

only prevents the development of toxæmia and eliminates the diminished intelligence in the child but actually enhances the intelligence'. In her summary she relates the best academic results to a particular drug regime. These conclusions raise the possibility that, just as medication has been prescribed as the solution to educational problems in certain American States, so prenatal progesterone will be suggested as the answer to poor examination results in this country.

Do Dr Dalton's data justify her claims? To examine this it is necessary to read her current paper in conjunction with her earlier papers of 1968, which describes her sample and records the children's status and attainments at one year and 9 years. Points to be noted include:

1. Two control groups are used, one of normal women, one of toxæmic women. These two are combined for comparisons with the experimental group at age 9, but kept separate at later ages.

2. No attempt was made to control for the social class or education of the mothers. This is particularly important for the toxæmic group with the association of toxæmia with various indices of social disadvantage.

3. In each follow-up, approximately 50 per cent of each sample only were traced. Among the reasons for loss of sample members are adoption of the child and residence at a gypsy encampment. Details of types of losses are not given independently for each sample.

4. If the toxæmic group is excluded, there is no difference in the rates of academic success at 9 years and A and O level results between progesterone-treated and normal groups. More of the progesterone-treated group attended university, but this could be due to:

5. Differences are seen between the mothers of the normal and treated groups. Those from the latter are older. They are more likely to have breast-fed their infants to six months. Dr Dalton feels this latter finding could be a direct result of the progesterone treatment. It is surely at least as likely to be a direct reflection of the women's social status and educational background.

The data presented can in no way be seen to support the suggestion that progesterone 'actually enhances the intelligence'. Differences are seen within the progesterone-treated group, but these are difficult to evaluate. Early therapy and long duration of therapy increase O level passes, but not A levels. No social data, however, are given on the families in the various groups.

It may well be that Dr Dalton has found an interesting issue which needs studying. Unfortunately

her unqualified claims could stimulate enthusiasts to attempt to raise the intelligence of various groups in the community, particularly as she suggests that there may be a specific effect which will raise scientific ability (? at the expense of interest in the arts).

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MIANSERIN

DEAR SIR,

The comparison of mianserin and amitriptyline reported recently by Coppen *et al* (*Journal*, October 1976, 129, 342-45) is unsatisfactory in several respects. No doubt this trial will be quoted by advertisers of mianserin, and therefore certain comments are pertinent. I hope they may also be useful when considering plans for further drug trials.

(1) Mianserin was given thrice daily, while amitriptyline was given at night. This may have led to:

- (a) patients giving clues to the 'unaware' investigator as to which medication they were taking;

- (b) altered sleep in patients having all their medication at night, thus affecting changes in scores on the Hamilton Rating Scale. Scores might also be affected by other differences between effects of thrice daily and single nightly dosage;

- (c) differences in side-effect scores. Patients having a single nightly dosage of amitriptyline are more likely to complain of certain side-effects than those on thrice daily medication (Snowdon, *in press*). It is likely that this would also apply to mianserin.

(2) There was a considerable difference in mean age (13.1 years) between patients in the two treatment groups. Patients in their sixties may well be more liable to some side-effects (e.g. postural hypotension), especially if the drug is given in undivided dose, than are those in their forties.

There is no mention in this report of how many patients dropped out of the trial (e.g. because of side-effects).

Mianserin is probably a useful additional anti-depressant, and may have certain advantages. Evidence suggests that its side-effects are less troublesome than those of amitriptyline, and a trial comparing similar dosage regimens of the two drugs might well be convincing.

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