

TITLE OF THE ABSTRACT: VALIDATION OF SCORE CARD TO PREDICT ADHERENCE OF MEDICATIONS IN CHILDREN AND ADOLESCENT POPULATION WITH PSYCHIATRIC DISORDERS

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Objectives:

Medication non-adherence is a major reason for relapse and recurrence of psychiatric disorders among children and adolescents. Unfortunately the medication non-adherence among this population ranges from 10-55%. Currently, there is no clinical way to predict those who default on their psychotropic medications in India. Therefore we developed a score card based on the identified predictive factors. This study aimed to evaluate the predictive validity of the developed clinical score card.

Methods:

We studied 43 children and adolescents who attended the review OPD. At the baseline all children were administered the Vellore score card along with the gold standard measure, Clinician Rating Scale (CRS) and the divergent measure namely the Child Sleep Habit Questionnaire. 20% were also administered the Vellore score card to assess the inter rater reliability After 3 months they were administered the measure the Morisky's Medication Adherence Scale (MMAS-8) and 20% of them were again readministered the Vellore score card to calculate the test retest reliability.

Results:

On comparing the Vellore score card with the CRS, a score of 0 was taken as the cut off score as it had a specificity of 100% making the score card a valid tool to predict non adherence. However its sensitivity was only 8.33% at this cut off. The area under

curve (AUC) in the ROC of the score card was 0.714 (z is 2.644, p=0.0082). The test retest reliability and the inter rater reliability were studied to assess the reproducibility of the score card and the ICC was respectively 0.51 (p=0.18) and 0.77 (0.07). The score card in comparison with the child sleep habit questionnaire showed no significant association ($r = -0.110$, $p = 0.492$). There was no statistical difference between the scores of the Vellore score card and the modified Morisky's scale both of which were administered at follow up (chi square – 1.143, p=1). However the kappa showed a case identification concordance of .1 (kappa= .25, p=.285). Factor validity was assessed using factor analysis. The study in view of being continuing one, a final conclusion cannot yet be drawn.

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