reaction form model, though it has substantial heuristic value, and merits to be thoroughly scrutinized.

(1) Van Praag HM (1997): Over the mainstream: diagnostic requirements for biological psychiatric research. Psychiat Res 72: 201–212.
(2) Van Praag HM (1998): Inflationary tendencies in judging the yield of depression research. Neuropsychobiology. In press.

S39. Affective disorders in the puerperium and the premenstruum: biological mechanisms and treatment

Chairs: A Wieck (UK), G Koren (CDN)

S39-1

AFFECTIVE DISORDERS IN THE POSTNATAL PERIOD AND THE PREMENSTRUUM: BIOLOGICAL MECHANISMS

A. Wieck. *University Department of Psychiatry, Withington Hospital, Manchester, UK*

Reproductive events are known to trigger an increase of affective disorders in women. In the early postnatal period mild mood swings, depressive episodes and affective psychoses are all more likely to occur and in the premenstruum some women experience changes in mood and behaviour which can be significant enough to interfere with day to day functioning. Because both time points are associated with a marked and rapid decline in circulating female sex steroids it has been suggested that the rapid hormone 'withdrawal' triggers affective disorders in predisposed women by its effect on neurotransmitter systems.

There are only few randomized controlled treatment studies of the effects of ovarian hormones on mood and none have been conducted to test the withdrawal hypothesis. However, studies in animals and neuroendocrine investigations in women have strongly supported a role of ovarian hormones in the pathogenesis of affective disorders. Sex steroids have free access to the brain where they bind to widespread receptors. Intracellular ovarian hormone receptors are present within the serotonergic raphe nuclei and treatment with ovarian hormones has been reported to modulate 5HT activity by altering for example serotonin turnover, monoamine oxidase activity, 5HT2-receptor mRNA levels and the binding characteristics of some 5HT receptors. In women, an increasing number of studies suggest that oestradiol and/or progesterone increase serotonergic neurotransmission in a way which is consistent with an antidepressant effect. In the dopaminergic systems actions of oestrogen and progesterone can be stimulatory or inhibitory depending on the site, the dose and the duration of hormone administration. Preliminary neuroendocrine studies suggest that women predisposed to postnatal manic-depressive illness have increased hypothalamic D2 receptor sensitivity when ovarian hormone production is high.

S39-2

A CONTROLLED STUDY OF FLUOXETINE AND COGNITIVE-BEHAVIOURAL COUNSELLING IN THE TREATMENT OF POSTNATAL DEPRESSION

Louis Appleby. *University Department of Psychiatry, Withington Hospital, Manchester, UK*

Objective: To study the effectiveness of fluoxetine and cognitive-behavioural counselling (CBC) in depressive illness in postnatal women: to compare fluoxetine v. placebo, six sessions v. one session of counselling, and combinations of drugs and counselling.

Design: A randomised, controlled treatment trial, double blind in relation to drug treatment, with four treatment cells: fluoxetine or placebo plus one or six sessions of counselling.

Subjects: 87 women satisfying criteria for depressive illness 6–8 weeks after childbirth, 61 (70%) of whom completed 12 weeks of treatment.

Setting: Community-based study in south Manchester.

Main Outcome Measures: Psychiatric morbidity after 1, 4 and 12 weeks, measured as mean scores and 95% confidence limits on the Revised Clinical Interview Schedule, the Edinburgh Postnatal Depression Scale and the Hamilton Depression Scale.

Results: Highly significant improvement was observed in all four treatment groups. The improvement in subjects receiving fluoxetine was significantly greater than in those receiving placebo. The improvement after 6 sessions of counselling was significantly greater than after a single session. Interaction between counselling and fluoxetine was not statistically significant. These differences were evident after one week, and improvement in all groups was complete after four weeks.

Conclusions: Both fluoxetine and cognitive behavioural counselling given as a course of therapy are effective treatments for non-psychotic depression in postnatal women. Following an initial session of counselling, additional benefit results from either fluoxetine or further counselling but there appears to be no advantage in receiving both. The choice of treatment may therefore be made by postnatal women themselves, who are often reluctant to take medication. The study has led to a training programme in CBC for health visitors in Manchester, and preliminary results from the evaluation of training will also be presented.

S39-3

NEURODEVELOPMENT OF CHILDREN EXPOSED IN UTERO TO ANTIDEPRESSANT DRUGS

Irena Nulman, Joanne Rovet, Donna E. Stewart, Jacob Wolpin, H. Allan Gardner, Jochen G.W. Theis, Nathalie Kulin, Gideon Koren*. *Department of Clinical Pharmacology and Toxicology, University of Toronto, 555 University Avenue, Ont M5G 1X8, Canada*

Background: Many women of reproductive age have depression, necessitating therapy with either a tricyclic antidepressant drug or a drug, such as fluoxetine, that inhibits the reuptake of serotonin. Whether these drugs affect fetal neurodevelopment is not known.

Methods: We studied the children of 80 mothers who had received a tricyclic antipdepressant drug during pregnancy, 55 children whose mothers had received fluoxetine during pregnancy, and 84 children whose mothers had not been exposed during pregnancy to any agent known to affect the fetus adversely. The children's global IQ and language development were assessed between 16 and 86 months of postnatal age by age-appropriate Bayley Scales of Infant Development or the McCarthy Scales of Children's Abilities (for IQ) and the Reynell Developmental Language Scales.

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Results: The mean (± SD) global IQ scores were 118 ± 17 in the children of mothers who received a tricyclic antidepressant drug, 117 ± 17 in those whose mothers received fluoxetine, and 115 ± 14 in those in the control group. The language scores were similar in all three groups. The results were similar in children exposed to a tricyclic antidepressant drug or fluoxetine during the first trimester and those exposed throughout pregnancy. There were also no significant differences in temperament, mood, arousability, activity level, distractibility, or behaviour problems in the three groups of children.

Conclusion: In utero exposure to either tricyclic antidepressant drugs or fluoxetine does not affect global IQ, language development, or behavioural development in preschool children. (N Engl J Med 1997; 336: 258–62)

S39-4

THE PHARMACOLOGICAL TREATMENT OF PREMENSTRUAL DYSPHORIA

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Five to ten % of all women of fertile age experience a severe form of premenstrual dysphoria (PMD) that markedly reduces quality of life and for which an effective treatment is highly warranted. It has frequently been suggested that a reduction in brain serotonergic neurotransmission may lead to irritability, depressed mood, and increased carbohydrate craving; since all these symptoms are prominent in women with PMD, the hypothesis that PMD may be related to serotonin is not farfetched. Supporting this concept, five different serotonin reuptake inhibitors (SRIs) have now been shown superior to placebo for the treatment of PMD (clomipramine, fluoxetine, paroxetine, sertraline, and citalopram); in contrast, the noradrenaline reuptake inhibitor maprotiline is not effective. The onset of action of SRIs is much shorter when used for PMD than when used for depression; we have hence obtained an excellent symptom reduction in PMD subjects by intermittent administration of clomipramine or citalopram in the luteal phase only. Further support for an involvement of serotonin in PMD is gained by preliminary trials suggesting that the 5HT1A agonist buspirone, the serotonin releasing agents fenfluramine and mCPP, and the serotonin precursor tryptophan may all reduce premenstrual complaints.

A role of sex steroids for the pathophysiology of PMD lends support from the fact that the symptoms may be reduced by ovariectomy or by administration of ovulation inhibitors. The importance of estradiol and progesterone for the onset of premenstrual complaints will be discussed, and an hypothesis suggesting that PMD is related to a slight hyperandrogenicity causing a reduction in serotonergic neurotransmission will be presented.

SEC40. Is the mental hospital still needed?

Chairs: AH Mann (UK), L Singer (F)

SEC40-1

THE HISTORY AND DEVELOPMENT OF COMMUNITY PSYCHIATRY

Graham Thornicroft[1], Michele Tansella. [1]*Section of Community Psychiatry (PRiSM); Institute of Psychiatry, de Crespigny Park, London, UK*

Over the last 150 years, the history of mental health services can be seen in relation to 3 periods.

Period 1 describes the rise of the asylum between about 1880 and 1950; Period 2 is the decline of the asylum from around 1950 to 1980; and Period 3 refers to the re-forming of mental health services since approximately 1980. We locate these trends within a new conceptual framework, the matrix model,, which includes two dimensions, the geographical and the temporal. The first of these refers to three geographical levels: (1) country, (2) local and (3) patient. The second dimension refers to three temporal levels: (A) inputs, (B) processes and (C) outcomes. Using these two dimensions we construct a 3 × 3 matrix to bring into focus critical issues in the history of community mental health services. In terms of the geographical dimension, we describe a process of decentralisation, with a move from the country/regional level to the local level of service provision, and more recently, in the third period, towards specifying individual treatment and care within the local service. In terms of the second dimension of the matrix model [inputs, processes and outcomes], we suggest that the dfferential emphasis between the three historical periods is even more emphatic. Although we conisder that outcomes are the most important aspeckt of services evaluation, these outcomes can only be interpreted in the contex of their prior temporal phases, namely inputs and processes.

(1) Tansella M & Thornicroft G (1998) A Conceptual Framework for Mental Health Services: the Matrix Model. Psychological Medicine (in press).
(2) Thornicroft G & Tansella M (1999) Re-forming mental Health Services, Cambridge; University Press, Cambridge (in press)

SEC40-2

TIME TO SLOW DOWN THE DECENTRALIZATION PROCESS?

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The process from institutionalized to deinstitutionalized psychiatry has taken place in Western Europe during the last 20 years. The change has been characterized by ideology and to a minor degree empirically based health service research and epidemiological research.

Seen in retrospect one could have wished the changes to happen in a more moderate way

1. these could have been carried out in 40–50 years and not rushed through in 10–20 years.
2. the decentralized treatment and service facilities could have been build up before the closing down/ the drastically reduction of the existing institutions.

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