

to explain her theory of the causation of anxiety states. For one thing, she argued that there is a difference between a simple "state of fear" and an "anxiety state" in which anxiety is "constant and intense". This, she continued, is a condition in which the normal balance between the sympathetic and parasympathetic nervous systems is upset. In her view, the genesis of anxiety states requires a process which she called "sensitization" and which she compared with the kind of feeling which people have at the end of a long, tiring day. The object of treatment is to get rid of the sensitization. But what is the biochemical mechanism of anxiety? Dr Weekes said quite openly last Sunday that "there is no mystery about it". Hormones are secreted, among them adrenaline, and the previously sensitized people react in an exaggerated way to adrenaline. The result can be a vicious circle of "fear—adrenaline—fear" which results in panic "like the crack of a stockman's whip".

What does Dr Weekes do about these conditions? There is no point, she said, in telling people that "Your mother didn't love you enough". Dr Weekes's treatment is first of all to explain about the interaction of the fear and the adrenaline. Many people, she said, "are immediately relieved to find there is a simple explanation". So fear ceases to accumulate. Sometimes Dr Weekes uses anti-depressant drugs, especially at the beginning of treatment, but she is shy of electric shock therapy. In her experience, she said, all those with the "wish to be cured" could be treated successfully, though everybody connected with the programme, including an anonymous general practitioner, was at pains to emphasize that this method of treatment was not applicable to conditions of "deep-seated mental disturbance". Nobody, unfortunately, explained how to distinguish between the lack of will to be cured and a deep seated disturbance. (Those who try to rid themselves of depression by reading Dr Weekes's book called *Self Help for Your Nerves* will no doubt be even less well placed to make the distinction.) Dr Weekes took the view that religion is a great help in the application of her treatment, although the irreligious are not beyond reclaim.

One way and another, this is no doubt the kind of thing that a great many people wish to see and listen to on Sunday evenings. There is no reason to think that Dr Weekes is anything but anxious to do good works, although her methods are uncomfortably reminiscent of Dale Carnegie and his exhortations. Those who work in psychiatry and psychoanalysis would no doubt have liked an opportunity to ask Dr Weekes about the evidence for her assertion about the central role of adrenaline in anxiety states. Unfortunately there was nothing to suggest that she has unpublished results up her sleeve. It would also have been good to know more about the criteria by which she estimates when her own treatment has been successful. But these, of course, are not points which would have occurred to most of those who watch BBC television, and it will be surprising if the occasion has

not stimulated a great search for self-help among those who are depressed or otherwise disturbed. The danger is that it may keep some people away from really constructive treatment longer than would be necessary.

FORATOM

Enrichment for Europe

THE building of an enrichment plant in Europe for the supply of fuel for nuclear reactors is fully justified, according to a report now published by Foratom, the European nuclear industrial forum. But the costs of operating such a plant would inevitably be uncompetitive with American enrichment facilities unless fairly large subsidies were provided. The report suggests that Europe's actual need for enrichment facilities would be somewhere between 2.5 million and 9 million kilogram separative units of work a year, the actual demand depending on how far Britain and France meet their own needs and how far they make use of European facilities. The estimate also assumes that a good part of the European demand will be met by American plants, which have a present capacity of 17 kg suw a year. By 1980, the report says, the total world demand will be around 40 million kilogram units a year, 23 million in the United States and between 9 and 15.8 million in Europe. If part of the need is to be met by a European plant, a decision will be needed by 1972.

The Foratom study already seems slightly out of date. It supposes, for example, that gas diffusion is the method which would be chosen if the decision were to be taken now, though it admits that it would be "inconceivable" for Europe to go through the agonies of re-inventing gas diffusion yet again. Negotiations would have to be carried out with France and Britain about whether either Capenhurst or Pierrelatte could be converted into a European plant or, alternatively, whether either Britain or France would be willing to supply know-how for the building of such a plant. The report also says that development of ultracentrifuge and separation nozzle methods should go ahead "on the broadest possible" base of collaboration. Although it says that the ultracentrifuge might make it possible for individual countries to build their own plants, it would clearly disapprove of this development.

The investment needed to build the plant would be enormous. The report suggests that a diffusion plant with a capacity of 2.5 million kg suw would cost \$575 million—\$375 million of it for the diffusion complex, \$25 million for cascade improvement and another \$175 million for the electricity generating plant. Separative costs for a plant like this would be somewhere between \$28.90 and \$36.72 per kg suw, significantly more than the American cost of \$26 per kg suw. The plant, if built, would be run by a semi-public organization on the lines of the ENEA Eurochemic establishment. Meanwhile, the Foratom group recommends that the Comité de Direction of Foratom should suggest that European governments should discuss the matter either on a multilateral basis or in the framework of European international organizations.