of cocaine type, and drug dependence of cannabis type. Other types of drug dependence (barbiturate, amphetamine, etc.) continue to present problems, but their description under the general term "drug dependence" does not in any way affect the measures taken to solve them. The general term will help to indicate a relationship by drawing attention to a common feature associated with drug abuse and at the same time permit more exact description and differentiation of specific characteristics according to the nature of the agent involved.

### 5. Considerations Governing the Medical Use of Narcotics

The Committee has on many occasions stressed the medical aspects of the treatment of addicts and the precautionary attitude that should be adopted by physicians in this connexion and in the use of narcotics generally in their practice. Its attention was drawn to a recent report setting forth in considerable detail the whole philosophy of the use of narcotics in medical practice.[1] It was felt that this report constituted a useful guide towards the attainment of the objectives that the Committee has stressed.

### 6. Khat (*Catha edulis*)

The Committee studied a report by the Secretariat on the medical aspects of the habitual chewing of khat leaves. In this report the somatic and psychic symptoms brought about by the chewing of the leaves were reviewed and explained as the effects of the specific active principles contained in the leaves. Besides tannins in appreciable amounts, it has been possible to identify (+)-norpseudoephedrine (cathine) and a chemically and pharmacologically closely related substance, which disappears when the plant is dried and is presumably a step in the biosynthesis of cathine. These two substances are amphetamine-like in respect of structure and pharmacodynamics, but there is evidence that their effects are less powerful than those produced by equivalent amounts of, for example, methamphetamine.

The Committee considered that while khat and pure amphetamine substances produced medical effects that were similar although of different degree, the lower activity of khat was due in the main to differences in dosage, route of administration, and the circumstances in which the one or the other were consumed. In addition, khat produced gastro-intestinal symptoms, due partly to its high content of tannins.

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[1] Council on Mental Health (1963) *Narcotics and medical practice. J. Amer. med. Ass.*, 185, 976.