

AMPHETAMINES IN GENERAL PRACTICE

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Public and professional concern regarding the consumption of stimulant drugs has increased in recent years. Consumption of amphetamine and related compounds now account for three per cent of all drugs prescribed under the National Health Service (*Brit. med. J.*, 1961). Obtaining these drugs by false pretences is now a common offence whereas before June 1960 such cases were uncommon. Psychotic reactions to amphetamines have been described by Connell (1958) and others, and most psychiatrists are aware of the problem of both psychoses and habituation.

The present survey was an attempt to determine the usual indications for prescribing the amphetamines, the characteristics of the patients receiving them and the extent of habituation to these drugs. All members of the N.E. Faculty of the College of General Practitioners were invited to participate and 64 agreed to do so. Fourteen subsequently withdrew and some were unable to complete the full three months or give complete figures for their practice. This report is based upon data supplied by 33 doctors (19 complete practices) serving approximately 79,300 patients. A *proforma* covering a single foolscap sheet was completed for each patient who received an amphetamine preparation during the period 1 April to 30 June 1961.

During this period 620 patients (0.8 per cent of survey population) received amphetamine or related drugs; 90 (14.5 per cent) of these patients were men and 530 (85.5 per cent) were women. Table I shows the age distribution of the patients receiving the drug in total and expressed as a percentage of those 15 years of age and over. This may be compared with the percentage distribution of the population of England and Wales by age groups from age 15 years. (Derived from Cmnd. 871 H.M.S.O. 1959.) This shows that the extremes of age are poorly represented giving an exaggerated peak

in the 36-45 year-old age group. Of the total group 9.7 per cent were unmarried and 69 per cent were married and had children.

TABLE I

<i>Age</i>	<15	15-20	21-25	26-35	36-45	46-55	56-65	> 65
Total numbers ..	9	16	20	116	164	141	94	60
Total habituated ..	0	0	1	16	28	26	25	31
Percentage habituated*	—	0	0.8	12.6	22.2	20.5	19.8	24.5
Percentage total numbers* ..	—	2.6	3.2	18.7	26.4	22.7	15.1	9.7
Percentage population England and Wales*†	—	8.1	8.0	17.0	18.1	18.4	14.6	15.2

* expressed as percentages of age groups over 15 years.

† based on Registrar Generals figures for England and Wales.

The commonest indication for the use of these drugs (table II) was obesity, with depression, tiredness, and anxiety as the only other prominent symptoms. Thus it can be said that the largest group receiving these drugs are middle-aged, obese housewives.

TABLE II

<i>Symptom</i>	<i>Totals</i>		<i>Habituated</i>	
	<i>Numbers</i>	<i>Percentage</i>	<i>Numbers</i>	<i>Percentage</i>
Obesity	297	34.6	26	15.2
Depression	169	20.5	29	17
Tiredness	145	17.6	47	27.5
Anxiety	117	14.2	43	25.8
Lack of confidence ..	44	5.3	16	9.3
Pain	22	2.7	6	3.5
Dysmenorrhoea	21	2.5	2	1.7
Enuresis	10	1.2	1	0.8

No precise definition of habituation or addiction was laid down but in the view of the prescribing doctors 127 (20.5 per cent) of patients receiving the drug were regarded as habituated; 24 of these were men (26.6 per cent of all men) compared to 103 or 19.4 per cent of all women. Habituation was uncommon in the younger age groups rising to a peak in the 36-45 age group with a second larger

peak among the over 65's. Of the total addiction 24.5 per cent occurred in the over 65 years age group despite the fact that this group is under-represented in the survey population.

Any patient who had experienced a disabling mental illness, was markedly psychopathic in behaviour or had been under psychiatric care, was recorded under "Psychiatric disability". Many patients recorded as showing no psychiatric disability were reported to be receiving these drugs for depression or anxiety. Psychiatric disability was reported in 99 (15.9 per cent) of the patients and 53 of these were regarded as habituated. Thus more than half of these patients with psychiatric disability were habituated and 41 per cent of habitues were regarded as abnormal.

Although a wide range of amphetamine and related drugs was prescribed drinamyl accounted for 35 per cent of the total, dexamphetamine 21 per cent, durphet 13 per cent and precludin just over 9 per cent. The average daily dose recorded was 2 x 5mg. equivalents of dexamphetamine sulphate daily, few were recorded as receiving more and none more than 4 x 5 mg. per day.

One hundred and twenty-seven (20.5 per cent) of patients were receiving these drugs regularly for over 2 years. Of these 41 (32 per cent) were regarded as psychiatrically disturbed and in 60 (47 per cent) the primary diagnosis was depression alone. Seventy-three (57.2 per cent) of these patients were regarded as habituated but only 11 (15 per cent) were regarded as psychiatrically disturbed and 18 (24.6 per cent) diagnosed as suffering from depression alone. No evidence of increasing dosage was found and few doctors regarded these drugs as entirely unhelpful even when the patient was habituated. No clear evidence of adverse effects other than habituation emerged from this data. Several practitioners did comment on the failure of anorexic effect with prolonged use of these drugs. Fifteen of the participating practitioners reported radical changes in their prescribing habits before the survey, largely through fear of habituation and three doctors declared that they virtually no longer prescribed the drug.

Discussion

It is clear from the investigation that the risk of habituation is a real one, one in five for women and one in four for men taking the drug. In a practice of 2,500 there would probably be 20 patients taking amphetamine at any time and at least four of these would be habituated.

Whilst obesity is the commonest indication for prescribing the drug initially, this symptom is displaced by psychiatric symptoms when the figures for habituation are considered. This may be due to the use of amphetamines on a short-term basis for obesity but it

is possible that with continuing dependence on the drug, the original symptom is forgotten. Yudkin (1961) has asserted that drugs are of little value in achieving weight reduction and the whole question of drug treatment in obesity is at present under review.

The presence of psychiatric disability or of psychiatric symptoms—notably depression—is strongly associated with habituation. This probably accounts for the high incidence of habituation among the over 65's for 70 per cent of the group were recorded as depressed. Even in this group, however, 16.2 per cent of the habituated were taking the drug for obesity and had been doing so for more than two years.

Most surprising is the finding that in a population of nearly 80,000 patients no evidence of psychosis, toxic reaction, or indulgence in doses exceeding 20 mg. of amphetamine daily is reported.

In view of the risks attached to these drugs, it would seem advisable to avoid their use as much as possible. In obesity the anorexic effect is usually transient and never effective unless combined with dietary measures (Yudkin, 1961). Its use in controlled short-term therapy may be of value but it is doubtful if sustained use over years can be justified.

So far as depression is concerned the existence of more effective chemotherapeutic agents should render the use of amphetamines unnecessary.

Particular care must clearly be exercised when the drug is prescribed for the elderly or psychiatrically ill; in such patients the difficulty in weaning is likely to exceed any temporary therapeutic benefit.

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