Practical Neuropsychology for the NZ setting; from Assessment Planning to Formulation of Practical Recommendations.

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Outline

- This workshop is based upon practical experience
- Includes what neuropsychologists in NZ do well, and room for improvement.
- Section on symptom validity testing
- Assessment planning and referral questions
- Drawing conclusions
- Making useful recommendations

NZ neuropsychologists – what do they do?

- Work in hospitals
- Work in private practise – most do a lot of ACC or other insurance company work.
- University / teaching
- Medicolegal / Forensic / Litigation work
- 'Proving' clinical impressions to reviewing psychologists who have not met the person.
- The 'face' of neuropsychology in NZ is shaped substantially by ACC

Are we being ‘Swept Along?’

- Neuropsychologists in NZ may not be aware that they are being asked to do litigation work.
- Be aware and make informed choices about what work you want to do.
- Then……..do it well and protect yourself appropriately.
- The best way to protect yourself is to work to a very high standard.

Neuropsychologists in NZ – Strengths

- NZ trained neuropsychologists are good clinical psychologists.
- Often have good local knowledge and a good understanding about various funding schemes and govt legislation.
- Tend to know quite a bit about rehabilitation and working with allied therapists (Clin Psychs, OT's SLT's) in a rehabilitation setting.
- Small population ideal for networking and information sharing.

Room for Improvement

- Not always good with differential diagnosis e.g. neuropsychological profile in DAT versus DAI.
- Reports tend to be very ‘long winded’. Often many pages dedicated to describing various tests and reporting on performances.
- Assessments inaccessible to the majority due to cost and time involved.

Room for Improvement

- Difficulties integrating test results with history and drawing sensible conclusions.
- Assessors act as ‘advocates’ for clients due to NZ’s unfair funding system, often resulting in inappropriate interventions and prolonging disorders.
- Reluctant to embrace symptom validity assessment.
- ? Collegial

Consequences of ‘Status Quo’

- Neuropsychology seen as unhelpful by clients who do not understand their reports, policy makers and funding providers
- Lack of funding for neuropsychology
- Reducing employment opportunities.
- Neuropsychology as a ‘stand alone’ discipline may disappear.
- See John Hodges article

Soon, others will do it better.

Mitchell, J. Arnold, R. Dawson, K. Nestor, P. & Hodges, J. (2009). **Outcome in subgroups of mild cognitive impairment (MCI) is highly predictable using a simple algorithm.** *Journal of Neurology*. 256:1500–1509 Springer-Verlag.

- Administered the Addenbrooks Cognitive Examination (ACE), Paired Associate Learning task and other neuropsychological tests. Classified as mdMCI, aMCI, and naMCI and worried well.
- Found mdMCI most likely to progress to dementia.

Continued

- Found those (regardless of classification) with >88 on ACE and < 14 errors on the PAL had 80% chance of NOT progressing to dementia after two years.
- Concluded that the ACE and PAL was a good clinical screening protocol.

- Neurologists and psychiatrists are very interested in this type of thing which they can do themselves, for free.

Symptom Validity Testing

Current statistics regarding prevalence of and treatment for certain disorders may be invalid because of failure to consider symptom validity e.g. PTSD, MTBI, Chronic pain

- Neuropsychologists do it better than any other discipline (neurology, psychiatry).
- If neuropsychologists do not embrace symptom validity assessment, other disciplines will adopt it as their own, and will not do it as well.
- Lends credibility to those clients who genuinely need help
- Helps to ensure valuable resources are used appropriately.

‘Malingering’

- Slick et al (1999) developed criteria for diagnosing malingering with regard to cognitive and pain disorders.
- Key features are as follows:
  - Inconsistency between reported symptoms and those expected given the documented or reported injury.
  - Inconsistency between patterns of recovery and those expected given the documented or reported injury.
  - Inconsistency between performances on cognitive tests and those expected in the context of the injury
  - Identifiable secondary gain
  - Failure on tests of symptom validity.

Sensitivity = 0.542 Specificity = 1.00

- Laribee 2003 – atypical patterns of performance on three measures used as indicators of symptom validity = specificity of 1.00.
- Measures included
  - Benton Visual Form Discrimination
  - Finger tapping
  - Reliable Digit Span
  - Wisconsin Card Sorting Failure to Maintain Set Scale
  - MMPI-2 Fake Bad Scale

Robust Evidence

- If you find that the client meets the Slick et al (1999) criteria for malingering and…..
- The client fails three measures of symptom validity……

I would argue that this is an extremely strong indication that the test performances were not a valid reflection of the true abilities.

What's the point?

- Decision makers usually do not understand the difference between comments about symptom validity made by a neuropsychologist on the basis of the Slick et all 1999 criteria and Laribee study, and comments made by psychiatrists or neurologists on the basis if clinical presentation alone.
- Example – reviewer choose to value psychiatric opinion over neuropsychological opinion because the psychiatrist has a 'higher' qualification.

What to do?

- Neuropsychologists need to educate decision makers and those who read our reports so that they understand the basis upon which our decisions are made and the robustness of our decisions
- Include some information in the body of the report.
- Feedback sessions?

Tea Time!!!

Recap

- Neuropsych in NZ – Where we work, what we do well, room for improvement.
- The influence of ACC on the face of neuropsych in NZ
- Litigation – making informed decisions about the sort of work we do and protecting ourselves appropriately
- Best way to protect yourself is to do a good job
- Symptom validity assessment – protect yourself by doing it well using robust protocol and well validated argument.

Assessment Planning and Referral Questions

- Don’t plan your assessment until you have clearly identified your referral question.
- Don’t rely only on the referrer to define your referral question.
- Not all referral questions are appropriate or answerable. You decide.
- Phone the referrer to discuss
- Change your question after meeting client if necessary.

Assessment planning

- Hypothesis testing approach versus fixed battery.
- Need good knowledge of expected neuropsychological profile.
- Be familiar with norms prior to starting assessment.
- Consider physical limitations etc.
- Keep testing to a minimum!

Conducting assessment

- You all know how to do this well.
- Pay close attention to performances produced versus those expected, and change your plan accordingly if performances deviate from those expected.

Practical Exercise – Develop an Assessment Protocol

- 67 year old woman
- Concerned about decline in memory
- Grandmother developed ‘dementia’
- No other relevant medical history
- Educational history includes diploma in teaching completed while children were at primary school.
- Husband is a retired civil engineer.
- Involved in a lot of community groups

Form groups now please

- Make sure you have a good mix –
- Geographical region
- Expertise including amount and type.
- Select a spokesperson and a note taker.

Exercise

- Determine hypothesis- null hypothesis
- Questions to ask in addition to usual history?
- Premorbid abilities?
- Tests to give?
- Expected patterns of performance in context of hypothesis and null hypothesis

Re-define the referral question at any stage. Exercise

- 52 year old gentleman
- Severe TBI age 14 – decerebrate posturing, EEG showed little normal brain activity
- Recovered remarkably well and returned to school (without much success)
- Worked in labouring jobs
- Another TBI in a MVA age 17
- Subsequently fired from job and unable to sustain employment since then.

Exercise Ctd….

- Lived with family – now in a flat with another TBI man.
- CT about 10 years ago showed bifrontal lesions, cortical atrophy, ventricular enlargement and ischemic changes.
- Referred to CMH who referred on to ACC.
- ACC want to know how much of incapacity is due to injury at age 14, and how much due to injury at age 17.
- Referral question?

Drawing Conclusions

- What do your effort tests tell you?
- What does your clinical experience tell you?
- How consistent are the test results with your expectations / hypothesis?
- How consistent are the test results with your clinical observations
- Ensure you refer back to upper body of report when drawing conclusions.

Conclusions and Recommendations

In a rehabilitation setting, sometimes conclusions and recommendations can be thought of in terms of goals and how to achieve them.

Conclusions = I think the person is capable of achieving this goal, with some support.

Recommendations = how to support them to achieve that goal.

Conclusions Ctd….

- Conclusions can be a diagnosis
- Think about impact of conclusions on the future of the client.
- Never let empathy compromise professional integrity.
- Report conclusions as accurately as possible and if you can, make recommendations which minimise impact of some conclusions.
- How responsible are you for the consequences of your conclusions?

Conclusions

- Step 1 – summarise the neuropsychological profile. Outline the most salient features.
- Step 2 – Discuss the consistency between the neuropsychological profile and your expectations. Perhaps offer a diagnosis. Show that you have considered alternatives. Try to offer an explanation for any inconsistencies.
- Step 3 – Discuss what the test results mean for the client. Think about their goals, lifestyle, reported difficulties, current rehab input etc.
- Step 4 – Discuss your thoughts regarding the future. Think about prognosis for further recovery, ability to benefit from future input etc.

Exercise

- 38 year old woman previous history of depression.
- Feeling better and stopped antidepressant three weeks prior to MVA.
- Has two children aged 1 and 3. Works as a hairdresser.
- No LOC etc but felt ‘shocked’ and ‘dazed’
- Examined in hospital, found to be pregnant. Discharged home.
- Reported low mood and excessive fatigue main prob.
- Neuropsych – very poor TOMM and memory tests. Good on all other tests.
- What to do?

Recommendations

- Think of recommendations in terms of
  1. further investigations.
  2. rehabilitation versus compensation.

Recommendations

- Need to fit with your conclusions
- Need to fit with your referral question
- Need to be practical in the context of the resources available.
- Require a knowledge of the framework within which the funding agency works – get the wording right.

Framework for developing recommendations

1. Decide whether or not you need more investigations
2. Decide whether your focus is restoration or compensation
3. Think of all possible interventions which would be helpful
4. Consider practicality of the above
5. Prioritise and be intensive

Exercise

- 67 year old woman with possible dementia
- 52 year old man with two TBI’s
- 38 year old pregnant woman
- Think of all the things which would help these people.
- Discuss resources available in your area – think natural resources and formal organisations.

Common Questions

- Can he / she return to scuba diving?
- Can he / she fly?
- Can he / she drive?