

Brief communication article Σύντομο άρθρο

Inter-rater reliability of the Greek version of CAARMS among two groups of mental health professionals

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There is increasing interest within the Greek psychiatric community in the early detection and prevention of psychotic disorders. To support this, there is a need for a valid and reliable tool to identify young people that may be at risk of developing a psychotic disorder. Our team has previously translated the Comprehensive Assessment of At-Risk Mental States (CAARMS). The validity of the CAARMS was ensured by the procedure of translation and the aim of the current study was to estimate the interrater reliability of the CAARMS Greek translation among residents in psychiatry and specialized mental health professionals. 43 mental health workers (27 residents in psychiatry and 16 specialized mental health professionals (i.e. 11 psychiatrists and 5 psychologist) participated in two seminars that covered theoretical information about the ultra high risk concept and training in the CAARMS. During the seminars, 10 vignettes with psychiatric history cases were presented, including healthy, ultra high risk and first episode psychosis. The mean correlated percentage of agreement with the correct answers regarding diagnosis of the presented history cases among all our subjects was 81.42, among specialized mental health professionals 77.88, and among residents 84.46. Intraclass correlation co-efficients were 0.994 for specialized mental health professionals and 0.997 for residents. The translated Greek version of CAARMS presents a satisfying interrater reliability when used by both residents and specialized mental health professionals. Residents declare even higher intraclass correlation co-efficients and mean correlated percentage of agreement than specialized mental health professionals, which indicate that residents are capable of using the CAARMS in early intervention units.

Key words: Early psychosis, prevention, CAARMS, Greek version, reliability.

Introduction

The Comprehensive Assessment of At-Risk Mental States (CAARMS)¹ has been designed by Yung et al. to assess psychopathology indicative of imminent risk of development of a first psychotic episode (FEP) and to determine if an individual meets the Ultra High Risk (UHR) criteria for developing a FEP. The original CAARMS has been tested regarding its inter-rater reliability and concurrent, discriminant and predictive validity which have been found to be good to excellent.¹ The CAARMS has been translated and standardized into multiple languages, including Spanish, Swedish, Danish, German, French, Italian, Japanese, Chinese, Korean and Arabic.²⁻⁵

The growing interest of the Greek Psychiatric Community in the issues of early prevention in psychosis has been developing in recent years.⁶ Some of the initiatives taken were the publication of a new book ("Early Psychotic Experiences. Signs, Symptoms and Interventions"),⁷ the translation of the CAARMS⁸ and the organization of presentations in daily meetings, training seminars and round tables in national and international congresses, regarding early prevention in psychosis issues. A "Hellenic Group for early intervention in Psychosis" was formed by specialists from many Greek University Psychiatric Clinics and organized scientific meetings. Representatives of Greek relatives' and patients' associations were invited and participated in one of those meetings. The translators of the CAARMS suggested (and got their suggestion published in an international journal) that the term sub-threshold prodromal state might be used instead of attenuated psychosis syndrome in DSM-V.⁹ They have also presented in a congress preliminary findings regarding the translated CAARMS psychometric properties.¹⁰

The growing interest in issues of early prevention has led a number of mental health institutions in Greece, such as Eginition Hospital – 1st Department of Psychiatry, University of Athens, Attikon Hospital – 2nd Department of Psychiatry, University of Athens, the Mental Health Research

Institute and the Psychiatric Clinics of the University of Thessaloniki, of the University of Ioannina and of the University of Patras, along with Hellenic Psychiatric Association, to organize scientific presentations and collaborations, as well as training seminars, regarding early psychosis prevention programs. Since 2007, an early intervention service for psychosis has been operating in Ioannina, and has since been successfully established within the context of the local mental health network.¹¹

In Athens University in particular, the 1st and 2nd Psychiatric Clinic, in Eginition Hospital and Attikon General Hospital respectively, took a few more steps in implementing such preventive strategies. Two new outpatient units have been installed in Eginition and Attikon Hospital regarding early psychosis.

The outpatient Eginition Hospital unit is addressed to young first degree relatives (15–45 years of age) of patients with psychosis, as well as probable ultra high risk patients referred by other psychiatric units of Eginition or other hospitals. Among them, those who are found to meet the Ultra High Risk criteria are selected and followed up. Appropriate psychological and pharmacological interventions (benzodiazepines and antidepressants or antipsychotic medication once they have transitioned to First Episode Psychosis) are implemented to them, if necessary. Those subjects are also studied regarding various psychosocial parameters, such as quality of life, personality traits, anhedonia, psychosis or schizophrenia proneness, as well as biological parameters.

It should be mentioned that investigators in those two hospitals had already experience in the research of first episode schizophrenia (FES) patients. From previous studies, various biological parameters were investigated as probable susceptibility risk factors for schizophrenia, such as the serum BDNF levels at the onset of schizophrenia and the BDNF Val66Met variant.¹² In other studies, it was demonstrated that activities released by P600 during working memory tasks may be involved in FES patients¹³ and that second-pass

parsing process of information processing, as indexed by P600, elicited during a working memory test, is impaired in FES patients.¹⁴ Methods demonstrating chromatin alterations of leucocytes of FES patients were studied as tools of early diagnosis, since decondensed chromatin is considered as a biological marker of schizophrenia.¹⁵ So, it would be of great interest to search if such genetic, molecular, psychophysiological and other biological markers might be related to ultra high risk for psychosis patients. Our team in Eginition Hospital has also translated, back-translated in Greek and published another psychometric instrument used in early prevention, the SPI-A.¹⁶

Aim

The goal of this study was to estimate the reliability of the Greek translation of the CAARMS, regarding diagnosis of psychiatric history cases presented to our subjects and to compare two groups of mental health professionals regarding their inter-rater reliability for the positive subscales of the CAARMS. The Eginition early psychosis intervention outpatient unit trains residents in their last year of their training in psychiatry in the use of the CAARMS. Those residents participate in the estimation process of subjects referred to our unit. Thus, it is important for our unit to demonstrate that residents are equally capable as specialized mental health professionals in the use of the CAARMS, after being trained.

Material and method

The CAARMS was translated in Greek in collaboration with the authors of the original CAARMS. The validity of the CAARMS was ensured by the method of translation - back translation in Greek followed by the translators, according to the following directions proposed by the authors of the interview:

The original version of the CAARMS was translated into Greek by one person, then translated back by another separate person and then this back-translation was checked by an author of the

original version of the CAARMS. Then, any discrepancies were resolved by discussion between the Greek translation team and an author of the English version of the CAARMS.

Our outpatient unit has organized two seminars, in which the participants were psychiatry residents and other mental health professionals who have completed their training in their specialty (i.e. 11 psychiatrists and 5 psychologists). In those seminars we gave them theoretical information about the ultra high risk concept, we presented the CAARMS and we gave them directions in which way they should rate subjects when using it. The translators of the CAARMS were the trainers in the two seminars. One of them, following the "train the trainer's model", was provided training in the use of the CAARMS by the CAARMS Training Coordinator of the time.

During those seminars, we presented to our subjects the same 10 vignettes with psychiatric history cases, which might belong to patients suffering from a first psychotic episode, to subjects in high risk for psychosis or to healthy ones. Those vignettes were provided by the authors of the CAARMS, in order to estimate reliability among mental health professionals using the CAARMS. Five of these vignettes were rated as part of the training, by discussing which might be the correct rating and final conclusion about diagnosis. Then, five vignettes were rated by our subjects in order to estimate their inter-rater reliability.

The two seminars were followed by 43 mental health professionals, 27 residents in psychiatry in the last year of education and 16 specialized mental health professionals (11 psychiatrists and 5 psychologists). Statistically, the SPSS, version 17, was used and the mean correlated percentage of agreement with the correct answers, regarding diagnosis and the severity and frequency of the three initial subscales of the CAARMS were estimated. The intraclass correlation coefficient was estimated separately in our two groups of specialized mental health professionals and of psychiatric residents.

Results

The mean correlated percentage of inter-rater agreement with the correct answers, regarding the categorization of the psychiatric history cases (Trait and State Risk Factors-TSRF, Attenuated Positive Symptoms – AIMS, Brief Limited Intermittent Psychotic Symptoms – BLIPS, normal, psychosis threshold) among our subjects, was 81.42%. The mean correlated percentage for residents was 84.46% and for specialized mental health professionals was 77.88% (table 1). The mean correlated percentage of agreement with the correct answers, regarding the severity and frequency of the three initial positive symptoms subscales is presented in table 2.

Two intraclass correlation co-efficients were estimated, one for the specialized mental health professionals and one for the residents. The intraclass correlation co-efficient for the specialized mental health professionals was 0.994, while for the residents it was 0.997.

Conclusion

The translated in Greek CAARMS is valid and reliable when used by mental health professionals in order to correctly diagnose psychiatric history cases. Both the group of specialized mental health professionals and of psychiatric residents exhibited high intraclass correlation co-efficients. Our findings show that psychiatric residents, even though they have not completed their training, were proven more reliable in using the CAARMS, after a short training in the use of that interview,

than specialized mental health professionals. Thus, it seems that psychiatric residents after a short training are suitable for participating in prevention programs in which this interview is used.

The method used in order to estimate the inter-rater reliability of the translated CAARMS differed from the method used to estimate the inter-rater reliability of the original.¹⁷ However, in both cases, the CAARMS exhibited satisfactory inter-rater reliability.

Greece, at the time being, is a country in economic crisis, so policy and economic issues should be taken into account, regarding the implementation of early prevention services. Specialists interested in shifting preventive interventions in psychosis from a model of secondary and tertiary prevention in psychosis to one of primary and secondary prevention have also to face negative attitudes towards early prevention, especially in such a difficult period for mental health services. Yet, there is a lack of financial programs assisting that effort of Athens in issues of early intervention. Thus, people interested in those services should have a deep interest in them and voluntarily elaborate time and energy in order to promote the establishment of those new preventive activities.

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Table 1. Mean correlated percentage of agreement with the correct diagnosis among all subjects, specialized mental health professionals and residents.

All subjects	81.42
Specialized mental health professionals	77.88
Residents	84.46

Table 2. Mean correlated percentage of agreement with the correct answers.

	Severity	Frequency
Unusual thought content	92.78	92.3
Non bizarre ideas	91.18	94.14
Perceptual abnormalities	97.56	97.02

Η αξιοπιστία μεταξύ εκτιμητών της Ελληνικής μετάφρασης της CAARMS σε δύο ομάδες επαγγελματιών ψυχικής υγείας

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Τα μέλη της Ελληνικής Ψυχιατρικής Κοινότητας επιδεικνύουν ένα αυξανόμενο ενδιαφέρον σχετικά με την πρώιμη ανίχνευση και πρόληψη των ψυχιατρικών διαταραχών, το οποίο έχει οδηγήσει έναν αριθμό δομών ψυχικής υγείας στην Ελλάδα στη διοργάνωση επιστημονικών παρουσιάσεων, συνεργασιών και εκπαιδευτικών σεμιναρίων σχετικών με προγράμματα πρώιμης παρέμβασης. Στο Πανεπιστήμιο των Αθηνών ειδικότερα, στην Ψυχιατρική Κλινική του Αιγινήτειου Νοσοκομείου λειτουργεί ένα νέο εξωτερικό ιατρείο πρώιμης παρέμβασης στην ψύχωση. Προκειμένου να αναγνωριστούν νέα άτομα ως υψηλού κινδύνου για ψυχωσική διαταραχή είναι απαραίτητο να μπορεί να χρησιμοποιηθεί ένα έγκυρο και αξιόπιστο εργαλείο μεταφρασμένο στα Ελληνικά. Η ομάδα μας πρόσφατα μετάφρασε την Comprehensive Assessment of At-Risk Mental States (CAARMS). Η εγκυρότητα της CAARMS διασφαλίστηκε μέσω της διαδικασίας που ακολουθήθηκε κατά τη μετάφρασή της. Ο στόχος της παρούσας μελέτης είναι η εκτίμηση της μεταξύ βαθμολογητών αξιοπιστίας της ελληνικής μετάφρασης της CAARMS σε δύο ομάδες, μία ειδικευμένων της Ψυχιατρικής και μία ειδικών επαγγελματιών της Ψυχικής Υγείας. Το ιατρείο πρώιμης παρέμβασης στην ψύχωση του Αιγινήτειου Νοσοκομείου παρέχει εκπαίδευση σε ειδικευόμενους στο τελευταίο έτος της εκπαίδευσής τους στην Ψυχιατρική, στη χρήση της CAARMS. Οι ειδικευόμενοι αυτοί συμμετέχουν στη διαδικασία εκτίμησης των ατόμων που παραπέμπονται στο ιατρείο. Έτσι, είναι σημαντικό για το ιατρείο μας να διερευνηθεί εάν οι ειδικευόμενοι είναι εξίσου κατάλληλοι όσο οι ειδικευμένοι επαγγελματίες ψυχικής υγείας στη χρήση της CAARMS μετά από εκπαίδευση. 43 εργαζόμενοι στον χώρο της ψυχικής υγείας (27 ειδικευόμενοι στην Ψυχιατρική και 16 ειδικευμένοι επαγγελματίες ψυχικής υγείας) συμμετείχαν σε δύο σεμινάρια, τα οποία διοργανώθηκαν από το εξωτερικό ιατρείο πρώιμης παρέμβασης του Αιγινήτειου. Στα σεμινάρια αυτά παρασχέθηκε θεωρητική ενημέρωση για το θέμα των εξαιρετικά υψηλού κινδύνου για ψύχωση καταστάσεων, έγινε παρουσίαση της CAARMS και δόθηκαν οδηγίες για τη βαθμολόγησή της. Οι μεταφραστές της CAARMS ήσαν οι εκπαιδευτές στα δύο σεμινάρια. Ένας από αυτούς, ακολουθώντας το «μοντέλο εκπαιδύοντα τον εκπαιδευτή», εκπαιδεύτηκε στην CAARMS από τη Συντονίστρια στην Εκπαίδευση της CAARMS εκείνης της περιόδου. Κατά τη διάρκεια των σεμιναρίων παρουσιάστηκαν δέκα κείμενα περιπτώσεων ψυχιατρικών ιστορικών, που αφορούσαν είτε υγιείς είτε άτομα λίαν υψηλού κινδύνου για ψύχωση είτε με πρώτο ψυχωσικό επεισόδιο. Το mean correlated percentage of agreement με τις σωστές απαντήσεις αναφορικά με τη διάγνωση των παρουσιασθέντων ιστορικών μεταξύ του συνόλου των υποκειμένων της μελέτης ήταν 81,42, μεταξύ των ειδικών επαγγελματιών ψυχικής υγείας ήταν 77,88 και μεταξύ των ειδικευόμενων ήταν 84,46. Τα intraclass correlation coefficients ήταν 0,994 για τους ειδικευμένους επαγγελματίες ψυχικής υγείας και 0,997 για τους ειδικευόμενους ψυχιάτρους. Η μεταφρασμένη ελληνική έκδοση της CAARMS παρουσιάζει μια ικανοποιητική μεταξύ βαθμολογητών αξιοπιστία όταν χρησιμοποιείται είτε από ειδικευμένους ψυχιάτρους είτε από ειδικευμένους επαγγελματίες ψυχικής υγείας. Οι ειδικευόμενοι μάλιστα εμφανίζουν ακόμη μεγαλύτερα intraclass correlation co-efficients και mean correlated percentage of agreement από τους ειδικευμένους επαγγελματίες ψυχικής υγείας, γεγονός που σημαίνει ότι οι ειδικευόμενοι είναι κατάλληλοι να επιδίδουν την CAARMS σε μονάδες πρώιμης παρέμβασης.

Λέξεις ευρητηρίου: Πρώιμη ψύχωση, πρόληψη, CAARMS, Ελληνική μετάφραση, αξιοπιστία.

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