

**P02.186**

ANXIETY AND DEPRESSION IN FAMILY MEMBERS OF ICU PATIENTS: ETHICAL CONSIDERATIONS REGARDING DECISION-MAKING CAPACITY

F. Pochard<sup>1</sup>\*, E. Azoulay<sup>2</sup>, S. Chevret<sup>3</sup>, I. Ferrand<sup>1</sup>, J.F. Dhainaut<sup>1</sup>, B. Schlemmer<sup>2</sup>. For the French FAMIREA Group: <sup>1</sup>Service Psychiatrie et Service de Réanimation Médicale, Hôpital Cochin, 27 Rue du Faubourg Saint Jacques, 75014 Paris; <sup>2</sup>Service de Réanimation Médicale, <sup>3</sup>Service de Biostatistique, Hôpital Saint-Louis, 1 Avenue Claude Vellefaux, 75010 Paris, France

**Background:** Anxiety and depression have a major impact on the ability to make decisions. Characterization of symptoms reflecting anxiety and depression in family members visiting ICU patients may be of major relevance to the ethics of involving family members in decision-making, particularly about end-of-life issues.

**Methods:** Prospective multicenter study in 43 French ICUs (37 adult and 6 pediatric). Each unit included 15 patients admitted for longer than 2 days. ICU characteristics and data on the patient and family members were collected. Family members completed the Hospital Anxiety and Depression Scale (HADS) to allow evaluation of the prevalence and potential predictors of anxiety and depression.

**Findings:** 637 patients were included in the study and 920 family members completed the HADS. All items were completed in 836 HADS questionnaires, which formed the basis for this study. The prevalences of anxiety and depression in family members were 69.1% and 35.4%, respectively. Anxiety or depression were present in 72.7% of family members and 84% of spouses. Factors predictive of anxiety in a multivariate model included patient-related factors (absence of chronic disease), family-related factors (spouse, female gender, desire for professional psychological help, help being received by usual doctor) and caregiver-related factors (absence of physician-nurse meetings on a regular basis, absence of a room used only for meetings with family members). The multivariate model also identified three groups of factors predicting depression: patient-related (age), family-related (spouse, female gender, not of French descent), and caregiver-related (no waiting room, perceived contradictions in the information provided by caregivers).

**Interpretation and Conclusion:** More than two-thirds of family members visiting ICU patients suffer anxiety or depression. Involvement of family members with anxiety or depression in end-of-life decisions should be carefully discussed.

*This study was supported by a grant from the French Society for Critical Care (Société de Réanimation de Langue Française).*

**P02.187**

PSYCHIATRY FOR MEDICAL STUDENTS IN RESOURCE POOR COUNTRIES: A DESCRIPTION OF THE CURRICULUM AT MALAWI'S MEDICAL SCHOOL

H. Herzig, Division of Psychiatry, University of Bristol, 41 St Michael's Hill, Bristol BS2 8DZ, UK

Though mental disorders present a major burden for rich and poor countries alike, in developing countries Psychiatry is neglected in medical training and service provision. Malawi in Central Africa, among the world's poorest countries, lacks an effective state mental health service and until recently had no resident psychiatrist. The author worked as a psychiatrist in Malawi from 1996-98, and as visiting lecturer at the only medical school. A new mental health curriculum was planned and implemented, setting Psychiatry within general medicine and primary health care and de-emphasising its specialist status. Doctors in resource poor countries must fulfil varied roles administrator, educator, service planner,

hospital physician, GP - each of which provide opportunities to meet the population's essential mental health needs. Through a variety of teaching methods including an epidemiological research exercise, the new mental health curriculum explores how these basic needs may be met by Malawi's future doctors in their various roles. The course is handicapped by the poor quality of clinical care at the old colonial central mental hospital, which is inadequate for patients, demoralising for staff and unedifying for students. Nevertheless the students embrace the need to provide better mental health care and rate the course as highly relevant. By building lasting links with medical and nursing schools coupled with political and small financial initiatives, European institutions might initiate significant improvement in mental health care in the poorest countries.

**P02.188**

<sup>1</sup>H-MAGNETIC RESONANCE SPECTROSCOPY AT 3.0 TESLA REVEALS REDUCED N-ACETYL ASPARTATE, CHOLINE AND MO-INOSEITOL LEVELS IN DEPRESSION

R. Frey\*, S. Gruber<sup>1</sup>, G. Ortwein-Swoboda, A. Heiden, V. Mlynarik<sup>1</sup>, E. Moser<sup>1</sup>, S. Kasper. Dep. of General Psychiatry, University Hospital of Psychiatry, Vienna; <sup>1</sup>NMR Group, Institute for Medical Physics, University of Vienna, Austria

<sup>1</sup>H-Magnetic Resonance Spectroscopy (MRS) was performed in 12 untreated patients (7 females, 5 males; mean age  $37.1 \pm 11.6$ ) with depressive episodes (ICD 10: F32 or F33; HAMD:  $24.4 \pm 5.0$ ) and 12 controls (age and sex matched sample size). Single voxels ( $2 \times 2 \times 2$  cm $3$ ) were examined in the left and right prefrontal region (gray and white matter) by means of a Bruker Medspec 30/80 DBX, at 3.0 Tesla (STEAM sequence: TE = 20 ms, TR = 6 s). With the total creatin (Cr) as an internal standard, the NAA/Cr, Cho/Cr and mI/Cr ratios were calculated to follow the N-acetyl aspartate, choline and myo-inositol levels, respectively. As compared to healthy volunteers, patients showed significantly lower NAA/Cr ( $p < 0.05$ ) and mI/Cr ( $p < 0.05$ ) in the left frontal lobe as well as significantly lower NAA/Cr ( $p < 0.01$ ), Cho/Cr ( $p < 0.05$ ) and mI/Cr ( $p < 0.01$ ) in the right frontal lobe. Interhemispheric differences were found neither in patients nor in controls. Low NAA levels might be a marker for a decreased neuronal density, but might be as well a substrate of neuronal hypoactivity in depression. Reduced choline levels might be associated with a decreased membrane turnover. Myo-inositol as a precursor in the phosphatidylinositol second messenger system has been reported to be reduced in depression. Results will be discussed quantitatively and the potential impact for therapy control by MRS is open for debate.

**P02.189**

MEASURING DEPRESSION IN SCHIZOPHRENIA: RELATIONSHIP WITH NEGATIVE SYMPTOMS

V.P. Kontaxakis, B.J. Havaki-Kontaxaki, S.S. Stamouli, M.M. Margariti, C.T. Koliatis, G.N. Christodoulou. Department of Psychiatry, University of Athens, Greece

**Background:** The identification of depressive symptoms in schizophrenic patients is difficult, mainly due to overlap between depressive symptoms and negative symptoms. The purpose of this study is to evaluate the associations between four measures of depression and negative symptoms in a group of acute schizophrenic inpatients.