GRADE METHODS IN EVALUATION OF CLINICAL SCALES DATA TO MEASURE THERAPY EFFECTIVENESS

Anna Wolińska-Welcz[1], Henryk Welcz[2]

[1] *Maria Curie-Sklodowska University, Institute oj Mathematics, Lublin, Poland*
[2] *Chair and Department of Psychiatry, Medical University, Lublin, Poland*

Abstract

The present paper describes how the grade approach has been applied to investigate a dataset from diagnostic questionnaires and scales obtained after completion of clinical therapy. It is shown that more regular copula data structures are observed after therapy. Grade methodology gives a valuable insight into effects of therapy. Moreover, grade exploration reveals new hidden variables and splits the questionnaire data into four more regularly monotone dependent segments, closely connected with level of improvement and external or internal controllability. Finally, two sets of homogeneous and ordered clusters of patients obtained before therapy as well as four segments obtained after therapy receive characterizations from the therapy effectiveness point of view, which may be useful in future medical therapeutic decisions. All analyses were performed using the GradeStat program.