5 studies were selected that reported appropriate data to assess test-retest reliability and 26 studies were selected which reported alpha coefficient scores to determine the internal consistency of the HADS. Factor analysis studies revealed consistent bi-dimensional or tripartite models, with few exceptions. Just one study of five evaluated fulfilled the criteria for good test-retest reliability. However, most of the studies evaluating alpha revealed an acceptable level of internal consistency reliability. CONCLUSIONS: Based on the studies in the review, the findings suggest that the HADS may be an effective screening tool in an alcohol dependent population, though there is a caveat to this. The test-retest characteristics appear unsatisfactory in the studies selected. Notwithstanding the test-retest reliability characteristics, factor structure and internal consistency evidence would suggest the instrument to be suitable for use in an alcohol-dependent population.

CONCORDANCE OF COMPUTERIZED SELF-REPORT MEASURES OF DSM-IV TR MOOD AND ANXIETY DISORDERS COMPARED TO GOLD STANDARDS.
Kessler RC1, Fairley PA1, Gruber M1, Hartew Q2, Jewell MA1, Sampson N2, Shurtleff AC3
1Harvard Medical School, Boston, MA, USA, 2EpiQ Inc, Oakland, IL, USA
OBJECTIVES: Substantial numbers of patients presenting to primary care suffer unrecognized disorders of mood or anxiety, potentially complicating treatment and outcome. The objective of this study was to evaluate the validity of an electronic screening instrument based upon the World Health Organization’s Composite International Diagnostic Interview (WHO CIDI) and DSM-IV-TR designed for use in primary care. This is a fully-structured computerized instrument designed to screen for bipolar disorder (BDP), generalized anxiety disorder (GAD), panic disorder (PD), and major depressive episodes (MDE) in primary care patients. METHODS: A preliminary version of the instrument was piloted in individuals with known disease. Following cognitive interviews with subjects, it was refined and tested in 3058 respondents from 29 primary care physician offices across the US. Sub-samples were selected to receive a reappraisal interview (n = 206), over-sampling on those screening positive for either the disorders. To assess validity each completed a “gold-standard” Structured Clinical Interview for DSM-IV (SCID). RESULTS: The results demonstrate that the CIDI-based computerized screening instrument can be used to identify the vast majority of patients with a high likelihood of mood and anxiety disorders treated in the primary care setting.

EVALUATION OF PSYCHOMETRIC EQUIVALENCE BETWEEN INTERACTIVE VOICE-RESPONSE (IVR) AND PAPER VERSIONS OF DAILY ASSESSMENT SCALE FOR ANXIETY (DAS-A).
Mundt J1, Hansen M2, Lappalainen J3, Morlock F3
1Healthcare Technology Systems, Inc, Madison, WI, USA, 2Astrazeneca, Wilmington, DE, USA, 3Telinnova, Santa Monica, CA, USA
OBJECTIVES: A DAS-A is an 8-item patient-reported instrument designed to detect daily changes of anxiety symptoms in patients with Generalized Anxiety Disorder (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment. This study compared the psychometric and measurement properties of an IVR version of the DAS-A with the original paper (GAD) during the first week of treatment.
cross-sectional analysis of 2005-2006 MEPS data involving children. Functional impairment was ascertainment using the mean summed scores (range 0–52) of the parent-reported Columbia Impairment scale (CIS). Psychometric properties of the CIS were evaluated for the study sample. The Wilson and Cleary Model was used to examine factors associated with functional impairment. The primary independent variable of interest was depression. Multivariable linear regression involving the SURVEYREG procedure was applied to the study sample to identify the predictors of functional impairment in children and adolescents. RESULTS: Analysis of the CIS revealed that Cronbach’s alpha of the parent-reported CIS was 0.90 with item-to-total correlations ranging from 0.51 to 0.77. The mean summed CIS score of children and adolescents with depression (CIS, 19.88) was higher than those without depression (CIS, 6.09). Multivariable linear regression revealed a significant correlation between age and depression was significant at a 0.05 level. Stratified regression analysis was performed by age. In both age groups, the diagnosis of depression was strongly associated with functional impairment (+7 units in ages 5–11 years, +11 units in ages 12–17 years). The presence of developmental, respiratory tract, attention deficit, and anxiety disorders also increased functional impairment in children and adolescents. Family factors such as parents’ psychiatric illness, their highest education level and family living arrangement further contributed to impairment in children. CONCLUSIONS: Functional impairment is significant in pediatric depression and understanding of personal and family factors can play an important role in the assessment, management and treatment of depression.

Mental Health – Health Care Use & Policy Studies

THE RELIABILITY AND VALIDITY OF THE CLEAR THINKING SCALE (CTS) AMONG PATIENTS DIAGNOSED WITH SCHIZOPHRENIA

Bridges JF1, Chan KS2, Stuart EA1
Johns Hopkins University, Baltimore, MD, USA, Johns Hopkins Bloomberg School of Health, Baltimore, MD, USA, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA

OBJECTIVES: Previous research has demonstrated that clear thinking is relevant to patients diagnosed with schizophrenia. We tested the reliability and validity of an experimental clear thinking scale (CTS) among a sample of outpatients diagnosed with schizophrenia. The CTS measures functioning across four sub-domains: staying organized (SO); making sense of the world (MS); feeling clear headed (CH); and expressing thoughts and feelings (TF). METHODS: Following item generation and reduction, cognitive interview were used to refine the survey instrument. The scale was then fielded to a sample of outpatients diagnosed with schizophrenia. The reliability and validity of the CTS and its four sub-domains was assessed using the Cronbach’s alpha and comparison to the Clyde mood scale (CMS) construct of “clear thinking”. RESULTS: Cognitive interviews (n = 12) identified several items that patients had difficulty understanding, which were subsequently removed or reordered. We also found that all items needed to be unidirectional and measuring deficits (i.e., while clear thinking is a positive construct, patients related to it best in its absence). A sample of 51 outpatients diagnosed with schizophrenia (66% male; average age = 49; average time since diagnosis = 22) completed the survey (only one respondent was unable to complete the survey). Cronbach’s alphas for all constructs were good: .77 (SO), .79 (MS), .79 (CH), and .83 (TF), and was excellent for the overall scale (.93). All constructs were positively correlated with CMS clear thinking construct, which had a Cronbach’s of 0.94. However, these correlations were significant only for TF (p = 0.002) and the overall scale (p = 0.02). CONCLUSIONS: Findings indicate that clear thinking can be reliably and validly described across four domains that are relevant to patients diagnosed with schizophrenia. Future research will focus on further refining the CTS, comparing it with other scales of functioning and disease symptoms and assessing its sensitivity to changes.

Analysis of Adolescent Patients with Non-depressive Neuroses in Comparison to the General Inpatient Group

Houck JA
University of Louisville, Louisville, KY, USA

OBJECTIVES: To analyze a variety of variables for DRG 427, non-depressive neuroses, in comparison to the control group to determine differences in the distribution. METHODS: The data were taken from the Kids’ Inpatient Database (KID) from year 2007. The data were taken from the Kids’ Inpatient Database (KID) from year 2007. This database describes hospital inpatient stays for children twenty years old and younger. In this database, there are 1,447 cases of DRG 521. For comparison purposes, a random sample equal in size was drawn from all DRG codes other than DRG 521. The statistical software, SAS, is used to analyze this data set. RESULTS: Initial statistical analyses have shown a greater proportion of whites in the experimental group (DRG 521), 72%, compared to the control group with 61%. The overwhelming majority of the experimental group is in the higher age range of fifteen to twenty years old, compared to the control group which has a uniform distribution across all age categories. In the experimental group contains a higher proportion of males, 55.8%, compared to the control group, 52%. CONCLUSIONS: Previous research has indicated that when individuals have comorbid conditions including drug/alcohol dependence and mental illness, males are more likely to be treated and seek treatment for substance dependence whereas females are more likely to seek treatment for mental illnesses. This information could explain why more males are present in the experimental group, compared to the control group. In addition, adolescence and young adults are more likely to engage in risky behavior, which would explain the concentration of older individuals in the experimental group.

Analysis of Children with Depression on Hospitalization Among Medicare Beneficiaries

Kennedy J1, Tien YY1, Cohen LJ1, Star DA2, Blodgett E2
Washington State University, Spokane, WA, USA, Washington University College of Pharmacy/Washington Institute for Me, Spokane, WA, USA, Washington State University, Pullman, WA, USA

OBJECTIVES: The objective of this study is to compare rates of hospitalization among patients receiving different classes of antipsychotics (SGAs, FGAs, both, or none) in a large, all-ages sample of both institutionalized and noninstitutionalized Medicare beneficiaries. METHODS: We examined the 2005 Medicare Current Beneficiary Survey (MCBS) Cost and Use file Prescription Drug Event (PDE) module for 11,236 survey participants. Antipsychotic utilization was characterized in terms of class (FGA chlorpromazine, fluphenazine, haloperidol, loxapine, perphenazine, thiothixene; thiovanazine, and trifluoperazine) or SGA (aripiprazole, clozapine, olanzapine, quetiapine, risperidone, and ziprasidone). Hospitalization was defined in terms of whether a Medicare beneficiary was admitted to the hospital for any reason in 2005, and the number of times in the year. RESULTS: About 3.5% of Medicare beneficiaries (1.3 million) filled one or more prescriptions for an antipsychotic medication in 2005. Rates of all-cause hospitalization among Medicare beneficiaries were significantly higher for SGA users than for FGA users: 38.9% of those who used only SGAs compared to 31.0% of FGA-only users. Patients prescribed both FGAs and SGAs had the highest rate of hospitalization (60.7%), compared to 21.3% of nonusers. Controlling for demographic, socioeconomic, health, and disability variables, SGA users were over twice as likely (odds ratio, 2.2; 95% CI, 1.17–2.9), and combination users were over six times as likely (odds ratio, 6.3; 95% CI, 4.4–16.2) as nonusers to be hospitalized. The odds of FGA users being hospitalized were not significantly different from nonusers (odds ratio, 1.4; 95% CI, 0.7–2.8). CONCLUSIONS: This analysis offers provocative, but by no means conclusive evidence that SGAs as a class are not necessarily superior to FGAs in mitigating patient’s use of hospital services, Systematic analysis of this relationship with a longitudinal sample of Medicare beneficiaries is warranted.

Analysis of Children with Depression on Hospitalization Among Medicare Beneficiaries

Hunt J, Gauthier M
Canadian Institute for Health Information, Ottawa, ON, Canada

OBJECTIVES: The majority of antipsychotic use in the elderly is to treat behavioural and psychological symptoms of dementia. New information on the safety of antipsychotics in the elderly was released between 2000 and 2005. This analysis provides insight into antipsychotic use among seniors during this time period. METHODS: Claims data from the Canadian Prescription Drug Utilization Information System (NPDIS) Database were analyzed for seniors on public drug programs in six Canadian provinces between 2001–2002 and 2006–2007. This analysis looked at trends in antipsychotic use, including use by age and sex. Additional analyses focused on atypi-