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The Cognitive Based Approach of Capacity Assessment in Psychiatry: A Philosophical Critique of the MacCAT-T

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This article gives a brief introduction to the MacArthur Competence Assessment Tool-Treatment (MacCAT-T) and critically examines its theoretical presuppositions. On the basis of empirical, methodological and ethical critique it is emphasised that the cognitive bias that underlies the MacCAT-T assessment needs to be modified. On the one hand it has to be admitted that the operationalisation of competence in terms of value-free categories, e.g. rational decision abilities, guarantees objectivity to a great extent; but on the other hand it bears severe problems. Firstly, the cognitive focus is in itself a normative convention in the process of anthropological value-attribution. Secondly, it misses the complexity of the decision process in real life. It is therefore suggested that values, emotions and other biographic and context specific aspects should be considered when interpreting the cognitive standards according to the MacArthur model. To fill the gap between cognitive and non-cognitive approaches the phenomenological theory of personal constructs is briefly introduced. In conclusion some main demands for further research to develop a multi-step model of competence assessment are outlined.

KEY WORDS: MacCAT-T; capacity; competence; decision-making; ethics, psychiatry.

INTRODUCTION

The patient's autonomy has become a legal and ethical standard in clinical practice today. No medical treatment can be initiated until the patient has autonomously given his consent. Significant problems with the focus on patients'

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autonomy arise particularly in the case of a restricted competence of self-determination in the mentally ill. The patient's consent is only binding if the patient is in fact able to decide autonomously about his own health care (Patient Decision Making Competence (PDMC)). The pivotal role of PDMC in the context of mental illnesses has led to a considerable amount of empirical research in this field. In order to define competence the following five standards have been proposed (Roth et al., 1977): evidencing a choice; reasonable outcome of choice; choice based on rational reason; ability to understand and actual understanding.

In clinical practice the psychiatrist generally determines the patient's competence in his own estimation using his subjective judgement and clinical experience (Markson et al., 1994). To provide help for assessing competence in a more objective and reliable way, various test instruments have been developed over the past few years on the basis of different ethical and legal concepts. An overview thereof is given by Welie (2001) and by Bauer and Vollmann (2002). In the course of contemporary discussion on the applicability of these instruments in the assessment of PDMC the MacArthur Competence Assessment Tool-Treatment (MacCAT-T) has become a gold standard in clinical psychiatry.

MacCAT-T

The MacArthur Competence Assessment Tool-Treatment (MacCAT-T) is a semi-structured interview to assess and rate the patients' abilities which are described as components of competence for decision making and relate to four legal standards in the context of the American legal system: (1) the ability to understand relevant information regarding a concrete decision of treatment; (2) to manipulate relevant information rationally, so as to make comparisons and weigh options; (3) to appreciate the significance of the given information about the illness and possible treatment for one's own situation; (4) to express a choice (Grisso and Appelbaum, 1995). In approximately 30 minutes the following abilities related to competence are assessed: understanding the disorder and treatment, appreciation, reasoning and expressing a choice.

The instrument that measures understanding presents patients with a prepared description of their individual disorder and its treatment, pointing out potential benefits, risks of the recommended therapy or medication, as well as alternatives to it. After the disclosure the patients are asked to paraphrase the given information in their own words. Their responses are scored according to criteria specified in the instrument's manual.

The second section, which measures appreciation, has two parts. The first part is to determine whether patients acknowledge the disclosed diagnosis and symptoms and to what degree they agree that these statements apply to their own situation (appreciation of disorder). The second part is to decide whether the patients acknowledge that treatment and medication might be of some benefit to them (appreciation of treatment benefit). However, according to these

standards, impairment is only given when the patient's explanations and reasons for disbelieving are based on illogical, bizarre or delusory premises. The patients get full credit in both appreciation of disorder and appreciation of treatment benefit, if they present a reasonable explanation for an attitude that differs from their physician's recommendations.

The reasoning and choice sections involve a discussion between clinician and patient in which the presence or absence of the ability to generate consequences of the available treatment options is evaluated. Attention is paid to several aspects of decision-making e.g. considering consequences, making comparisons between options, transitive thinking or understanding of probability.

At the end of the interview the patients are asked for their decision for or against treatment. Their responses in all sections are documented word-for-word—if possible—in a record form and rated using the following scale: 2 points for adequate, 1 point for partially sufficient and 0 points for insufficient responses. Patients who gain scores below defined limits are categorized as impaired on that particular standard.

As the authors of the MacCAT-T point out, the scores cannot be translated directly into judgements of legal competence or incompetence. Further it is emphasized that only in combination with clinical observations, mental status examinations and psychiatric or psychosocial history it is possible to determine to what degree the patient's performance in the MacCAT-T might be significant (Grisso and Appelbaum, 1998).

CRITIQUE OF THE MacCAT-T

Before the MacCAT-T is critically examined, it should be emphasized that up to now this instrument is one of the most sophisticated assessment tools at hand. The clear conceptionalisation and the precisely defined criteria comprising legal and ethical standards are exemplary. The MacCAT-T is distinguished from other approaches by high quality standards in objectivity, validity and reliability. Its underlying theoretical assumptions are based on a broad basic research (MacArthur Competence Study) that is to date exceptional in this area. Finally a particular strong point of the MacCAT-T is its excellent applicability in clinical practice which has been certified in several empirical studies (Grisso and Appelbaum, 1995, 1998; Vollmann et al., 2003, 2004).

As Charland (1998) has already pointed out, all four components of competence that are assessed by the MacCAT-T are operationalized in terms of primarily cognitive or intellectual capacities. This focus on cognitive standards takes up the discussion of competence in the tradition of Kantian ethics and has the advantage of operating with value free categories. On the other hand it seems to be an illusion that "objective" standards are not normative. Upon closer consideration the central premises of a cognitive bias are open to serious challenge, which will become clear from the following.

EMPIRICAL CRITIQUE

In previous research a wide range of relationships between cognitive abilities and PDMC has been suggested (Welie, 2001). Recent results of empirical research, however, provide strong evidence that the relationship between psychopathological symptoms and cognitive factors on the one hand and competence on the other hand is not significant.

In an empirical study by Vollmann et al. (2004) no significant correlation between the results of decision making capacity assessment with the MacCAT-T and the results of neuropsychological test instruments was found in patients with dementia. Since the clinical picture of demented patients is highly characterized by cognitive impairments, it is not to be expected that a correlation between cognitive functions and decision-making capacity will be found in other psychologically determined illnesses either. On the basis of these results cognitive abilities seem to be a necessary but not a sufficient condition of PDMC. In other words, competence in decision-making requires at least - but not only- cognitive abilities (Fitten, 1990). The confirmation of these assumptions in further research may lead to far-reaching consequences concerning the structure of competence assessment tools. From the realization that cognitive notions are a necessary but not a sufficient condition one could deduce a hierarchy of different theoretical approaches to PDMC assessment. Evidently this may lead to a more comprehensive understanding of cognitive abilities and non-cognitive aspects in the assessment of mental capacity.

METHODOLOGICAL CRITIQUE

The basic assumption, which gives rise to the MacArthur model—the assumption that competence is primarily and exclusively a cognitive notion—can be methodologically challenged along the following lines:

1. Reasoning in the MacCAT-T is understood as rational argumentation in the sense of logical consistency, but it is not questioned at all that decision-making situations are based solely on rational choices. This model tends to imply highly rationalist standards for patients, whereas often a preferred choice is based on a feeling, which does not have the same significance in the MacArthur model as a self-evident reason. The focus on logical consistency becomes problematic notably when emotionality or counter-rationality represents an adequate and useful means of decision-making strategy. In other words a model limited to rational and conscious aspects of decision-making is not representative for the way people generally reach decisions. In every day reality people do not analyse all the options and compare them to a given set of values and preferences. Decisions are to a large extent based on emotions, values or intuitive factors that are not or at least not totally conscious to the decision maker (Welie, 2001). Therefore

it can be assumed that in some cases the patient is not aware of all steps of his decision process and hence cannot name or clarify the cognitive operations he has carried out to another person. His decision, however, can nonetheless be a meaningful answer to a particular situation in a subjective context (Widdershoven, 1995; Dekkers, 1998). As Widdershoven and Benaroyo's article in this volume suggests, the assessment of the rationality of a given decision depends on the chosen context. A decision that seems irrational and meaningless when viewed as an isolated act by an external observer can be appropriate when biographical, social and contextual factors are taken into consideration. In the perspective of decision making as a meaning-giving process logical consistency of patients' responses can be nothing more than one component of an adequate indicator of PDMC.

2. At no point in their theoretical reflections the authors of the MacCAT-T mention patients' values as criteria for PDMC. But the restriction to only logical rationality runs the risk of neglecting the patient's normative orientation; a factor, which seemingly has a great impact on the decision-making process. A detailed discussion thereof is given by Freedman (1981), Drane (1985), and Buchanan and Brock (1989).

   To emphasise the importance of value systems for the decision making process one has to ask oneself whether there could be a decision that is not embedded in a set of values. Again, everyday life shows that decisions, goals and preferences are always framed by personal constructs such as values, biographical and historical experiences, emotions, etc. From this point of view it immediately becomes apparent that the assumption of a value-free decision process is untenable.

   2.1 Along the same lines Helmchen et al. (1989) have argued that the absence of authenticity should be a criterion for impaired decision-making capacity—a criterion which is totally neglected by assessment procedures that are based on the idea that decision making is a process of rational calculation. In this regard, the MacCAT-T cannot grant the patients' authenticity either. For a logically consistent argumentation does not necessarily have to fit into the personal construct system of individual preferences and values. As Tan and Fegert's article in this volume shows, a rational decision does not necessarily reflect the authentic preferences of a patient suffering from anorexia.

   The following argument has been brought up against the requirement to consider authenticity as a criterion of PDMC: as long as the question how patients' authentic values are to be tested has not been settled, one should exclude this issue (Welie and Welie, 2001). It should be the task of upcoming research to find methods for evaluating a patient's authentic values within the complexity of the decisional process.

2.2 As mentioned above, a patient is only denied appreciation if he shows distortion or delusion. This takes into consideration that PDMC should be determined without relying on the actual decision of a patient. That means that a patient's competence in making decisions relating to his or her own health care should be guaranteed on the basis that he or she could have reached a decision in favour of health care that seems to be beneficial, whereas the actual decision can differ from advisable treatment options. This way it is supposed to be prevented that a patient who agrees to proposed interventions is presumed competent by his or her doctor just because of his agreement. Up to this point there is presumably little disagreement with the authors of the MacCAT-T. But in defining what kind of patient's answers are still reasonable and hence acceptable, there is necessarily a substantial value judgement involved on the clinician's side. It is simply not possible to define sense and personal significance on the basis of formal logic. In other words, the judgement of what information is substantially irrational, unrealistic or a considerable distortion of reality is limited to the physicians' personal value system, whereas the patient's perspective is not taken into account, i.e. the patient's answers during the competence assessment procedure are adapted to the clinician's value system. Consequently the construction of "reasonable" answers depends to a large extent on the physician's perception of how accurately the value systems of patient and physician match.

3. The MacCAT-T's standardization has both positive and negative aspects. From a psychometric point of view standardization enhances the reliability of the instrument at hand. From a philosophical perspective, however, standardization may lead to the neglect of autonomy as personal uniqueness. A major problem therefore lies in setting the cut-offs in the subtests on the basis of merely statistical considerations. In the MacCAT-T impairment is defined in accordance with the MacArthur Treatment Competence Study (Grisso and Appelbaum, 1995) as the second standard deviations of a normal control group (Vollmann et al., 2003). The question of whether objective methods can replace clinical assessment is discussed very controversially ranging from complete agreement (Janofsky et al., 1992) to significant discrepancies (Rutman and Silberfeld, 1997).

ETHICAL CRITIQUE

The study of Vollmann et al. (2003), which examines different methods of evaluating decision making competence, shows that the MacCAT-T classified a greater proportion of patients as being impaired than psychiatrists would have done by their clinical judgement. In general, unreliability in measurement may cause a high rate of error in capacity assessment, leaving many people unfairly excluded

from their right to make treatment decisions, and others with presumably serious impairments left alone. But because the patients' rights to self-determination can be claimed as fundamental rights, they outweigh any other rights in a weighing up of legal interests. Therefore it is in moral and legal terms preferable that some patients, who in fact are incompetent, are misjudged to be competent, than that patients who are in fact competent are misjudged to be incompetent. In this case the patient's right of free choice overrules the duty to help (Welie and Welie, 2001). Considering this line of argument and Vollmann's results, it remains doubtful whether the MacCAT-T is the most desirable procedure from an ethical point of view.

TOWARDS A COMPREHENSIVE MODEL OF COMPETENCE ASSESSMENT

The domination of cognitive criteria in formal assessment tools and the fact that emotional, biographical and context specific factors are ignored has repeatedly been criticised (Elliot, 1997; Charland, 1998; Welie, 2001). Obviously there needs to be a justification for the assumption that competence is no more than the ability to make a rational decision. Up to now, however, the narrow focus on cognitive abilities in competence assessment is scientifically not tenable. As indicated by arguments given above the cognitive bias is more likely to be traced back to physicians' construct systems and conventions, from which decision making abilities are deduced. The authors of the MacCAT-T even refer explicitly to the jurisprudence of decision-making capacity in common law, from which they directly draw the decision-making abilities which are featured as criteria of competence in the MacCAT-T. Of course such an approach is legitimate, but—without denying the historically grown wisdom of the common law—one should nevertheless consider systematic arguments in order to improve capacity assessment tools. Therefore an extension of the cognitively oriented approach in capacity assessment—which up to now is primarily focused on the patient's cognitive functioning and his or her ability to generate rational answers—that includes components of the patient's biographical and emotional context, personal construct systems and sets of values, seems to be a sensible and yet a challenging task.

EMOTIONAL CAPACITY AND DECISION-MAKING COMPETENCE

A very sophisticated argument for taking into account a patient's emotional capacities in competence assessment has been presented by Charland (1998). He claims that the MacArthur Competence Treatment Study neglects emotional factors and therefore argues that the scope of competence assessment should be broadened in order to include emotional capacities. Charland particularly concentrates on appreciation which is, as noted above, one of the four elements that underlie competence according to the MacArthur assessment. Borrowing from Richard

Lazarus' emotion theory, Charland states that appreciation requires emotion which in turn involves a process of appraisal. In Lazarus' theory appraisal is defined as a process of assessing the subjective meaning of a stimulus. In that respect Charland sees a similarity between appreciation identified in the MacArthur assessment as the recognition of significance of disclosed information for one's own situation and the process of appraisal Lazarus describes as underlying emotional reactions.

In his reply to Charlands critique, Appelbaum (1998)—one of the authors of the MacCAT—defends his approach by proving that Charlands argumentation shows two main inconsistencies. Firstly, Appelbaum points out that on the grounds of a similarity between appreciation and emotion it does not follow that appreciation therefore requires emotion. And secondly he proves Charland to be inconsistent when he describes emotions in terms of underlying cognitive mechanisms and at the same time seems to be an opponent of a cognitive approach to decision-making capacity. Despite these inconsistencies, Appelbaum admits that emotions are a challenge for theories exclusively based on cognitive abilities.

DEMANDS ON A COMPREHENSIVE MODEL OF COMPETENCE ASSESSMENT

There is no need to rebuild the assessment tools from scratch, and there is no use in entirely opposing the cognitive approach to decision-making capacities either. The point is not to argue that the MacCAT-T should be rejected. It does not even seem necessary to enlarge either the standards for competence nor to add new cognitive elements to the existing components of capacity described in the MacArthur assessment. But one should consider to interpret the cognitively operationalized standards in terms of a patient oriented assessment of relevant construct systems and sets of values concerning decision making processes in medical healthcare. In this perspective a non-cognitive concept of PDMC should not be understood as an alternative to the aforementioned cognitive approaches. On the contrary, the idea is to enrich the methodological and theoretical presumptions of the MacArthur assessment by considering a non-cognitive dimension of the given standards.

The points of critique articulated above can be a useful starting point for the development of a new conception of competence assessment from a broader perspective. Foremost the gap between cognitive and non-cognitive approaches should receive attention, though it can be assumed that the whole controversy reduces itself to the solution of the problem of whether one can find a suitable combination of cognitive and non-cognitive approaches in testing instruments. Since a cognitive approach remains trapped in many shortcomings, one should consider alternative ways in assessing competence. So far, making a decision has been proven to be irreducible to cognitive aspects alone, and should therefore be viewed as an integrated process, in which subjective meaning-giving plays a central

role. For PDMC assessment it follows from this that the evaluation of PDMC has to be considered in view of the total continuum of the patient's behaviour and its subjective interpretation in terms of constructs and sets of values. Beside the approaches from narrative, hermeneutic and feminist ethics assembled here, further impulses can be gained from G.A. Kelly's personal psychology approach (Kelly, 1955, 1970). In light of this theory sophisticated procedures have evolved with which personal construct systems and values can be assessed and evaluated (Scheer and Catina, 1993). Following this approach, the aim of further research can be seen in the development of specific methods with which personal constructs can be assessed and evaluated as objectively as possible and in the identification of dimensions of personal constructs which are relevant to health care related decisions and their integration into PDMC assessment.

For this upcoming task the following guiding principles can be gained on the basis of the arguments presented above:

(1) The four standards of capacity described in the MacCAT-T should be assessed in cognitive and non-cognitive dimensions, i.e. the cognitive aspects should also be interpreted in qualitative terms.
(2) Both approaches should be brought together in a multi-step model. Definition of a range of convenience for each subtest could enhance their applicability.
(3) Within a theory of personal constructs one can choose between many possible ways of assessment: direct questioning, asking the patient to judge given constructs related to himself or to others, write essays about himself or others, make up stories about himself or others, or play role plays. In addition to these approaches semi-structured test-instruments, which have been developed in the context of personal-construct psychology, should receive considerable attention (Kelly, 1955; Bell, 1990; Riemann, 1991; Scheer and Catina, 1993). Following this line, however, there must be a clear definition of relevant personal constructs and a reliable procedure to assess them.
(4) Emotional aspects of PDMC can be evaluated in the context of personal constructs. To what extent emotionality is assessed during the procedure of PDMC assessment and whether it is assessed at all depends on the patient's construction of the decision process.
(5) All alternative procedures must be solely assessable by how objectively they evaluate biographical, social and contextual factors as well as values and personal constructs.

CONCLUSION

Although the MacCAT-T is one of the most elaborate assessment instruments for PDMC available, the focus on an exclusively cognitive bias can be

challenged from an empirical, methodological and ethical perspective. To cope with the complexity of the decision process and to enhance an objective approach to PDMC one should extend the theoretical assumptions of the MacArthur model by consulting emotions, values und personal constructs in the competence assessment procedure. It seems though that the addition of new cognitive elements to the current four components of competence is not going to solve the problems. Therefore it is proposed to extend the theoretical grounds of the MacArthur model by alternative approaches similar for instance to those developed in this volume from the perspective of narrative, hemeneutic and feminist ethics. In addition to that, the theories about personal constructs popularised by the psychologist G.A. Kelly can constitute an agenda for further research.

For a comprehensive assessment of PDMC one should project the cognitive elements, which are proposed in the MacCAT-T assessment, into a qualitative dimension. In this perspective the patients' subjective phenomena, e.g. his thoughts, emotions and values are emphasized. By interpreting the results of the cognitive based instruments in terms of the patients' meaning-giving process, one might be able to close the gap between cognitive and non-cognitive approaches.

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