The role of the neuropsychological assessment in relinquishing decision making rights

Many neurological and psychiatric disorders (for example the cortical and sub-cortical dementias and certain psychotic disorders such as schizophrenia) have a pattern of deterioration in which cognitive functioning becomes progressively compromised. Many challenges face such individuals and their families but perhaps one of the more difficult problems to be faced in the disease process concerns decision-making: when is the symptomatic person no longer able to make independent decisions?

Decision making is not an all or none phenomenon or even uniform. At least three types of decision making have been identified: veridical decision -making, actor-centered decision-making and emotion-based decision-making.[1,2] Veridical decisions concern finding the correct answers to an unambiguous question (e.g. 2 + 2 = 4, or why is the sky blue?). Actor-centered decisions are those that have no a priori right or wrong answer - instead the correct answer is embedded in the situation or context of the question (e.g. shall I wear the blue or the red blouse today?). Emotion-based decisions are those made 'intuitively' when outcomes are uncertain (e.g. who will be the best person for the job?).

All decision styles are important for normal functioning and require cognitive integrity, particularly of the pre-frontal cortical structures. All styles become compromised in progressive dementing disorders, although probably at different times in the deteriorating process. The challenge is in deciding when a symptomatic person is no longer competent to make their own decisions. Incidental, personal actor- centered decisions that do not have far reaching consequences (for example, decisions around activities of daily living) can be left to the person for as long as they wish to be part of that decision making process. It is obvious that a person's dignity is linked to their autonomy which contributes to a healthy sense of self and should be preserved for as long as possible. It is measuring competence when making more demanding judgements, including legal decisions, which require more care.

The need to transfer decision-making authority in a caring and respectful way cannot be over emphasized. Decisions about decision-making are best answered by the neuropsychologist who is specifically trained ''to understand the degree and consequences of… impairment''.[3] Resolving when to relinquish legal power is potentially measurable by both clinical interviewing techniques and neuropsychological assessment.

Two approaches are used in neuropsychological assessment: application of a battery of standardised tests or a hypothesis driven, syndrome-based, process approach.[4] Standardised norms typically accompany batteries. A reduction in a client's performance that is consistent with scores measuring one standard deviation below expectation is typically considered indicative of concern but a drop of two standard deviations denotes impairment. The use of this approach best applies if the patient is urbanized and English speaking. In South Africa, 11 official languages, varying degrees of quality in education, wide discrepancies in socio-economic status, differing cultures and rapid acculturation - against a historical background of political discrimination - provide multiple reasons for inequality in test scores which reduce the reliability and validity of standardised test batteries.[5]

There is no universal test battery to compensate for such differences although some local norms have been developed.[6,7] Such endeavours have revealed a typical pattern whereby locally produced norms reflect scores that are inferior to the original standardized scores.[8] As a general rule, scores are lower for black South Africans, when compared with their white counterparts.[6,7] Environmental factors such as quality of education and socio-economic status are the reasons for this discrepancy. Furthermore, norms from one community cannot automatically be applied to another community, nor can norms for one language group be applied to another group even though both groups are ethnically similar. Such factors create further problems.[7]

Consequently, a combination of syndrome analysis coupled with an individualized test battery, using appropriate norms when available, is most commonly utilized by neuropsychological practitioners in South Africa.[9] This approach works well because there is a careful evaluation of the whole person in their context. Functional domain patterns of strength and weaknesses can be elicited and the client can be his or her own control. Nevertheless, there are several challenges to using a process approach. These include insufficient structure, possible subjective bias and limitations in terms of test validity and reliability. Further, such assessment techniques are difficult to teach because they require that the neuropsychologist have a broad general knowledge not only of neuropsychological structural and functional relationships and clinical psychology, but also the environmental and cultural consequential experiences of all South Africans.

A recent development for the process approach may offer a means to better understand the patient's cognitive abilities. The Collaborative Therapeutic Neuropsychological Assessment (CTNA) is an extension of the style first used by Aleksandr Luria in which complex cognitive functioning is seen as the product of dynamic neural networks.[10] The main thesis of CTNA is an individualised approach to understanding test performance based on humanistic practice. The client and examiner are seen as collaborating together to establish not just the objective facts

of impairment but the subjective experience. Results are explored in a respectful and open manner with the patient, who is asked to reflect upon their performance, explaining how they did the test and what the test meant for them. Interpretation of results is egalitarian, carried out within the context of the client's life and their experience of taking the tests, rather than adopting the specialist/patient approach of the medical model, which can engender hostility.

The authors of CTNA have the following to say:

> *''CTNA challenges practitioners of neuropsychology to broaden the scope of their roles in the assessment process. One of the greatest challenges for the practitioner is the ability to relinquish some level of control of the assessment and feedback process. CTNA empowers patients by making them collaborators and co-interpreters of the assessment results. In addition, they are further empowered to determine the nature and course of outcomes resulting from the assessment. Such a method requires that patients be seen as on an equal footing with the assessor and that their opinions and ideas are of equal importance in determining how to use the neuropsychological information.''*

As a tool for use in the clinical setting of deteriorating disorders, when decision-making abilities are being evaluated, CTNA allows for a patient-centred approach in the early stages of the disease and a way of establishing a working alliance with family members as the disease progresses. Further, this approach has equal benefits in the cross cultural setting. The developers of CTNA state ''*... [these] methods are well suited for creating a more open, supportive and culturally sensitive environment...*''. Although this approach is probably partially adopted in the South African context, further implementation would facilitate the understanding of test performance and results. Specifically, for those who do not have sufficient experience with the assessment process and may be understandably suspicious of such procedures, or those whose cognitive abilities are selectively compromised.

The model above serves as a guideline for any process in which decision making gradually deteriorates; when interventions need to be implemented tactfully yet decisively. Typically these are neurological and psychiatric disorders that involve impairment of prefrontal cortical structures and related networks. In the South African context, there are many possibilities for this: HIV/AIDS, traumatic brain injury, cerebrovascular insult are commonly occurring examples. Thus, the use of neuropsychological assessments in developing countries is a vitally important but under-estimated and under-utilised practice; the neuropsychologist is a necessary component of the health service team.

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Dr Olayinka Omigbodun is the new president of IACAPAP!

During the last IACAPAP congress in Beijing, Dr Olayinka Omigbodun received the highest honours that IACAPAP can award. Dr Omigbodun has been appointed as the new President of IACAPAP. Africa has also been honoured by the promotion of AACAMH's chair to the position of IACAPAP President.

We congratulate Dr Omigbodun on this remarkable achievement, which recognizes both her exceptional leadership qualities and her continuous efforts for the promotion of CAMH in Africa. May it encourage all of us to follow her good example and redouble our efforts for the improvement of child and adolescent mental health in Africa.

Brian Robertson and Naoufel Gaddour