## Transcultural psychopharmacotherapy

The following are extracts from the *Transcultural Psychopharmacotherapy Newsletter*, No. 3 (sponsored by WHO Division of the Mental Health)\*

REPORT: Transcultural psychopharmacology Pacific Rim College of Psychiatrists Los Angeles, October 17–20, 1991

S. Chang from Boston presented a review on data currently available regarding ethnicity and lithium kinetics/dynamics. His studies in China (Shanghai) and Taiwan revealed that the kinetics of lithium among Chinese are similar to the Caucasian subjects he studied in Chicago. However, the steady-state therapeutic lithium levels in both Chinese sites (less than 0.8 mEq/L) for the treatment of bipolar disorder, were much lower than those used in Chicago (0.8–1.2 mEq/L), suggesting that there may be ethnic differences in the pharmacodynamics of lithium.

S. Lee from Hong Kong reported a 50% rate of goitres among 50 Chinese psychiatric patients treated with lithium. Their mean TSH level was in the normal range, but significantly higher than that of the normal controls. A higher proportion of the patients (14% v. 2%) also tested positive with thyroid antibody. The reason for this high incidence of thyroid abnormalities among Chinese patients is not clear, but Lee speculated that this could be due to a lower intake of iodine in these patients.

K-M. Lin (California) reviewed four studies comparing the pharmacokinetics of benzodiazepines between Asians and Caucasians. All four studies demonstrated that Asians had slower clearance, longer half-life, and higher plasma drug concentrations. One of the studies suggested that this could be due to differences in the volume of distribution, secondary to ethnic differences in the percentage of fat. This, however, was not supported by the other reports. Since the metabolism of diazepam correlates highly with that of mephenytoin, and the percentage of poor metabolisers of mephenytoin is higher in Chinese (15-20%) as compared to Europeans (3%), this mechanism was examined in another study conducted in Beijing. However, surprisingly, there was no difference in the kinetics of diazepam between Chinese extensive metabolisers of mephenytoin and poor metabolisers while both Chinese groups metabolise diazepam at the rate of European poor metabolisers of mephenytoin. The mechanism of ethnic differences

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in the pharmacokinetics of benzodiazepines thus remain unclarified at present.

E. Pi (Lost Angeles) reviewed six studies comparing the pharmacokinetics of tricyclic antidepressants between Asians and Europeans. Three of these studies showed that Asians metabolised TCAs slower than Europeans, while the other two (both conducted by Pi) failed to replicate such findings. He discussed limitations in study methodology that may be responsible for such discrepancies.

Both H. Chiu from Hong Kong and E. Pi from Los Angeles reported prevalence rates of TD in the range of what have been reported in Western countries.

C-K. Lee from Korea reported a study of the ALDH genotype in Korean alcoholics, which revealed that the majority of the alcoholics (84%) did not have the enzyme deficiency. Those with ALDH deficiency were all heterozygotes. These results confirmed earlier findings from Japan, indicating that those lacking ALDH enzymes are much less likely to develop alcoholism. Lee also reported that the alcoholics with enzyme deficiency had different personality profiles, compared to those without the enzyme deficiency.

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# Research Centre on the Psychobiology of Ethnicity

Recently established at the Harbor-UCLA campus with major funding from the National Institute of Mental Health (NIMH), the Research Center on the Psychobiology of Ethnicity is the first federally funded research center in the United States that focusses specifically on psychobiological issues relevant to the evaluation and care of ethnic minority patients. Although dramatic ethnic differences in response to various psychotropics and other medications have been repeatedly reported in recent years, the extent of and mechanisms (e.g. pharmacokinetic, pharmacogenetic, and pharmacodynamic) responsible for these differences have remained largely unclarified. Even less understood are the meaning and significance of ethnic differences in psychobiologic processes associated with psychiatric disorders, that have also started to emerge in the literature.

The research activities of the Center will provide much needed guidelines to ensure that diagnostic and treatment practices will be relevant and appropriate for patients with ethnic minority backgrounds. Equally important are their basic science ramifications. Cross-ethnic comparisons can and should contribute significantly to our understanding of what is 'universal', and thus more representative of the 'core' features of a certain clinical condition or phenomenon, and what may be more the product of cultural peculiarities and environmental influences.

The Center is engaged in the following activities: (1) a series of studies that include ethnic comparisons in the pharmacokinetics and pharmacodynamics of antidepressants, lithium, and benzodiazepines, as well as the neurohormonal and sleep electrophysiological changes in depressed ethnic minority patients; (2) establishing core research infrastructures; (3) encouraging collaboration and networking of researchers of divergent disciplines and interests; and (4) fostering the growth of ethnic minority researchers.

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### Bibliography on transethnictranscultural psychopharmacology

DRAYER, D. E. & REIDENBERG, M. M. (1975) Clinical consequences of polymorphic acetylation of basic drugs. Clinical Pharmacology and Therapeutics, 22, 251–258.

GLASSMAN, A. H., PERE, J. M., SHOSTAK, M. et al (1977) Clinical implications of imipramine plasma levels for depressive illness. Arch. Gen. Psychiatry, 34, 197-204.

LUNDE, P. K. M., FRISLID, K. & HANSTEEN, V. (1977) Disease and acetylation polymorphism. Clinical Pharmacokinetics, 2, 182–196.

Ziegler, V. E. & Biggs, J. T. (1977) Tricyclic plasma levels. JAMA, 238, 2167-2169.

ZIEGLER, V. E., CLAYTON, P. J. & BIGGS, J. T. (1977) A comparison study of amitriptyline and nortriptyline with plasma levels. *Arch. Gen. Psychiatry*, 34, 607-612.

Branch, R. A., Salih, S. Y. & Homeida, M. (1978) Racial differences in drug metabolizing ability: a study with antipyrine in the Sudan. *Clinical Pharmacology and Therapuetics*, 24, 283–286.

Psychiatric Bulletin (1993), 17, 64

# **Miscellany**

#### **Audio cassettes of College Meetings**

Audio cassettes of the College's Annual Meeting in Dublin from 24–27 July 1992 and of the Autumn Quarterly Meeting, Birmingham Metropole Hotel, 14–15 October 1992, are available from QED Recording Services Ltd, Lancaster Road, New Barnet, Herts EN4 8AS (telephone 081 441 7722; fax 081 441 0777).

#### **ENMESH**

In collaboration with the European Office of the World Health Organisation, a European Network for Mental Service Evaluation (ENMESH) is now being established. Active researchers in the field are invited to request a registration form to join the network from Dr Aart Schene, (ENMESH Secretary), Associate Professor of Psychiatry, Academisch Medisch Centrum, Polikliniek Psychiatrie, Meibergdreef 9, 1105 AZ, Amsterdam (ZO), The Netherlands.

#### SANE (Schizophrenia, A National Emergency)

SANE, the mental illness charity, has announced that Oxford University has been chosen to host its

Prince of Wales International Centre for Research into Schizophrenia and Depression. It will act as an international network for communication between scientists and clinicians from the United States, Saudi Arabia, and other countries and will be a centre for training. It intends to establish an annual symposium, conferences, and exchange fellowships.

The opening times of SANE'S telephone helpline – SANELINE – are to be extended from 4.00 p.m. until midnight every night during the week, with weekend and Bank Holiday opening hours continuing as before from 2.00 p.m. until 2.00 a.m.

#### 1991 Survey of Rural Services

This is the first national report of its type and covers 13 types of service, including health care and day care for elderly and handicapped people. Full copies of the report, price £17, can be obtained from the Rural Development Commission, 141 Castle Street, Salisbury, Wilts SP1 3TP (telephone 0722 366255); a summary of the findings is also available, free of charge.