PMH46

ASSESSING THE CROSS-CULTURAL COMPARABILITY OF THE CENTRE FOR EPIDEMIOLOGIC STUDIES DEPRESSION SCALE (CES-D)

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OBJECTIVES: The Centre for Epidemiologic Studies Depression Scale (CES-D) is one of the most widely used depression questionnaires; it has been translated into many languages and is frequently used in multi-national studies. This research sought to examine whether different language versions of the CES-D were affected by country (cultural)-related differential item functioning (DIF). **METHODS:** CES-D data were available from depressed patients in the UK (n = 177), US (n = 100), Germany (n = 78) and France (n = 124). The data were pooled and applied to the one-parameter Rasch item-response model for analysis and to identify cross-cultural DIF. **RESULTS:** The UK and German CES-D did not fit the Rasch model (Chi^2 $p < 0.001$) suggesting that summation of item scores in these countries is not justified. Four items in the UK (including 2 of the 4 positively worded items) and 2 items in Germany misfitted. The US CES-D exhibited borderline overall misfit to the Rasch model (Chi^2 $p < 0.01$) with no item misfit and the French data fitted the Rasch model (with 1 item misfitting). The pooled data from the 4 countries did not fit the Rasch model (Chi^2 $p < 0.001$) and DIF was observed in 7 items (including all of the positively worded items). DIF between the US and UK (5 items), the US and Germany (5 items) and US and France (4 items) was greater than that between UK and Germany (1 item), the UK and France (2 items) and Germany and France (3 items). **CONCLUSIONS:** CES-D data from these countries cannot be pooled justifiably without first accounting for DIF by culture. DIF appeared to be greater between the US and Europe than within European countries. In addition, the use of both positively and negatively worded items in a questionnaire may introduce bias.

PMH47

MEASURING RELAPSE AFTER ADOLESCENT SUBSTANCE ABUSE TREATMENT: A PROPORTIONAL HAZARD APPROACH

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OBJECTIVES: Cox regression is used to analyze relapse patterns of adolescents treated for psychoactive substance use disorder (PSUD). The objective is to evaluate the role numerous psychosocial, treatment and environmental characteristics play in the relapse process in this treatment population. It is clear that the PSUD disease and recovery process are unique in adolescents and that relapse and recovery need rigorous study. Relapse is the most important treatment outcome. **METHODS:** Subjects are 509 adolescents discharged from an ASAM-defined Level 1. A primary inpatient treatment program from 2001–2005. Data was collected as part of the treatment program's annual outcomes evaluation. The sampling frame was all who successfully completed treatment. Response rate was 61%. Analysis of characteristics of nonrespondents showed no significant differences compared to respondents. The survey is based on a 230-item questionnaire. Treatment records of each adolescent completing the questionnaire were obtained for matching treatment outcomes from the questionnaire to treatment and sociodemographic variables contained in treatment records. A comprehensive data set was created from these two sources. Data were analyzed using Cox proportional hazard regression. **RESULTS:** Results indicate race (Whites were 59.2% less likely to relapse than other races; blacks are 4.9 times more likely.), gender (males 1.28 times more likely), participation in support groups (participants 23.7% less likely), school attendance (attendees 21.6% less likely), supportive friendships (one SD change on scale corresponds to a 7.7% reduction in relapse risk), and cannabis dependence (cannabis diagnosis 28.7% more likely) are significant determinants of relapse, certis paribus. **CONCLUSIONS:** Several risk factors for relapse are identified that can be addressed in primary treatment. For instance, treatment programs emphasizing friendships skills by application of social cognitive theory might be considered.

OBESITY

POB1

ASSESSMENT OF THE CLINICAL RISK FACTORS FOR METABOLIC SYNDROME IN A NATIONAL PRIMARY CARE ELECTRONIC HEALTH RECORD (EHR) DATABASE

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OBJECTIVE: Metabolic syndrome is the constellation of central obesity, dyslipidemia, impaired glucose tolerance, and elevated blood pressure (BP). We analyzed the components of metabolic syndrome via EHR databases. **METHODS:** Ambulatory electronic health record data for 3,301,897 patients included demographics, vitals, labs, drugs and payment types from the GE Centricity EMR research database. The study period was January 1, 2003 to December 31, 2004. Patients aged 18 to 64 years with any indicator of cardio-metabolic risk were identified by clinical (biometrics), diagnosis (ICD-9 codes) or treatment (prescriptions) information. **RESULTS:** The final study population was 475,651 patients after patients with bariatric surgery or body mass index (BMI) > 35 $kg\,m^2$ were excluded. The total of 266,371 (56%) patients had BP as a risk factor. A total of 162,521 (34.17%) had BMI as a risk factor. When the patients excluded for morbid obesity were included this rose to 43.8%. Triglycerides (TG) were identified as a risk factor in 10.74%, high density lipoproteins (HDL) in 15.99%, impaired fasting glucose in 8.83%, diabetes in 7.22% and metabolic syndrome (diagnosis) in 0.12%. All risk factors, except HDL had values for all three definitions (clinical, treatment and diagnosis) of metabolic syndrome. Of these, out of range BMI values were primarily established by the clinically-based BMI definition (33.34%) with the diagnosis and treatment definitions identifying less that 2%. Over 50% of the patients with elevated BP were identified clinically while treatment and diagnosis-based definitions identified only 18% and 7% of the patients with elevated BP, respectively. Diabetes was more similar across all three definitions (range 2.37%–4.69%). **CONCLUSION:** Distribution of clinical risk factors in a primary care database closely mirrors that established by prospective national health surveys. The key source of identification of risk factors is clinically based biometric information. Studies on metabolic syndrome need to incorporate clinically based information.

POB2

COST-EFFECTIVENESS OF TREATING CARDIOMETABOLIC PATIENTS WITH RIMONABANT (ACOMPLIA®) IN A DANISH SETTING

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