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# DEAR SIR,

In their article, Moody and Allsopp (Journal, August, 1969, p. 923-8) reported water and electrolyte circadian rhythm changes in twelve female manic-depressive subjects, and concluded that, although there was a tendency for the water rhythm to be associated with the depressive phase of the illness, 'no constant pattern of change' could be determined, the water rhythm being advanced in six subjects and delayed in six.

Although the authors note that 'seven of the group were pre-menopausal whilst five were postmenopausal' there is no indication that this significant difference in endocrine status was considered a factor influencing the inconclusive results from this study.

The effects of sex hormones upon water and electrolyte balance and the implication of sex hormone imbalance in certain depressions (Rees 1966, Hamilton 1962) and in other psychiatric conditions (Torghele 1957, Taylor 1969) suggest that a re-evaluation of the data from this study with consideration for the endocrine status of each subject, might clarify Moody and Allsopp's inconsistent findings.

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### DEAR SIR,

In specifically studying patterns of water and electrolyte excretion, our prime object was to establish whether significant differences did in fact exist on comparing the profile of urinary output in the depressed and normal periods. This was a necessary prerequisite to investigating the factors responsible for any such changes.

Dr. Heymann's interesting hypothesis would, on present evidence, appear to be well worth testing if the rather difficult combination of isolation, metabolic and monitoring requirements could be met in psychiatrically ill as well as in normal subjects. An extension of such work could have fascinating implications for researchers in psychiatry and in aviation medicine interested in problems related to phase shifts.

Dr. Taylor raises the complementary and related point of looking at the possibility of explaining the observed phenomena on the basis of 'hormone imbalance'. We had examined the data in relation to several parameters not listed in our paper, and found that the pre/post-menopausal status and phase of the menstrual cycle in our patients were not correlated with delay or advancement of the water or sodium rhythms. However, we should like to stress the point that to draw more than the most tentative conclusions about the endocrine status of the patients from purely clinical observations would be quite unwarranted. A study aimed at obtaining the relevant data would involve the formidable task of measuring production and secretion rates, plasma levels and excretory patterns of the relevant sex hormones at frequent intervals. Furthermore, careful studies (Watson & Robinson 1965; Bruce and Russell 1962) have often failed to demonstrate a clear relationship between the phase of the menstrual cycle and water and electrolyte changes. We feel that the examination of aldosterone secretion rates and control mechanisms is more immediately relevant to the problem, and one of us (M.N.E.A.) is now engaged in such a study.

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### NURSES FOR CHILDREN'S UNITS DEAR SIR.

Dr. Wardle (Journal, October, 1969, p. 1228) has written about a problem of great importance to those concerned with the running of psychiatric in-patient units for children and adolescents.

My own view, based on four years' experience of an in-patient unit dealing with 20 psychiatrically disturbed children from 10 to 16 years of age, is that there is a definite but limited place in such units for nurses,