the last week have you: had trouble getting to sleep, staying asleep, or sleeping too much?</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>D4. Felt more tired or slack, like you've had no energy?</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>D5. Been eating too much or eating only a little bit?</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>D6. Felt bad about yourself. Or felt shamed that you have let yourself or family down?</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>D7. Had trouble paying attention, or concentrating on things?</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>If the person doesn't understand, the interviewer can ask them &quot;What do you normally do?&quot; e.g. watching television, talking to friends. Have you had trouble paying attention when doing these things in the last week?&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D8. In the last week: has anyone told you that you are speaking or moving too slowly or too fast?</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>D9. Have you had thoughts that you would be better off dead?</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>D10. Have you thought of hurting yourself?</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>D11. Have you felt wild? (angry)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>

Score point >= 8 indicates possible depression requiring further clinical assessment

Dep TOTAL SCORE

Additional question:

D12. Have these/these problem/s made it hard for you to do your work, do things at home or get along with people? e.g. cooking, looking after family. If yes, prompt, little bit, a lot or big mob? O No O A little bit O A lot O Big mob

Adapted from the PHQ (Esler 2008)
FAMILY REPORT
I’d like to ask you some questions about (name). These questions are about his/her health and memory.

FAMILY- MEDICAL HISTORY
1. Has s/he ever had a stroke? (gone weak down one side)
   - yes
   - no
   - don’t know

2. Has s/he got sugar sickness? (diabetes)
   - yes
   - no
   - don’t know

3. Has s/he got high blood pressure?
   - yes
   - no
   - don’t know

4. Has s/he got heart problems?
   - yes
   - no
   - don’t know

5. Has s/he got kidney problems?
   - yes
   - no
   - don’t know

6. Has s/he ever been knocked out? (eg. hit their head and blacked out)
   - yes
   - no
   - don’t know

7. Has s/he ever been sad all the time?
   - yes
   - no
   - don’t know
   7.1 if yes- have they had medicines for that? (antidepressants)
     - yes
     - no
     - don’t know

8. Does s/he have trouble walking?
   - yes
   - no
   - don’t know

9. Does s/he fall down a lot?
   - yes
   - no
   - don’t know
   9.1 if yes- do they hurt themselves?
     - yes
     - no
     - don’t know

10. Does s/he have any pain?
    - yes
    - no
    - don’t know
    10.1 if yes- sometimes........all the time?
         - sometimes
         - all of the time

11. Does s/he remember to take their medicines?
    - yes
    - no
    - don’t know
    11.1 Do you have to help?
        - yes
        - no
        - don’t know

12. Is there anything else you are worried about?
FAMILY - SMOKING AND ALCOHOL HISTORY

1. Does s/he drink grog?
   (If no go to 2)
   1.1 How many times a week? only sometimes every day
   1.2 How much? just few drinks until s/he's drunk
   1.3 How long for? not long for a long time
   (not long is less than 10 yrs, long time is more than 10 yrs)

2. Did s/he drink when s/he was young?
   (If no go to 3)
   2.1 Did s/he drink every day? no yes
   2.2 Did s/he used to get drunk? no yes
   2.3 if they have quit- When did s/he stop? not long ago long time ago

3. Does s/he smoke?
   (If no go to 4)
   3.1 How many in one day? little bit: (less than 1 packet) big mob: (1 packet or more)
   3.2 How long has s/he been smoking? not long long time

4. Did s/he smoke when s/he was young?
   (If no go to 5)
   4.1 How many in one day? little bit: (less than 1 packet) big mob: (1 packet or more)
   4.2 if they have quit- When did s/he stop? not long ago long time ago

5. Does s/he chew tobacco?
   5.1 Did s/he chew when s/he was young? no yes
# KICA-Carer: COGNITIVE INFORMANT REPORT

1. Have you noticed that s/he (name) is forgetting a lot of things?
   - *If yes:* Does this happen
     - *no*: 0
     - *sometimes*: 1
     - *all the time*: 2

2. Does s/he forget the names of his family?
   - *If yes:* Does this happen
     - *no*: 0
     - *sometimes*: 1
     - *all the time*: 2

3. Does s/he forget what happened yesterday?
   - *If yes:* Does this happen
     - *no*: 0
     - *sometimes*: 1
     - *all the time*: 2

4. Does s/he forget where s/he is now?
   - *If yes:* Does this happen
     - *no*: 0
     - *sometimes*: 1
     - *all the time*: 2

5. Does s/he say the same thing over and over?
   - *If yes:* Does this happen
     - *no*: 0
     - *sometimes*: 1
     - *all the time*: 2

6. Can s/he remember which week is pension week?
   - *If no:* Does this happen
     - *yes*: 0
     - *sometimes*: 1
     - *all the time*: 2

7. Does s/he keep walking away and getting lost?
   - *If yes:* Does this happen
     - *no*: 0
     - *sometimes*: 1
     - *all the time*: 2

8. Does s/he do things that are wrong in Aboriginal way?
   (eg. calling out names of people who have passed away)
   - *If yes:* Does this happen
     - *no*: 0
     - *sometimes*: 1
     - *all the time*: 2

## KICA-Carer TOTAL SCORE: ____ /16

*Score ≥ 3/16 further investigations required*
**KICA-Behaviour: Family report**

1. Is s/he happy most of the time?  
   *(If yes, go to 3)*  
   *yes / no*

2. Is s/he sad most of the time?  
   2.1 If yes, is this different from before?  
   *yes / no*

3. Is s/he sleeping well at night?  
   3.1 If no, is this different from before?  
   *yes / no*

4. Is s/he sleeping all the time? Sleep day and night?  
   4.1 If yes, is this different from before?  
   *yes / no*

5. Is s/he eating properly?  
   5.1 If no, is this different from before  
   *yes / no*

6. Is s/he growing a lot (eg. at his grannies)?  
   6.1 If yes, is this different from before?  
   *yes / no*

7. Does s/he laugh for no reason?  
   7.1 If yes, is this different from before?  
   *yes / no*

8. Does s/he blame people for no reason?  
   8.1 If yes, is this different from before?  
   *yes / no*

9. Does s/he see things that are not really there?  
   9.1 If yes, is this different from before?  
   *yes / no*

10. Does s/he hear things that are not really there?  
    10.1 If yes, is this different from before?  
    *yes / no*

11. Is s/he frightened of people for no reason?  
    11.1 If yes, is this different from before?  
    *yes / no*

12. Does s/he hit people for no reason?  
    12.1 If yes, is this different from before?  
    *yes / no*

13. *If family has noticed changes in memory or behaviour:*

    Did their memory / behaviour - get worse slowly and gradually?  
    - change quickly, all of a sudden?  
    Write details *(when did memory change, what symptoms etc)*...
14. Is there anyone in their family who forgets things all the time? (alive today)
   Write relationship: ____________________________
   yes  no  don’t know

15. Was anyone else in their family like that before they passed away?
   Write relationship: ____________________________
   yes  no  don’t know

KICA-ADL:
I’d like to ask you questions about what name can do for himself / herself.

1. Can s/he still do her own work? (paid and unpaid eg, cooking/cleaning/making fire)
   yes  no  don’t know

2. Can s/he still go eg. fishing, play cards? (activities they enjoy)
   yes  no  don’t know

3. Can s/he look after his/her own money?
   yes  no  don’t know

4. Can s/he feed himself?
   yes  no  don’t know

5. Can s/he put on his/her clothes?
   yes  no  don’t know

6. Can s/he shower himself/ herself?
   yes  no  don’t know

7. Does s/he have trouble finding the toilet?
   yes  no  don’t know

8. Does s/he make gumba (urine) in bed in the night?
   yes  no  don’t know

9. Does s/he make gumba (urine) in trousers/dress in the daytime?
   yes  no  don’t know

10. Does s/he make gura (bowel motion) in his trousers/dress?
    yes  no  don’t know