

## **Cannabis : report / by the Advisory Committee on Drug Dependence.**

### **Contributors**

Great Britain. Advisory Committee on Drug Dependence.

### **Publication/Creation**

London : H.M.S.O., 1968.

### **Persistent URL**

<https://wellcomecollection.org/works/f47gxjmy>

### **License and attribution**

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection  
183 Euston Road  
London NW1 2BE UK  
T +44 (0)20 7611 8722  
E [library@wellcomecollection.org](mailto:library@wellcomecollection.org)  
<https://wellcomecollection.org>



HOME OFFICE

# Cannabis

*Report by the Advisory Committee on  
Drug Dependence*

LONDON

HER MAJESTY'S STATIONERY OFFICE

Price 7s. 6d. net

SHEPHERD COLL  
/GRE



22501396879

HOME OFFICE

# Cannabis

*Report by the Advisory Committee on  
Drug Dependence*

LONDON

HER MAJESTY'S STATIONERY OFFICE

1968

# SHEPHERD COLLECTION

1/6RE

Cannabis

Report by the Advisory Committee on  
Drug Dependence

LONDON  
HER MAJESTY'S STATIONERY OFFICE

SBN 11 340080 2

## ADVISORY COMMITTEE ON DRUG DEPENDENCE

### *Chairman*

Sir Edward Wayne, M.D., Ph.D., D.Sc., F.R.C.P., F.R.C.P.(G.).

### *Members*

- R. G. Bannister, Esq., C.B.E., D.M., M.R.C.P., M.R.C.S.  
\*K. J. P. Barraclough, Esq., C.B.E., T.D.  
\*T. H. Bewley, Esq., M.D., F.R.C.P.I., D.P.M.  
Arthur Blenkinsop, Esq., M.P.  
J. C. Bloomfield, Esq., F.P.S., F.B.O.A.  
\*P. E. Brodie, Esq., O.B.E.  
\*P. H. Connell, Esq., M.D., D.P.M.  
The Rt. Hon. William Deedes, M.C., M.P.  
Miss Monica Furlong  
Ronald G. Gibson, Esq., O.B.E., M.R.C.S., L.R.C.P.  
\*J. D. P. Graham, Esq., M.D., F.R.C.P. (Edin.), F.R.C.P.(G.).  
Miss E. I. W. Hobkirk, C.B.E., T.D.  
\*N. B. Malleson, Esq., M.D., M.R.C.P.  
H. J. S. Matthew, Esq., M.D., F.R.C.P.  
A. B. Monro, Esq., M.D., Ph.D., M.R.C.P., D.P.M.  
Miss E. C. Murphy  
\*H. W. Palmer, Esq.,  
\*Timothy Raison, Esq.  
\*Michael Schofield, Esq.  
R. J. Werry, Esq., C.B.E.  
\*The Baroness Wootton of Abinger.

### *Co-opted member*

- \*Sir Aubrey Lewis, M.D., F.R.C.P.

### *Joint Secretaries*

- †E. G. Lucas, Esq., M.B., Ch.B., M.R.C.P.(E.), D.P.M., D(Obst).R.C.O.G.  
D. G. Turner, Esq.

---

\* Members of Hallucinogens Sub-Committee.

† As from 1st November 1968, N. R. W. Taylor, Esq., M.B., Ch.B. (Ed.), M.R.C.P. (Ed.)

UNRECORDED

Dr. E. A. Tamm, Chairman, U.S. Supreme Court, Washington, D.C.

COLLECTION

Members

Dr. G. B. Brown, Jr., M.D., M.P.H., M.C.P., M.R.C.S.

Dr. J. P. Bickman, M.D., M.P.H., M.C.P.

Dr. H. S. Gandy, M.D., M.P.H., M.C.P., M.R.C.S.

Arthur H. Hays, Jr., M.D., M.P.H., M.C.P.

Dr. C. H. Hays, M.D., M.P.H., M.C.P.

Dr. E. A. Hays, M.D., M.P.H., M.C.P.

Dr. H. C. Hays, M.D., M.P.H., M.C.P.

Dr. R. H. Hays, M.D., M.P.H., M.C.P.

Dr. M. H. Hays, M.D., M.P.H., M.C.P.

Dr. R. H. Hays, M.D., M.P.H., M.C.P.

Dr. R. H. Hays, M.D., M.P.H., M.C.P.

Dr. R. H. Hays, M.D., M.P.H., M.C.P.

Dr. R. H. Hays, M.D., M.P.H., M.C.P.

Dr. R. H. Hays, M.D., M.P.H., M.C.P.

Dr. R. H. Hays, M.D., M.P.H., M.C.P.

Dr. R. H. Hays, M.D., M.P.H., M.C.P.

Dr. R. H. Hays, M.D., M.P.H., M.C.P.

Dr. R. H. Hays, M.D., M.P.H., M.C.P.

Dr. R. H. Hays, M.D., M.P.H., M.C.P.

Dr. R. H. Hays, M.D., M.P.H., M.C.P.

Dr. R. H. Hays, M.D., M.P.H., M.C.P.

Dr. R. H. Hays, M.D., M.P.H., M.C.P.

Dr. R. H. Hays, M.D., M.P.H., M.C.P.

Dr. R. H. Hays, M.D., M.P.H., M.C.P.

Dr. R. H. Hays, M.D., M.P.H., M.C.P.

Dr. R. H. Hays, M.D., M.P.H., M.C.P.

Dr. R. H. Hays, M.D., M.P.H., M.C.P.

Dr. R. H. Hays, M.D., M.P.H., M.C.P.

Dr. R. H. Hays, M.D., M.P.H., M.C.P.

ADVISORY COMMITTEE ON DRUG DEPENDENCE  
(Chairman: Sir Edward Wayne, M.D., Ph.D., D.Sc., F.R.C.P., F.R.C.P.(G.))

Home Office  
Romney House  
Marshall Street  
London, S.W.1

1st November 1968

Dear Home Secretary,

I have much pleasure in sending you and your colleagues, the Secretary of State for Social Services and the Secretary of State for Scotland, the Report on Cannabis prepared by the Hallucinogens Sub-Committee of the Advisory Committee on Drug Dependence. The Report is submitted for consideration, with the complete endorsement of the Advisory Committee, subject to the minor reservations mentioned below.

Experience of cannabis within the United Kingdom has hitherto been too limited for comprehensive assessment. The Committee wish to pay tribute to the authors of the report for the many hours and painstaking study each contributed.

We do not pretend, however, that the Report can be regarded as final and definitive. On the contrary, as is made plain in the Report, there is a grave and urgent need for further expert study of all aspects of cannabis use and its consequences for the individual and society.

We think that the adverse effects which the consumption of cannabis in even small amounts may produce in some people should not be dismissed as insignificant. We have no doubt that the wider use of cannabis should not be encouraged. On the other hand, we think that the dangers of its use as commonly accepted in the past and the risk of progression to opiates have been overstated, and that the existing criminal sanctions intended to curb its use are unjustifiably severe.

The Sub-Committee's recommendations are clearly stated in paragraph 101 of the Report and fall into five main groups—research (recommendations (1) and (2)); recasting of the general drugs legislation (recommendation 3)); amendment of the existing law relating to cannabis (recommendations (4)–(9), (12)); synthetic cannabinoids (recommendation (11)); and a review of police powers of search and arrest in relation to drug offences generally (recommendation 10)). In sum they represent a plea for the use of cannabis to be judged more realistically in our codes of law and social behaviour, in the light of our present understanding and pending the further studies that are necessary. These recommendations do not in any way run counter to the obligations to control cannabis assumed by H.M. Government as a Party to the Single Convention on Narcotic Drugs 1961.

The Advisory Committee has accepted recommendation (10) and intends to undertake as soon as possible a review of the present powers of arrest and search in relation to drug offences. We hope that you and your colleagues will feel able to accept the remaining recommendations and to initiate the appropriate legislative and other action that their implementation demands.

I should now mention reservations to the Report. Those made by individual members of the Sub-Committee need no elaboration on my part. Miss Murphy sympathises with the reservation made by Mr. Schofield to paragraphs 85 to 90 and regrets the proposal to retain imprisonment as a possible penalty for minor first offences. She suggests that on summary conviction unlawful possession, sale or supply of cannabis should be punishable in the case of a first offence with a fine not exceeding £100; and for any subsequent such conviction or any conviction on indictment the penalties should be those recommended by the Sub-Committee. The Committee is generally of the view that imprisonment is no longer an appropriate punishment for those who are unlawfully in possession of a small amount.

The Committee has carefully reviewed the problem of trafficking in the light of the reservations expressed by Mr. Brodie and Mr. Schofield. The dilemma is that a maximum penalty on indictment for unlawful possession which might be expected to deter a large-scale trafficker would have to be inordinately larger than the harmfulness of the drug itself would justify. The Sub-Committee felt that if possession with intent to use and possession with intent to supply could not be distinguished in law, the penalties for unlawful possession should be matched more obviously to the known harmfulness of the drug than to the potential profitability of large-scale professional trafficking. Dr. Bannister, Miss Hobkirk and Dr. Gibson wish fully to associate themselves with Mr. Brodie. Other members of the Advisory Committee would be disposed to favour a somewhat higher penalty on indictment than that proposed in paragraph 89 but do not consider that the matter can be determined without review of the corresponding penalties for other drugs; the majority of us endorse the recommendation of the Sub-Committee.

In conclusion, may I add that in the Advisory Committee's view general publication of the Sub-Committee's Report would make a valuable contribution towards a more informed understanding of the problem of cannabis. We earnestly recommend to you and your colleagues that the Report should be published as soon as possible.

EDWARD WAYNE

*Chairman*

The Rt. Hon. James Callaghan, M.P.

# CONTENTS

	<i>Pages</i>
SECTION I Introduction . . . . .	1- 5
SECTION II Cannabis and its Clinical Features . . . . .	5- 7
SECTION III Cannabis in the United Kingdom . . . . .	7-12
SECTION IV Social Aspects of Cannabis use . . . . .	12-14
SECTION V A Comparison of Cannabis and Other Drugs . . . . .	14-16
SECTION VI General Conclusions and Recommendations . . . . .	16-34
RESERVATION By Mr. P. E. Brodie, O.B.E. . . . .	35
RESERVATION By Mr. Michael Schofield . . . . .	36-39
APPENDIX 1 Cannabis—A review of the International Clinical Literature by Sir Aubrey Lewis . . . . .	40-63
APPENDIX 2 History of the Development of International Control . . . . .	64-74
APPENDIX 3 World Health Organisation—Appraisal of Cannabis-type Dependence . . . . .	74-76
APPENDIX 4 Alphabetical list of Witnesses . . . . .	77
APPENDIX 5 Pharmacology of Cannabis . . . . .	78
APPENDIX 6 Summary of Statutory Provisions for the Control of Drugs in the United Kingdom . . . . .	79



## HALLUCINOGENS SUB-COMMITTEE

### Report on Cannabis

To: The Advisory Committee on Drug Dependence

#### SECTION 1—INTRODUCTION

##### *Appointment*

1. At your third meeting, on the 7th April 1967, you appointed us as a Sub-Committee to examine the question of misuse of cannabis and Lysergic Acid diethylamide (L.S.D.) in the United Kingdom, and problems arising. You invited us in particular to review available evidence on the pharmacological, clinical, pathological, social and legal aspects of these drugs. We have held seventeen meetings and now have pleasure in submitting our first report, which deals with the problems of cannabis.

##### *Procedure*

2. Our first enquiries were proceeding—without publicity—into the pharmacological and medical aspects when other developments gave our study new and much increased significance. An advertisement in *The Times* on the 24th July 1967 represented that the long-asserted dangers of cannabis were exaggerated and that the related law was socially damaging, if not unworkable. This was followed by a wave of debate about these issues in Parliament, the Press and elsewhere, and reports of enquiries e.g. by the National Council for Civil Liberties<sup>1</sup>. This publicity made more explicit the nature of some current "protest" about official policy on drugs; defined more clearly some of the main issues in our study; and led us to give greater attention to the legal aspects of the problem. Government spokesmen made it clear that any future development of policy on cannabis would have to take account of the Advisory Committee's report. Accordingly, we decided to give first priority to presenting our views on cannabis.

3. At the first meeting of the Sub-Committee we invited Dr. C. R. B. Joyce, Head of the Department of Pharmacology, London Hospital Medical College, to serve as a co-opted member for this study. We are especially grateful for all the help he has given to us.

4. We are also greatly indebted to Sir Aubrey Lewis, Emeritus Professor of Psychiatry, University of London, for his special contribution to our work. At an early stage of our enquiry we were informed that he had begun a survey of the salient international clinical literature on cannabis and L.S.D., and was willing to place this at our disposal when completed. We were glad to co-opt him to the Sub-Committee, and we have made extensive use of his advice as well as his material, which, with his agreement, we reproduce as Appendix 1 to this report.

##### *International Background*

5. Cannabis is a substance of many varieties, each differing in potency, and all widely used throughout the world. Its active principles have not been exhaustively investigated, and are not fully understood. The literature is vast and

<sup>1</sup> Report "Drugs and Civil Liberties"; published by the National Council for Civil Liberties.

contradictory. International discussion and decision-making have been handicapped by inexact or inadequate information. No previous attempt has been made to evaluate United Kingdom experience of this substance, or to compare that experience with that of other countries. United Kingdom adherence to the 1925 Geneva Convention<sup>1</sup>, which first placed Indian hemp under international control, was undertaken when this country had no experience of its effects.

6. In 1961 new restrictions<sup>2</sup> on cannabis and cannabis resin were introduced by the Single Convention on Narcotic Drugs, designed to impose much the same controls on production and distribution of these substances as are applicable to opium and other drugs, and to bring to an end the non-medical use of the drug in certain Eastern countries. In addition, these drugs were separately scheduled<sup>3</sup> with others of special danger such as heroin, because in the opinion of the World Health Organisation none of these drugs had an irreplaceable therapeutic value.

7. Since 1961 W.H.O. has introduced a new concept and terminology of "drug dependence" in place of the terms "addiction" and "habituation". Drug dependence, both physical and psychological, is presented as the interaction of three factors: the host (the individual), the agent (the drug), and the environment (society). Each dependence-producing drug demonstrates that interaction in its own way, varying with the characteristics of the individual and of the society in which he is placed (the W.H.O. appraisal of cannabis-type dependence is given in Appendix 3). As new criteria for judgment about drugs have been offered by W.H.O. new patterns of drug use have appeared. Even the term "narcotic" has been losing its identity, and there has been an understandable public tendency to try to simplify the classification of drugs, notwithstanding W.H.O. insistence on the individual character of the dependence produced by particular drugs. Lay opinion has readily recognised cannabis as "soft" in its own parlance, and found it difficult to understand why it is aligned with the opiates in the Single Convention, and in United Kingdom law.

#### *Ambit of Sub-Committee's Study of Cannabis*

8. Against this background our study has been focussed on three controversial topics: the effects of cannabis in different cultures, including its possible therapeutic use; the place of cannabis in the current United Kingdom drug "scene"; and the existing provisions relating to this drug in the Dangerous Drugs Acts.

9. Inevitably when the subject of study is an illegal activity, it is not easy to obtain reliable information or unbiased comment. Nevertheless, in the light of the evidence we received, we concluded that there was sufficient information available on which to reach a provisional judgment of the effects of cannabis in different cultures, and to form a reasonably clear picture of the use of cannabis in the United Kingdom.

10. To obtain first-hand evidence about the use and effects of cannabis in the United Kingdom we issued, by notice in the Press, a general invitation to people who might wish to express views to submit written evidence. This drew a very small response. We also invited a number of individuals who were known to be

<sup>1</sup> The Second Opium Conference Convention.

<sup>2</sup> A short account of the development of international control over cannabis is given in Appendix 2.

<sup>3</sup> Schedule 4 of the Convention.

concerned with our problems to give oral evidence. The names of these witnesses are listed in Appendix 4. We are grateful for the help that they gave us.

11. Throughout our study we have borne in mind that the use of cannabis is a world-wide problem, about which the international authorities have repeatedly expressed concern. We strongly support the principle of international collaboration against the misuse of drugs, and accept that international control must be based on a consensus of world opinion. At the same time we have thought it right not to restrict the scope of our review by consideration of external obligations. The United Kingdom drug problem is primarily for this country to resolve. It is entirely consistent with the W.H.O. concept of drug dependence to try to evaluate national factors bearing upon any particular drug problem. In the case of the United Kingdom and cannabis it is even more important to do so because evidence of the wider use of cannabis has come to notice so recently along with evidence of increased use of other drugs. In this respect the Single Convention has not been an obstacle to a wide-ranging review. Parties to the Convention have discretion to determine the stringency of penalties appropriate to particular drugs; and, in relation to drugs listed in the Fourth Schedule, they have discretion to adopt such additional measures of control as are necessary in "the prevailing conditions of the country".

12. It hardly need saying that the law alone cannot dispose of the problem of cannabis, or any other form of drug-taking. When the Interdepartmental Committee on Drug Addiction (The Brain Committee) reported in 1961 they felt able to say that the incidence of addiction to, and trafficking in, manufactured drugs was very small: "the cause for this seems to lie largely in social attitudes, to the observance of the law in general and to the taking of dangerous drugs in particular, coupled with the systematic enforcement of the Dangerous Drugs Act 1951 and its Regulations". The position today is very different. Convictions for drug offences have recently shown a sharp increase; many courts are faced for the first time with the task of deciding how to deal with the trafficker and the drug user; some immigrants from countries more familiar with cannabis-use have had to adjust to United Kingdom attitudes; and the task of the police has been growing more onerous, particularly in enforcing the law against young drug-takers without disruptive effect on the wider fabric of society. When drug misuse spreads, it becomes more difficult to strike the right balance between preventive, penal and remedial measures so as to prevent some individuals, for whom these measures are provided, being hurt by them rather than helped. We think that it may be helpful to state our own basic point of view.

### *Philosophy of Control*

13. The great majority of the restrictions currently imposed upon an individual's freedom in this country are defended on the ground that they are necessary for the safety or well-being of others. Although there may be differences of opinion as to how far such restrictions may legitimately be carried, at least it is clear that the law which requires a land-owner to obtain the approval of the local authority before he can erect a building upon his own property is not designed in the interests of his personal convenience; nor does anyone suppose that the law which fixes the maximum concentration of alcohol in the blood with which it is permissible to drive a motor vehicle is primarily intended to protect the drunken driver from himself.

14. Much more controversial, however, is the question whether, and if so, how far, it is justifiable for the law to restrict a man's freedom in what is presumed of be his own interest. On that issue there is considerable support today for J. S. Mill's dictum that "the only purpose for which power can rightly be exercised over any member of a civilized community against his will is to prevent harm to others. His own good, either physical or moral, is not a sufficient warrant". It was, indeed, on this very ground that the Wolfenden Committee put forward a recommendation, which Parliament subsequently accepted, that homosexual acts committed in private between two consenting adults should no longer be criminal; and it can be argued that by similar reasoning the use or sale of drugs in general, and of cannabis in particular, ought not to be the subject of criminal proceedings. Adult men and women, it is said, ought to be free to make their own decisions, in accordance with their personal tastes, and their own moral judgments, as to what substances they think it proper to consume. Added weight is, moreover, given to this argument by the multiplicity of restrictions on individual liberty which in any complex modern society are incontestably necessary for the common good. The greater the number and variety of unavoidable limitations on personal freedom, the more pressing, it may be said, is the urgency of preserving freedom of choice in what are matters of purely individual concern.

15. While we appreciate the force of this argument, it has to be recognized that no hard and fast line can be drawn between actions that are purely self-regarding, and those that involve wider social consequences. If, generally speaking, every one is entitled to decide for himself what he will eat, drink or smoke, the fact remains that those who indulge in gross intemperance of almost any kind will nearly always become a burden to their families, the public authorities or both. Indeed, examples of actions which never in any circumstances involve social repercussions are by no means easy to find. Nor can it be said that any consistent principle dictates the occasions on which the law at present intervenes to protect the individual from himself. Suicidal attempts at immediate and total self-destruction are not criminal; yet he who shortens his expectation of life by misusing heroin is liable to prosecution. Again, anyone over the age of 16 is entitled to ride a motor bicycle, although the statistics of self-destruction thereby<sup>1</sup> bear eloquent testimony to the lethal character of these machines.

16. Every proposal to restrict the freedom of the individual in his own supposed interests must, therefore, be decided on merits, in the light of the probable severity of any damage that he may inflict upon himself, and of the risk that in damaging himself he may also involuntarily be the cause of injury to others.

17. In addition, account must be taken of public attitudes. It is clear that interest in mood-altering drugs has much increased in the past few years. Explanations of this phenomenon can only be speculative. To some extent it could not unreasonably be ascribed to growing disenchantment with the highly competitive and threatening nature of contemporary society, or to the destruction of the natural environment. Again, it is notable that some of those who use drugs such as cannabis or L.S.D. appear to be searching for spiritual experience. They speak of "new levels of consciousness" and of "the heightening of sensual, visual and musical experience" in terms reminiscent of those employed by mystics. The students of the epidemiology of crowd behaviour will, moreover,

<sup>1</sup> In 1966 over half the number of riders of motor bicycles who were killed, or seriously injured, were in the age group of 15-19, i.e. 12,159 out of a total of 22,716.

be alive to the tendency of any new fashion, whether in contemporary speech, modes of recreation or forms of consumption, to spread throughout the community. In particular, a fashion that is illegal may be particularly tempting when the dangers are not clear.

18. Laws which seek to control the personal consumption of individuals are notoriously hard to enforce. We have to recognize that there comes a point at which public pressures become so powerful that it is idle to keep up attempts to resist them, the classic example in this context being the American prohibition of the consumption of alcohol. On the question whether this point has already been reached, or is likely to be reached in the near future, in relation to cannabis, differing opinions have been expressed to us. In any case, however, prohibition of the consumption of a substance which has become the normal accompaniment of social intercourse in all social classes must involve significantly more public disturbance than the continuance of a ban on the use of a drug which, in this country, is not, and never has been, in general use.

## SECTION II—CANNABIS AND ITS CLINICAL FEATURES

19. Cannabis is the generic name of Indian hemp (*C.Sativa*). Cannabis drugs are obtained from the unfertilized flowering tops and the leaves of the plant, which can be grown in climates varying from temperate to tropical. Cannabis *Sativa* is one species which may be divided into two groups: (i) *C.Indica*, which is grown in the Indian sub-continent or from seeds originating there, and (ii) *C.non-Indica*, which originates and is grown elsewhere. The potency does not differ as between these groups, provided that the conditions in which they are grown are the same. To yield a potent drug a high temperature and low humidity are necessary, and these conditions are seldom available naturally in the United Kingdom.

20. There are many local names for preparations of cannabis, e.g. the dried leaves may be termed marihuana, or dagga; the resin obtained from the flowering tops is usually called hashish, or charras. The Anglo-Saxon countries also have an extensive and continually changing vocabulary.

21. Cannabis contains a number of identifiable constituents. Recent research indicates that the tetrahydrocannabinols (THC) are active principles: some have been shown to be highly potent. A detailed description of the pharmacology of cannabis is given in Appendix 5.

### *Clinical Features*

22. In the following paragraphs we try to portray, so far as possible in layman's language, the effects of cannabis smoking (a) in moderation, (b) in excessive use on a particular occasion, leading to acute intoxication, and (c) in chronic use. This digest reflects the experience of a number of different cultures. In Section III we try to relate United Kingdom experience to this picture.

23. The effects of drugs which act upon the central nervous system are not determined solely by the drug and its dose. They are dependent also upon the person taking it, upon the immediate setting in which it is taken, and upon the cultural background. These are liable, in certain persons and in certain situations, to produce unexpected effects. Any account of the effects of a drug can only be

fully appreciated if this possibility is borne in mind. Some people can even take opiates regularly and become physically dependent on them without obvious deterioration in their health or social efficiency.

24. The response to cannabis may vary according to the form in which it is taken, and to the dose consumed. Where it is smoked, the effect normally comes on within half an hour, and lasts for two or three hours. When it is taken by mouth the onset is delayed sometimes up to two or three hours, and the effect may last twice as long. Because of the relatively rapid onset when the drug is smoked, experienced smokers can adjust their dosage to achieve the effect that they seek. When the drug is taken by mouth this adjustment is less easy to achieve. Apart from these considerations there does not appear to be any significant difference in effect between the many different forms of cannabis that are used throughout the world.

25. The taking of cannabis does not normally result in any characteristic physical effects except that of redness of the eyes. When the drug is smoked there may be some initial rawness and burning in the throat, and tightness in the chest. Upon occasions, particularly when the subject is initially anxious, headache may result. There may be nausea and vomiting. Once the effect of the drug has worn off there may be an increase in appetite, even ravenous hunger. There have been isolated reports in which death has been attributed to cannabis, but these are very rare and their validity cannot be confirmed.

26. The effects of cannabis in moderate amounts are predominantly psychological. They begin with a sense of excitement or tension, sometimes with apprehension or hilarity, followed as a rule by a sense of heightened awareness: colours, sounds and social intercourse appear more intense and meaningful. A sense of well-being is then usual. After this a phase of tranquillity and of passive enjoyment of the environment normally follows until, after a few hours, fatigue sets in and the subject sleeps. Although a "hangover" may follow this is not a common occurrence.

27. When the amount consumed is more considerable, or the subject is of a nervous disposition, or in an uncongenial social setting, symptoms of anxiety may be the first effects. These may be expected to settle, and the subject enters the euphoric or the passive state described above. On occasions, however, the anxiety may mount and symptoms suggestive of a deluded state ensue. As a rule these effects are not overwhelmingly intense. In most cases the subject retains his sense of contact with reality and remains aware of the fact that he is under the influence of a drug whose effects will pass off. On rarer occasions, usually with a heavy oral administration, the disturbance may be more profound.

28. The untoward effects of over-dosage as described above appear, in the great majority of cases, to pass off uneventfully as the drug clears from the system. They would be described in medical language as a toxic psychosis. There have been reports of a psychotic state persisting longer, even in rare cases giving place to what appears to be a prolonged schizophrenic illness, but it is difficult from these reports to assess the exact role of the cannabis in these circumstances.

29. Having reviewed all the material available to us we find ourselves in agreement with the conclusion reached by the Indian Hemp Drugs Commission appointed by the Government of India (1893-1894) and the New York Mayor's

Committee on Marihuana (1944), that the long-term consumption of cannabis in *moderate* doses has no harmful effects<sup>1</sup>.

30. There have been reports, particularly from experienced observers in the Middle and Far East, which suggest that *very heavy long-term* consumption may produce a syndrome of increasing mental and physical deterioration to the point where the subject is tremulous, ailing and socially incompetent. This syndrome may be punctuated on occasions with outbursts of violent behaviour. It is fair to say, however, that no reliable observations of such a syndrome have been made in the Western World, and that from the Eastern reports available to us it is not possible to form a judgment on whether such behaviour is directly attributable to cannabis-taking.

31. In Western society cannabis is sometimes taken with other drugs. There is no evidence to suggest that cannabis in man in customary doses enhances the effect of other drugs. When combined with another drug, cannabis in man does not cause this to exert an effect quantitatively greater than that which would result from the use of that drug alone in the same dosage; when cannabis is used with other drugs such as L.S.D., or occasionally alcohol, it is their effects, rather than those of cannabis, which predominate. Some persons who have taken L.S.D. frequently are apt to get a recrudescence of the hallucinogenic experience as a consequence sometimes of quite small doses of cannabis.

32. Those who believe that there is a syndrome of chronic excessive cannabis-taking describe symptoms of physical deterioration such as yellowing of the skin, tremor, wasting and unsteadiness of gait. Here again it is very difficult to make a confident judgment as to the role played by the drug and the changes brought about by other factors such as malnutrition. There is no evidence that in Western society serious physical dangers are directly associated with the smoking of cannabis.

### SECTION III—CANNABIS IN THE UNITED KINGDOM

#### *Prevalence*

33. In 1956 the United Nations Commission on Narcotic Drugs observed that it was clear that consumers of cannabis, as of opium, numbered millions in the world, and that geographically it was the most widespread drug of addiction.<sup>2</sup> Few countries have published numerical estimates of consumers or consumption, preferring to rely on such data as the quantities of drug seized and the number of convictions, for demonstrating the nature of their cannabis "problem". These details often reflect altered emphasis in enforcement and are not a reliable guide to scale or trends, without supplementary evidence about what is not being detected.

---

<sup>1</sup> "The moderate use (of hemp drugs) practically produces no ill effects. In all but the most exceptional cases, injury from habitual moderate use is not appreciable"—Indian Hemp Drugs Commission.

"From the study as a whole, it is concluded that marihuana is not a drug of addiction, comparable to morphine, and that if tolerance is acquired, this is of a very limited degree. Furthermore those who have been smoking marihuana for a period of years showed no mental or physical deterioration which may be attributed to the drug"—New York Mayor's Committee.

<sup>2</sup> Official Records of the Economic and Social Council, Twenty-second Session, Supp. No. 8 (E/2891), para. 133.

34. Our witnesses considered that there had been a gradual growth in cannabis use in the United Kingdom over the past 20 years, and the relevant statistics so far as they go are consistent with this. The following table shows the numbers of convictions for cannabis offences and of seizures by H.M. Customs and Excise, and the amounts seized, in each year since the end of the Second World War:

	Convictions	No. of Customs Seizures	Amounts Seized <sup>1</sup>
			<i>Kg</i>
1945	4	4	0
1946	10	?	2
1947	42	?	8
1948	46	32	13
1949	60	38	25
1950	79	65	41
1951	127	46	48
1952	87	70	19
1953	83	44	27
1954	144	68	118
1955	115	48	82
1956	103	37	114
1957	51	36	237
1958	99	32	101
1959	185	36	282
1960	235	84	126
1961	288	66	107
1962	588	60	105
1963	663	68	150
1964	544	96	336
1965	626	84	250
1966	1,119	72	258
1967 <sup>1</sup>	2,393	87	192

35. In the early part of the period, most seizures were of green plant tops, found in ships from Indian and African ports and thought to be destined for petty traffickers in touch with coloured seamen and entertainers in London docks and clubs. By 1950 illicit traffic in cannabis had been observed in other parts of the country where there was a coloured population. In 1950, however, police raids on certain London jazz clubs produced clear evidence that cannabis was being used by the indigenous population; by 1954 the tendency for the proportion of white to coloured offenders to increase was well marked, and in 1964 white persons constituted the majority of cannabis offenders for the first time. The recent trend can be seen from the following figures:

Cannabis offenders	1963	1964	1965	1966	1967
White	296	284	400	767	1,737
Coloured	367	260	226	352	656

<sup>1</sup> Before 1967 amounts seized by the police were not comprehensively recorded and do not figure in the table. In 1967 the total amount of cannabis involved in 2,734 prosecutions was 102.681 Kg. and 457 cannabis plants. The weights shown are simple aggregations of reported quantities of herb and resin.

Several witnesses discounted the significance of immigrant influence on cannabis-use, and asserted that international movement of young people and new attitudes to experimentation with mood-altering drugs were the main explanation of increased cannabis use by white persons in the United Kingdom since 1945.

36. The Times advertisement on 24th July 1967 claimed that

"The use of cannabis is increasing, and the rate of increase is accelerating. Cannabis smoking is widespread in the universities, and the custom has been taken up by writers, teachers, doctors, businessmen, musicians, artists and priests. . . . Smoking the herb also forms a traditional part of the social and religious life of hundreds and thousands of immigrants to Britain. . . . Uncounted thousands of frightened persons have been arbitrarily classified as criminals. . . ."

We invited witnesses to estimate the numbers of people who had tried cannabis and of those who used it regularly. Only guesses were forthcoming and these ranged between 30,000 and 300,000. We could find no basis for constructing estimates of our own. It is clear from the convictions recorded that such use of cannabis as there is, is widely spread throughout the country. Most witnesses felt that cannabis-use would continue to be popular and to spread for some time yet. As to speed of growth, we doubt whether the annual doubling of convictions in 1966 and 1967 reflects a corresponding growth in the use of cannabis in that period. One explanation might be that the formation of drug squads in many police areas in the past three years has been responsible for more successful police action against cannabis offenders than previously.

### *Supply*

37. The annual volume of seizures by the Customs has been fairly steady over the past decade or so. Individual cases have shown that large supplies have been brought in by highly organised smuggling. According to witnesses, however, there is also a substantial traffic in small amounts carried by persons returning from holidays abroad, or sent—mainly to immigrants—by post from their home countries. Several witnesses felt that "amateur" smuggling was now becoming more organised, with a more standardised drug in the illicit market. Lebanon, Pakistan and Cyprus were mentioned as major sources. It was suggested that hashish now formed some eighty per cent of the traffic.

38. Within the United Kingdom, we were told, the competition of the "amateur" smuggler has made the illicit traffic a very loosely organised and often casual activity not exploited to any significant extent by professional criminals. We were informed that the price of cannabis on the illicit market has shown little fluctuation in recent years beyond what might be expected for varying quality, and that there has been no shortage of supplies.

### *Users*

39. All our witnesses were agreed that cannabis-smoking in the United Kingdom was a social rather than a solitary activity, casual and permissive like the taking of alcohol. Friend introduced friend; the drug was readily enough available; if it did not suit the initiate, no one was the loser. The collective impression was that cannabis "society" was predominantly young and without class barriers. It resented middle-aged society's judgment on alcohol and

cannabis. It was not politically inclined and our witnesses saw no special significance in the popularity of cannabis among members of radical movements.

40. Some witnesses thought that it was possible to distinguish particular social groups within cannabis "society" and mentioned staff and students in universities and art schools, jazz and pop musicians and entertainers, film makers and artists, and others engaged in mass media of publicity. They explained this part of the pattern by the particular appeal of the drug to those interested in creative work and self-expression. But they also mentioned that there were growing numbers of workers in unskilled occupations who smoked cannabis for pleasure at week-ends as their equivalent to other people's alcohol. The aspect that some of our witnesses thought most worthy of note was the broad similarity of attitude to cannabis and its dangers amongst all these groups.

41. The "professional" group, for example, was described to us as fundamentally law-abiding; discriminating in the use of cannabis for introspection and elation as well as for social relaxation; "involved in life", often to the point of social protest; not much interested in experiments with L.S.D; generally disinclined to take amphetamines or alcohol (which was regarded as much more damaging than cannabis); and tending to stop the use of cannabis on marriage, or when the risk of prosecution was felt to be inimical to career prospects. The "unskilled" group was said to be similarly industrious and law-abiding and to see nothing wrong or harmful in its use of cannabis.<sup>1</sup>

42. Outside these groups the picture was much more confused and in flux. There were young people who had failed to adjust to university life or professional training or regular work, and who had "dropped out"; actively discontented and rebellious teenagers, looking for "kicks", who were prepared to take any drug offered to them; their weaker associates who took cannabis to avoid rejection by the group; and a few who were severely unstable and sought escape from their problems in a multiple drug use that included cannabis.

43. None of our witnesses felt able to estimate the relative sizes of the groups that they identified. We judged that they considered the responsible law-abiding regular users to be in the majority. They could tell us little about the use of cannabis by immigrants and we did not find any clear links between this and cannabis-smoking by other groups. Proportionately to their numbers there have been more convictions recorded against immigrants than indigenous United Kingdom nationals and we have no doubt that a number of those who have recently come to this country from areas where cannabis-smoking has been traditional have not given up their habit. We made special enquiry without success in an attempt to discover whether the smoking habits of immigrants made

---

<sup>1</sup> A similar picture of attitudes was found by investigators in Oakland, California, who obtained the confidence of youngsters, mostly Mexicans and Negroes, through providing them with club amenities without strings. The youngsters were firm in their conviction, based on their own experience, that the use of such drugs as marihuana resulted in harmless pleasure and increasing conviviality, did not lead to violence, madness, or addiction, was less harmful than alcohol, and could be regulated. They cited case after case of individuals known to them who had not been harmed in health, school achievement, athletics or career as a result of a habit of smoking marihuana; and they were not themselves interested in being helped to abstain from the drug. Most had taken up marihuana-smoking from a simple desire to emulate older boys, and not by reason of emotional disturbance or social stress. On the contrary the group regarded those who took drugs to excess as having a weak personality, and marihuana-users generally as making a positive effort to be in the main stream of organised society and reality.

them particularly vulnerable to enforcement or caused unusual problems of social adjustment with local communities.

### *Use and effects*

44. Witnesses knowledgeable about patterns of use told us that although some people smoked every day without interference to work or social life, the typical user probably took the drug once or twice a week, aiming at a "high" of 2 or 3 hours. More intensive daily smoking tended to make the user withdraw from other activity, particularly if he was not in a full-time occupation. Some people responded badly to the drug and a small number of initiates gave up smoking quickly because they disliked feelings of nausea or burning in the chest. There was little bias as between leaves or resin, but most smokers were interested in distinctive effects and there were individual preferences for material from particular sources. Experience and the heightened suggestibility due to the drug allowed the regular smoker to achieve the elation he sought with successively smaller doses. There was no physical tolerance; and "hangovers", although occasionally severe, were extremely rare.

45. We found a large measure of agreement among witnesses about the principal subjective effects of the drug. Most gave chief emphasis to its relaxing and calming effect. Several medical witnesses speculated that it had appeared to be beneficial for young patients during depression and also to have helped ex-addicts to abstain from heroin. Others contested this. Some suggested that cannabis tended to concentrate the user's attention on his anxieties, aches and pains, without helping him to resolve them, and to induce passivity without removing suffering. Apart from relaxation, the main sensations looked for were euphoria, tolerance of environment, and—at a more intellectual level—heightened awareness of self. Much reference was made to the varying influence of the circumstances in which the drug was used, little to altered visual or sensory perception. It was generally agreed that it was dangerous to drive a motor vehicle under the influence of cannabis not so much because driving ability was over-estimated (as with alcohol) as because of possible distortion of perception of depth and perspective.

46. We were told by more than one medical witness that cannabis-users did not seek treatment, and, when seen for other reasons, did not feel that treatment was needed for a cannabis habit. One medical witness mentioned having seen a few cases of acute psychosis following cannabis-use, but did not feel completely satisfied that cannabis had been the cause. The same witness was impressed by evidence of severe disturbance in a sample of chronic cannabis-users, but as this group was self-selected this information seemed to be of doubtful relevance to the generality of experience of cannabis-taking. A review carried out by the Ministry of Health has been reported to us as showing that 82 cases were admitted to hospital in 1966 with the diagnosis of drug addiction where cannabis was mentioned as the only or one of the drugs concerned. Further data were obtained in 79 of these cases. In 29 cases further evidence as to the significance of cannabis in leading to admission to hospital was inconclusive because of inadequate data or the patients' concurrent misuse of other drugs. Of the remaining cases, 8 had psychoses or confusional states, and 9 had other mental symptoms (not psychoses), which appeared to be attributable primarily to using cannabis, although other drugs might have been taken. 20 cases showed evidence of a way of life in

which cannabis had played a significant part in the social deterioration which had led to admission, although acute symptoms had not been the immediate cause. In this group the concurrent misuse of other drugs was a significant consideration. In 13 cases cannabis appeared to be irrelevant as a reason for admission to hospital. Thus in 42 cases the evidence was inconclusive or irrelevant and in the other 37 other drugs might also have been used.

#### SECTION IV—SOCIAL ASPECTS OF CANNABIS USE

47. Much of the main controversy about the dangers of cannabis has attached to the claims that its use leads to opiate addiction and to the commission of violent crime. We paid particular attention to these aspects in our review of the salient literature and of evidence as to United Kingdom experience.

##### *Progression*

48. Hitherto discussion of the question whether there is a progression from cannabis to heroin has relied chiefly upon evidence from retrospective investigations of the previous habits of heroin-users. In the nature of the case such evidence can never be conclusive. On the assumption that the use of cannabis is still confined to a fairly small section of the population, evidence that a high proportion of heroin addicts have previously taken cannabis would only suggest that the marihuana-smoker is more likely than the non-smoker to take to heroin; what it cannot do is to give any clue to the frequency of such a progression among marihuana-smokers generally. For what they are worth, such retrospective investigations (which incidentally more commonly deal with American than with British experience) indicate that many heroin addicts have previously sampled other drugs including cannabis.

49. Most observers discount any pharmacological action disposing the cannabis-smoker to resort to other drugs, and look for other explanations. Some have suggested that in order to obtain their supplies cannabis-users must inevitably resort to the criminal underworld where opiates are also available. According to our witnesses supplies of cannabis in this country are not necessarily obtained in the same places as heroin. However, social mixing of some cannabis and some opiate-users takes place and involvement with opiates could thus occur on a socio-cultural basis.

50. Others suppose that dissatisfaction with the relief or pleasure to be obtained from cannabis leads users on to other drugs, and a minority postulate a predisposition to cannabis which is also a predisposition to heroin. These suggestions arise because most observers obtained their information from drug-users who are patients or offenders. These are often the multiple drug-users who rarely avoid trouble and are frequently to be found in clinics and before the courts. There appears to be a particular group of emotionally deprived, disturbed personalities who have tried most of the illegal drugs (including cannabis) before becoming heroin addicts. In fact most heroin addicts are multiple drug-users and have the emotionally impoverished family background not infrequently found in other delinquent groups, such as high incidence of broken homes, poor school record, police record, unemployment and work-shyness. Cannabis-users with similar personalities and backgrounds may have a predisposition to heroin,

amphetamines and other illegal drugs. It is the personality of the user, rather than the properties of the drug, that is likely to cause progression to other drugs.

51. It can clearly be argued on the world picture that cannabis use does not lead to heroin addiction. So far as the United Kingdom is concerned no comprehensive survey has yet been made, but a number of isolated studies have been published, none of which demonstrate significant lines of progression. Our witnesses had nothing to add to the information already available, and we have concluded that a risk of progression to heroin from cannabis is not a reason for retaining the control over this drug.

### *Crime*

52. Published statements on links between cannabis and crime tend to confuse the consequences of enforcing legal restrictions on non-conforming drug users with alleged criminogenic effects of cannabis-smoking itself. Since possession of cannabis is generally prohibited, the user found in possession automatically acquires a criminal record. To obtain his supply, an illicit source must also be involved.

53. A main charge against cannabis overseas, but not in this country, has been that its use makes people commit crimes of violence, because it removes inhibitions. There have been reports of outbursts of wild agitation and unprovoked violence by chronic users. Other observers have denied any direct link with violent crime. The Indian Hemp Drugs Commission concluded that "the connection between hemp drugs and ordinary crime is very slight indeed", but that excessive use did, in some very rare cases, make the consumer violent; 600 witnesses were asked by the Commission whether they knew of cases of homicidal frenzy, and very few did. A considerable majority of these witnesses did not consider that the drug produced unpremeditated crimes of violence, and some said, as other writers have since, that there is a negative relation because cannabis makes men quiet as a rule. The New York Mayor's Committee reported to similar effect: many criminals might use the drug, but it was not the determining factor in the commission of major crimes.

54. Probable reasons for this divergence of views are: criminals in some countries have based their defence on alleged cannabis-intoxication which provoked behaviour which they could not remember and for which they could not be held fully responsible; many of these users had combined cannabis with opium, heroin, amphetamine, barbiturate or alcohol, and it was impossible to identify which of these if any was to blame for an individual's criminal behaviour; samples of persons investigated have mostly been small and the history of drug-taking, its duration and its degree in each individual has been provided exclusively by the man himself, who often believed it to be in his interest to lie about it.

55. The most that emerges from the welter of conflicting statements is that an excessive dose of cannabis may lead to an attack of disturbed consciousness, excitement, agitation, or panic, and reduce self-control. The extent to which the affected person may commit a violent crime in this state of mind depends much more on his personality than on the amount or preparation of cannabis which he has been taking. The evidence of a link with violent crime is far stronger with alcohol than with the smoking of cannabis.

56. In the United Kingdom the taking of cannabis has not so far been regarded, even by the severest critics, as a direct cause of serious crime. It is not, of course, disputed that a number of criminals take cannabis as many do alcohol. We sought further evidence on these matters, but we found that for lack of reliable methods of detecting cannabis in the body the police were not in a position to offer any information.

## SECTION V—A COMPARISON OF CANNABIS AND OTHER DRUGS

57. Cannabis has intrinsically different effects from most other drugs. As with most other drugs its effects are very variable, and depend not only on the substance consumed but on the person and his social setting. To this extent it is not easy to make any close comparison between cannabis and other drugs in common social use. Nevertheless, science, the law and social attitudes tend to create a common frame of reference for all drugs and, provided the risks of oversimplification are borne in mind, comparison of cannabis with other substances that affect the mind is relevant to our study even though it must necessarily be in broad terms.

58. Unlike the "hard" drugs, such as heroin, cannabis does not produce tolerance. Consuming the same, sometimes even a smaller, amount of cannabis continues to produce the original effect. Unlike heroin, cannabis does not cause physical dependence and withdrawal effects do not occur when its use is discontinued. The majority of users regard cannabis as pleasurable and so continue its use, but if they decide to give it up they do not usually experience difficulty. Here it might be said is a form of psychological dependence, but it is of a different order from the intense psychological dependence which normally follows the use of the "hard" drugs. The "hard" drugs are also physically dangerous: the direct result of over-dosage may be death, and possible indirect results are ill-health and even death, from pneumonia, malnutrition and infection due to dirty syringes. The social effects of taking opiates and cannabis are very different. The opiate-user frequently gets drawn into a "junkie" sub-culture where obtaining the drug and all that goes with it becomes a way of life, and this inexorably leads to gross deterioration. This is not true of cannabis, the use of which by itself does not appear to impair the subject's efficiency. In Western society it is clear that some adolescents form aberrant social groups around cannabis-taking; but where these are personally or socially deleterious it is not clear that the cannabis itself is primarily to blame. The use of other drugs as well as cannabis is often to be found in such groups and the social implications of adolescent alienation are probably of greater significance than the actual drugs.

59. In this country the barbiturates and the so-called minor tranquillizers such as meprobamate and chlordiazepoxide are widely prescribed by doctors and are all capable of producing varying degrees of tolerance and physical and psychological dependence. Over the last ten years the death rate from barbiturate poisoning (both accidental and suicidal) has doubled and cases of self-poisoning necessitating hospital admission have trebled. The amphetamines are also widely prescribed, and tolerance, psychological dependence and psychosis have become increasingly recognised as a consequence of their excessive use. Misuse of intravenous methylamphetamine (Methedrine) and related compounds carries with it the same risks of syringe-transmitted infections as are associated with heroin. No similar hazards have been observed to result from the use of cannabis.

60. We shall in due course be submitting a report on our study of L.S.D. and therefore do not propose to deal with it at length here. Suffice it to say that L.S.D. and other hallucinogens have for some while had a limited role in research and in experimental psychiatry. It is only in the last few years that these drugs have been used illicitly. It is still not easy to reach a clear assessment of their effects and dangers in this context, and it is therefore extremely difficult to make a clear comparison between them and cannabis. The subjective reports of those taking hallucinogens, both in clinical and in illicit conditions, suggest a response that is very much more intense. Under the influence of L.S.D. subjects may be so dangerously deluded that serious, even fatal, accidents occur, but there are no reliable reports of similar episodes among those who have taken cannabis alone.

61. Cannabis is often described as an "intoxicant" and frequently compared with alcohol. Both produce relaxation and euphoria; both, taken in excess, impair judgment, speed of reaction, and co-ordination. Cannabis more readily distorts perception of time and space. Unlike alcohol, cannabis is not known to enhance the effects of certain other drugs, induce a limited degree of tolerance or, over the long term, cause physical damage to body tissues directly or by dietary deficiency. Cannabis may well, however, be at least as dangerous as alcohol as an influence on driving or other responsible activity. This sharpness of similarity and contrast is considerably blurred by the effects of very different social settings. Alcohol in our culture is in general use and not illegal. Cannabis is used by a minority, and mostly against the law. Drinking patterns vary widely by country and by social class. Though many drinkers, particularly those who can be regarded as alcoholics, drink to get drunk, alcohol-users normally take a small amount, seeking only mild effects and a little social relaxation. The patterns of cannabis-smoking are more obscure. Experienced cannabis-users often smoke cannabis for a mild intoxication that they feel will improve their performance in a particular social setting or activity, e.g. playing jazz. Many smokers, however, take the drug in anticipation of a few hours of intense mental elation without the aggressive impulses often associated with taking large amounts of alcohol. All in all, it is impossible to make out a firm case against cannabis as being potentially a greater personal or social danger than alcohol. What can be said is that alcohol, with all its problems, is in some sense the "devil we know"<sup>1</sup>; cannabis, in Western society, is still an unknown quantity.

62. Tobacco-smoking is, of course, the most widespread "drug-addiction" in our society. The immediate effects are well known and substantially harmless. Physical dependence does not appear to occur, but habituation is intense, and people find great difficulty in giving up smoking. The long-term dangers of smoking in inducing cancer of the lung, in exacerbating chronic bronchitis and in contributing to coronary thrombosis are great. Nevertheless the danger that smoking may produce lung cancer was for a long while not apparent. It is not possible to say that long continued consumption, medically or for pleasure, of cannabis, or indeed of any other substance of which we have not yet had long experience, is free from possible danger.

63. To make a comparative evaluation between cannabis and other drugs is to venture on highly subjective territory. The history of the assessments that have been given to different drugs is a warning against any dogmatic judgment.

---

<sup>1</sup> In 1966, 66,468 males and 4,031 females were convicted of offences of drunkenness.

64. Tobacco was once the object of extreme judgments. In the 17th century a number of countries attempted to restrict or forbid its use, but without success. In 1606 Philip III of Spain issued a decree restricting its cultivation. In 1610 in Japan restrictions were issued against planting and smoking tobacco, and there are records of at least 150 people apprehended in 1614 for buying and selling it contrary to the Emperor's command, who were in jeopardy of their lives. At the same time, in Persia, violators of the laws which prohibited smoking were tortured, and in some cases beheaded. The Mogul Emperor of Hindustan noted "as the smoking of tobacco has taken a very bad effect in health and mind of so many persons I order that no person shall practice the habit". Smokers were to have their lips slit. In 1634 the Czar of Russia forbade smoking, and ordered both smokers and vendors to have their noses slit, and persistent violators to be put to death. Medical reports of the period are full of accounts of its deleterious effects on mental and physical health.

65. Even non-alcoholic beverages that are now in common use have, in their time, been regarded as gravely dangerous. As late as the beginning of this century the Regius Professor of Physic at Cambridge along with the most distinguished pharmacologist of the time described in a standard medical textbook the effects of excessive coffee consumption: "the sufferer is tremulous and loses his self-command; he is subject to fits of agitation and depression. He has a haggard appearance. . . . As with other such agents, a renewed dose of the poison gives temporary relief, but at the cost of future misery". Tea was no better. "Tea has appeared to us to be especially efficient in producing nightmares with . . . hallucinations which may be alarming in their intensity. . . . Another peculiar quality of tea is to produce a strange and extreme degree of physical depression. An hour or two after breakfast at which tea has been taken . . . a grievous sinking . . . may seize upon a sufferer, so that to speak is an effort. . . . The speech may become weak and vague. . . . By miseries such as these, the best years of life may be spoilt".

66. With such earlier judgments in mind we do not wish to make any formal or absolute statement on a comparison of cannabis and the other drugs in common social use. All we would wish to say is that the gradations of danger between consuming tea and coffee at one end of the scale and injecting heroin intravenously at the other, may not be permanently those which we now ascribe to particular drugs.

## SECTION VI—GENERAL CONCLUSION AND RECOMMENDATIONS

67. The evidence before us shows that:

An increasing number of people, mainly young, in all classes of society are experimenting with this drug, and substantial numbers use it regularly for social pleasure.

There is no evidence that this activity is causing violent crime or aggressive anti-social behaviour, or is producing in otherwise normal people conditions of dependence or psychosis, requiring medical treatment.

The experience of many other countries is that once it is established cannabis-smoking tends to spread. In some parts of Western society where interest in mood-altering drugs is growing, there are indications that it may become a functional equivalent of alcohol.

In spite of the threat of severe penalties and considerable effort at enforcement the use of cannabis in the United Kingdom does not appear to be diminishing. There is a body of opinion that criticises the present legislative treatment of cannabis on the grounds that it exaggerates the dangers of the drug, and needlessly interferes with civil liberty.

68. The controversy that has arisen in the United Kingdom about the proper evaluation of cannabis in the list of psycho-active drugs, should be resolved as quickly as possible, so that both the law and its enforcement as well as programmes of health education, may be relevant to what is known about the dangers of cannabis-smoking in this country, and may receive full public support. What are those dangers?

69. There are still a number of imponderables. The substance most commonly used in the United Kingdom is the concentrated form of resin, more potent than the leaf products used widely in America and in Asia. The active principles of this substance have not yet been fully identified; the immediate effects of the burning process are not yet understood; and the long-term physical and mental effects, if any, of chronic use have not been scientifically tested. There is at present no routine method of detecting the drug in body fluids in the user.

70. Notwithstanding the limits of present knowledge, it is clear that cannabis is a potent drug, having as wide a capacity as alcohol to alter mood, judgment and functional ability. In that sense, we agree with the conclusion<sup>1</sup> recently published in the U.S.A. by the Council on Mental Health, the Committee on Alcoholism and Drug Dependence of the National Research Council, and the National Academy of Science that cannabis is a "dangerous" drug. But we think it is also clear that, in terms of *physical* harmfulness, cannabis is very much less dangerous than the opiates, amphetamines and barbiturates, and also less dangerous than alcohol. The implications of its mental effects are much less clear. Psychosis or psychological dependence, it is true, do not seem to be frequent consequences of cannabis-smoking. But the subjectivity of the mental effects of cannabis makes it particularly difficult to measure the total effect of cannabis experience on any individual, or to assess what changes even a moderate and seemingly responsible habit might bring in the smoker's relationships with family and friends, study or work. We think that too little is known about the patterns of use to predict that in Western society it will produce social influences similar to those of alcohol. It was significant that even those of our witnesses who saw least danger in the drug were concerned to discourage juveniles from using it.

71. We conclude, therefore that in the interests of public health it is necessary to maintain restrictions on the availability and use of this drug. For the purpose of enforcing these restrictions there is no alternative to the criminal law and its penalties. As we have already stressed however (paragraph 15) it is difficult to draw a hard and fast line between actions that are purely self-regarding and those that involve wider social consequences. It is particularly difficult to do so when the matter at issue is the use of a drug with wide appeal as a relaxant, and the possibly deleterious effects of which—at least in the United Kingdom—are still unknown. Smoking cannabis may be an act of simple enjoyment, a demonstration

---

<sup>1</sup> JAMA, the Journal of the American Medical Association. Vol. 204, No. 13, June 24th, 1968.

of self-neglect or an indication of social irresponsibility. Distinctions such as these cannot be written into the law, but can and should be recognised by the courts in their consideration of cannabis offences and offenders. The measures that we now suggest are intended to meet the needs of the immediate situation as we see it. They should be kept under review in the light of experience and research.

### *Legalisation*

72. Some of our witnesses argued that possession of cannabis should be legalised at once. Most of us felt that the uncertainties just mentioned ruled this out in the near future: legalisation could not be reversed if the cost of "accepting" cannabis were later found to be higher than expected; and even if cannabis were ultimately found to be no more, or even less, harmful than alcohol, there would still be room for debate whether it would be in the interests of public health to extend the range of socially acceptable drugs. Those of us who did not wish to rule out the possibility of eventual legalisation agreed that this could not be introduced before an exhaustive study of the problems of transition and of necessary safeguards had been made. Safeguards against adulteration would have to be investigated and standards of inspection would have to be agreed; sources of supply would have to be considered; importation from countries where the supply was still illegal would present a particularly difficult problem; it might be necessary to devise a licensing system for manufacturing synthetics; much thought would have to be given to the mode of distribution; an attempt would have to be made to define permitted limits of intoxication and methods of detection; and special measures to protect minors would have to be incorporated into any such new law. It was clear therefore to all of us that the legalisation of cannabis would involve difficult and complex problems most of which have not been given much thought even by those who favour legalisation. Nevertheless we do not entirely discount the possibility that properly organised research may one day produce information which could justify further consideration of the practical problems of legalisation.

### *Research*

73. It will be clear from this Report that there is still a great deal that we do not know about cannabis. Precise description of the chemical structure and behavioural effects of its active constituents has not yet proceeded far. Chemical research on the synthesis of the active principles of cannabis and some of their derivatives has only recently begun to yield results. Accurate scientific knowledge is lacking of the personality of those who habitually use cannabis, of the significance of the circumstances in which it is used, and of the psychological, physiological and social consequences of its long-term use. No detailed information is available about the extent of cannabis use by immigrants and the effects of this on United Kingdom social conditions. No data exist on which to form reliable estimates of prevalence or to make meaningful projections of the possible growth of cannabis-taking, still less to gauge the social consequences of any such growth. The social consequences of the advent of synthetics may be important, but little scientific information has so far been assembled to guide us. Further study of all these things will be difficult and time-consuming. In a matter as complex and continuously changing as that of cannabis use in our society it is not reasonable to suppose that research alone will provide sure answers to all

the problems. We were glad therefore to learn of the setting up, by the Medical Research Council, of three working parties specially to study problems of drug dependence, and of the formation of the new Institute for the Study of Drug Dependence. We have no doubt that these developments will lead to a much needed enlargement of enquiry into the cannabis problem and we most strongly urge that every encouragement, both academic and financial, be given to suitable projects.

74. It is not within our competence to make detailed recommendations as to the kind of investigation that should be undertaken; but we think it useful to indicate the general areas in which research might be most immediately helpful. Information is needed about the pharmacological effects of natural cannabis, in its different forms, both on man and on experimental animals. The effects of synthetic derivatives should be studied as a matter of urgency. There is a pressing need for chemical tests, both qualitative and quantitative, to detect the presence of cannabis and its metabolites in the body fluids of users. Clinical reports of ill-effects, both immediate and long-term, following cannabis use are still haphazard and ill-documented. There is a need methodically to investigate possible cases of cannabis psychosis and, in particular, to study the concomitant effect of other drugs and of the abuse of alcohol in these cases. The possible therapeutic use of cannabis and its synthetic derivatives also deserves further investigation. There is also an immediate need for sociological studies to establish the prevalence of usage, and to define more closely the different social groups, and the personality patterns, of consumers of cannabis as well as the effects of the drug-use upon their social efficiency. More information is urgently needed on the incidence of cannabis-taking by adolescents, and the extent to which this is made up of the transient use of the drug at parties and week-ends and of sustained regular use. It would be helpful to see if there are differentiating characteristics between users who take only cannabis, users who take other drugs besides cannabis, and people who used to take cannabis but have now given up all drug-use.

75. The present legal position is unhelpful to research. Cannabis may be obtained for research if the Home Office gives authority, but, as the law stands, any research requiring it to be smoked by human beings is illegal except on Crown premises. There is considerable uncertainty as to whether hospital or university premises are exempt. These legal uncertainties have made it virtually impossible to undertake this kind of research. However, merely to remove the restriction on premises would be insufficient to allow the relevant research to be carried out. As social factors are so important in the use of cannabis qualified workers should be free to study these phenomena by observation and laboratory and social experiments without the risk of prosecution.

#### *The need for changes in the law relating to cannabis<sup>1</sup>*

76. The maximum penalties for any offence relating to cannabis are, on summary conviction, a fine not exceeding £250 or imprisonment for not more than 12 months or both, and, on conviction on indictment, a fine not exceeding £1,000 or imprisonment for not more than 10 years or both. These penalties are common to all drugs prohibited or controlled under the Dangerous Drugs Act

---

<sup>1</sup> See Appendix 6 for a summary of the main provisions of the law relating to the control of drugs.

1965, including heroin. Originally introduced in the Dangerous Drugs Act of 1920 (to deal with traffic in opiates) and increased by the Dangerous Drugs and Poisons (Amendment) Act 1923, they were applied to offences relating to Indian hemp by the Dangerous Drugs Act 1925 and have since remained virtually unchanged.

77. Article 36 of the Single Convention obliges Parties to penalise intentional offences of possession (and trafficking) but not of use. The selection of penalties is left for domestic law to determine. The Dangerous Drugs Act 1965 imposes the same penalties for unlawful possession as for unlawful supply. A high maximum penalty for possession has been justified in the past by the argument that it must allow for due punishment of the trafficker, who is more likely to be found in possession than in the act of supply.

78. While maximum penalties for dangerous drugs offences have stood unaltered, the general law on the treatment of offenders has been changed considerably. More alternatives to custodial treatment have been developed, and greater flexibility introduced into sentencing. Scientific studies have increased understanding of the origins of anti-social behaviour and of the relative effectiveness of deterrent and other approaches. In common with offenders against other laws the drugs offender has no doubt benefited by these developments. At the same time it seems to us that the penalties for cannabis offences have gone unreviewed for too long. Now that experience here (and overseas) has shown misuse of drugs to be a complex and rapidly changing social problem, it seems to us essential that the law should progressively be recast to give greater flexibility of control over individual drugs, and of adjustment of the relevant penalties in accordance with the dangers presented by a specific drug or form of drug-taking.

79. The tables on pages 22-27 give analyses of:

- A. penalties inflicted for cannabis offences under the Dangerous Drugs Act 1965 in the years 1964-1966 and for offences under the Drugs (Prevention of Misuse) Act 1964 in the years 1965 and 1966;
- B. penalties inflicted in 1967 for cannabis offences, other Dangerous Drugs Act offences, and offences under the Drugs (Prevention of Misuse) Act;
- C. cannabis prosecutions and disposals in 1967 related to age groups and weights of the drug.

80. These tables show some notable features about the cases dealt with by courts in 1967. Over two-thirds of all cannabis offenders (and nearly all found guilty of possessing more than 1 Kg.) did not have a record of non-drug offences. Nine out of ten of all cannabis offences were for possessing less than 30 grams. About a quarter of all cannabis offenders were sent to prison (or borstal, detention centre, or approved school); only about 13% were made subject to a probation order; and about 17% of first offenders were sent to prison. There was notably greater emphasis on fines and imprisonment for possession of cannabis than of other dangerous drugs, but less use of probation and conditional discharge for possession of cannabis than for possession either of other dangerous drugs or of amphetamines and other 1964 Act drugs. Average fines for possession offences in 1967 were £36 in the case of cannabis: £39 in the case of other dangerous drugs: and £28 10s. 0d. in the case of 1964 Act drugs.

81. We believe that the association of cannabis in legislation with heroin and the other opiates is entirely inappropriate and that new and quite separate

legislation to deal specially and separately with cannabis and its synthetic derivatives should be introduced as soon as possible. We are also convinced that the present penalties for possession and supply are altogether too high.

82. Several of our witnesses also drew attention to the principle of absolute liability on which drugs legislation had been constructed, and to the effect of various High Court judgments that *mens rea* does not have to be proved before a person can be convicted of an offence of possession. They argued that in the circumstances it was not surprising that defendants made allegations of "planting" by unknown persons or the police, or that some sections of the public should feel disinclined to bring evidence of offences to the notice of the authorities. It was outside the scope of our enquiry to examine these matters in general. We were glad to note, however, that following the judgment of the House of Lords in the case of *Warner v. Commissioner of Police for the Metropolis*, the Home Secretary undertook to examine, in conjunction with the Law Commission, the whole question of absolute liability in relation to drug offences. So far as cannabis is concerned, we have found nothing to justify making possession without knowledge an offence to which the law provides no defence, but we think that the form which defences might take is best left to be determined by the Home Secretary's review.

83. From our study of the statistics and other evidence about the supply of cannabis in the United Kingdom we have come to the conclusions that the traditional view of the supplier as a large-scale criminal is an over-simplification, and that having a heavy maximum penalty for possession to allow for punishment of the large-scale trafficker exaggerates the criminality of drug-taking itself. It seems clear that in cannabis "society" there is a regular give and take of the drug and that many users are in a position to supply it, and do supply it, in very small quantities without real criminal intent. None of our witnesses felt that "amateur" activities of this kind should be described as trafficking or singled out for particularly severe penalties. On the other hand, the margin between casual supply and purposeful profiteering is not so wide that a trafficker needs to be in regular possession of very large amounts to find his operations worth while. The courts today face considerable difficulty in penetrating the ambiguity of "possession", particularly since the norms of moderate drug-taking are not widely known. There is therefore a real risk, when the range of penalties is so extensive, that the courts may treat drug-takers with more, and drug-traffickers with less, severity than they deserve.

84. We considered the practicability of reducing this risk by distinguishing more clearly in the law between possession intended for use and possession intended for supply. One approach, which we understand has been tried in some countries overseas, would be to provide a specific offence of possession with intent to supply, attracting higher penalties than the offence of simple possession and with an onus on the defendant, after the prosecution had shown him to be knowingly in possession of a prohibited drug, to prove, on the balance of probabilities, that he did not intend to supply it to another person. It may be that such a provision would be valuable in clarifying the true nature of offences of possession, but it cannot be fully considered apart from the broad balance of obligations on prosecution and defence. We therefore recommend that the possibilities should be further examined in the Home Secretary's review of the question of strict liability. Subject to this, however, we think that a test of intent could produce further uncertainty in the law which it is our wish to remove.



- NOTES : 1 The Drugs (Prevention of Misuse) Act came into effect on 31st October 1964 and the few prosecutions between then and 31st December 1964 have for convenience been included in the figures for 1965.
- 2 The discrepancy between total penalties and total persons convicted arises because where a person was convicted on more than one charge each fine and/or prison sentence inflicted is presented. Where concurrent prison sentences were inflicted, the highest sentence only is presented, but all consecutive prison sentences are included.
- 3 The numbers of persons convicted under the Dangerous Drugs Act for the three years were as follows:

Year	Cannabis	Opium	Manufactured drugs	Total
1964	532	14	78	624
1965	620	13	111	744
1966	1109	36	208	1353

Table B

## Analysis of Proceedings by Category of Offence

1967

a—Cannabis:

b—Drugs, other than Cannabis, controlled under the Dangerous Drugs Act 1965;

c—Drugs controlled under the Drugs (Prevention of Misuse) Act 1964

	Unlawful Possession			Premises Offences			Unlawful Import			Unlawful Supply			Unlawful Procuring			Register and Receptacles			Cannabis Cultivation			Larceny			Other drug Offences			Offences under other statutes			Total			
	a	b	c	a	b	c	a	b	c	a	b	c	a	b	c	a	b	c	a	b	c	a	b	c	a	b	c	a	b	c				
No. of charges brought*	2507	456	2170	139	6	2	38	9	4	30	33	1	4	22	—	—	12	—	3	—	—	—	110	381	12	2	—	1	30	119	2734	680	2677	
Charge withdrawn or dismissed	312	45	176	20	1	1	1	—	—	4	1	—	—	—	—	—	—	—	—	2	6	2	—	—	—	—	—	—	—	—	6	339	49	189
Hospital or Guardianship order	2	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	2	
No. of convictions	2193	411	1992	119	5	1	37	9	4	26	32	1	4	22	—	—	12	—	3	—	—	—	108	375	10	2	—	1	30	113	2393	631	2486	
Absolute discharge	11	4	17	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12	4	17	
Recognizances	1	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	2	2	
Conditional discharge	169	46	211	11	—	—	1	—	—	1	—	—	—	2	—	—	2	—	1	—	—	—	1	14	—	—	—	—	4	12	183	55	237	
Hospital Order (S.60., Mental Health Act 1959)	6	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6	1	3	
Probation Order	309	109	395	9	—	—	—	—	—	2	10	—	3	10	—	—	—	—	—	—	—	—	5	45	—	1	—	—	—	6	35	323	141	475
Fit Person Order	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	
Fine	1114	89	801	66	2	—	15	4	1	12	7	1	—	2	—	—	10	—	2	—	—	21	114	8	—	—	—	—	3	24	1217	138	941	
Attendance Centre	1	6	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	3	—	—	—	—	—	—	—	1	8	4	
Remand Home	—	—	—	—	—	—	—	—	—	3	1	—	—	—	—	—	—	—	—	—	—	8	34	—	—	—	—	—	—	—	42	27	131	
Detention Centre	39	16	97	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	1	—	—	—	—	—	—	—	6	3	9	
Approved School	6	—	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Police Cells	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Imprisonment	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
w/o fine	465	102	301	28	3	1	16	3	2	6	8	—	1	5	—	—	—	—	—	—	—	29	57	1	—	—	—	—	8	20	517	158	381	
Borstal	33	21	76	3	—	—	—	—	—	—	3	—	—	2	—	—	—	—	—	—	—	15	35	—	1	—	—	—	—	—	36	42	117	
Otherwise dealt with	38	15	81	2	—	—	5	2	1	1	3	—	—	1	—	—	—	—	—	—	—	24	71	1	—	—	—	1	7	15	48	52	168	

	Unlawful Possession			Premises Offences			Unlawful Import			Unlawful Supply			Unlawful Procuring			Register and Receptacles			Cannabis Cultivation			Larceny			Other drug Offences			Offences under other statutes			Total		
	a	b	c	a	b	c	a	b	c	a	b	c	a	b	c	a	b	c	a	b	c	a	b	c	a	b	c	a	b	c			
Fines: minimum imposed	£ 1		1	10	4	—	3	25	—	5	50	—	50	—	—	7	—	—	10	—	—	—	5	2	10	—	—	10	4	—	—		
maximum imposed	£ 325		200	350	—	—	100	25	50	50	50	—	150	—	—	25	—	—	25	—	—	—	50	100	100	—	—	75	50	—	—		
total imposed	£ 40166	3472	22925	4610	29		419	75	25	230	140	50	—	200	—	—	124	—	35	—	—	605	2990	200	—	—	100	435	45660	50405	26425		
Imprisonment: shortest sentence	1 day		1 day	2 mos.	2 mos.	2 mos.	6 mos.	6 mos.	6 mos.	6 mos.	28 mos.	—	9 mos.	4 mos.	—	—	—	—	—	—	—	—	3 mos.	2 mos.	3 mos.	—	—	3 mos.	3 mos.	—	—		
longest sentence	7 yrs.		2 yrs.	3 yrs.	2 mos.	2 mos.	4 yrs.	9 yrs.	6 mos.	5 yrs.	—	—	9 mos.	1 yrs.	—	—	—	—	—	—	—	5 yrs.	4½ yrs.	3 mos.	—	—	18 mos.	1 yr.	—	—			

\*Total No. of persons prosecuted under the Dangerous Drugs Act 1965 or the Drugs (Prevention of Misuse) Act 1964. a—2639 b—521 c—2351

Table C

Analysis of Cannabis Prosecutions and  
Disposals Related to Age Groups and Weights of the Drug  
1967

Up to 30 grm

	Sex	AGE GROUPS															Total		
		15-20			21-25			26-35			Over 35			No age					
		Fine £50 +	Im- prison- ment	Other	Fine £50 +	Im- prison- ment	Other	Fine £50 +	Im- prison- ment	Other	Fine £50 +	Im- prison- ment	Other	Fine £50 +	Im- prison- ment	Other	Fine £50 +	Im- prison- ment	Other
No previous convictions	M F	112 11	24 1	501 91	116 11	90 4	278 61	89 3	66 2	135 20	42 3	44 1	79 5	10 —	5 —	43 10	369 28	229 8	1036 187
Previous Offenders—Drugs offences only	M F	1 —	1 —	13 2	2 1	7 2	8 3	1 —	7 —	8 —	2 —	2 —	4 1	— —	— —	— —	6 1	17 2	33 6
Previous Offender—Non- drug offences only	M F	21 —	10 —	110 7	20 3	18 —	62 2	15 2	27 3	27 5	7 —	11 —	16 —	3 —	1 —	1 —	66 5	67 3	216 14
Previous Offender—Drug and Non-Drug	M F	3 —	2 —	28 —	5 1	12 1	23 —	3 —	15 1	7 2	1 —	15 1	6 —	— —	— —	— —	12 1	44 3	64 2
Total	M F	137 11	37 1	652 100	143 16	127 7	371 66	108 5	115 6	177 27	52 3	72 2	105 6	13 —	6 —	44 10	453 35	357 16	1349 209

31 grm up to 1 kg.

No previous convictions	M F	2 —	1 —	27 12	7 —	23 1	14 6	7 3	22 2	9 6	9 —	24 1	10 2	1 —	1 1	— —	26 3	71 5	60 26
Previous Offender—Drugs offences only	M F	— —	— —	— —	— —	— 1	— —	— —	4 —	1 —	1 —	— —	— —	— —	— —	— —	1 —	4 1	1 —
Previous Offender—Non- drug offences only	M F	2 —	— —	5 1	— —	4 —	4 3	5 —	4 —	4 3	2 —	2 —	3 —	— —	— —	— —	9 —	10 —	16 7
Previous Offender—Drug and non-drug	M F	1 —	— —	1 —	— —	1 —	2 —	1 1	7 —	— 1	3 —	3 2	— —	— —	— —	— —	5 1	11 2	3 1
Total	M F	5 —	1 —	33 13	7 —	28 2	20 9	13 4	37 2	14 10	15 —	29 3	13 2	1 —	1 1	— —	41 4	96 8	80 34

[illegible]

27

85. Another course might be to devise a formula based on the amount of the drug found in a person's possession for determining the penalty to be imposed. Thus a person having, say, 30 grams or less of cannabis leaf or resin in his possession without authority at the time of his arrest would be liable only to a small fine; unauthorised possession of larger amounts would attract a higher penalty. Such a formula, however, would present serious difficulties for enforcement because of the practical requirements for determining the amount, type and purity of any drug found with sufficient exactitude to sustain proceedings for unauthorised possession of more than the specified amount; for establishing, when synthetic alternatives become available, comparable norms attracting a fine only; and for dealing with the problems of adulteration and identification. The introduction of a quantitative formula might also have an effect on trafficking. The limitation of risk to a small fine might not only lead small-scale traffickers to conduct their operations on a wider scale and more openly, it might also encourage professional criminals to become involved in this activity: once a large consignment had been imported and concealed a well organised distribution of small amounts could be carried on with virtual impunity. We have concluded that these difficulties make it impracticable to introduce a quantitative formula into cannabis offences at this time.

86. After the fullest consideration we have come back to the view that the only practical way to legislate for the situation over the next few years, is to retain the principle of a single offence namely unlawful possession, sale or supply of cannabis or its derivatives. This offence should carry a low range of penalties on summary conviction but a substantially higher range on indictment. If such legislation were brought in we would anticipate that the police would proceed on indictment only in those cases in which they believed that there was organised large-scale trafficking. Offences involving simple possession and small-scale trafficking would, we hope, be dealt with summarily.<sup>1</sup>

87. In considering the scale of penalties our main aim, having regard to our view of the known effects of cannabis, is to remove for practical purposes, the prospect of imprisonment for possession of a small amount and to demonstrate that taking the drug in moderation is a relatively minor offence. Thus we would hope that juvenile experiments in taking cannabis would be recognised for what they are, and not treated as antisocial acts or evidence of unsatisfactory moral character. On the other hand, we would expect repeated convictions for possession of cannabis—in the same way as convictions for drunkenness—to carry certain social implications and penalties, e.g. in certain kinds of employment where evidence of a drug habit might be thought to be a disqualification. In our view the cannabis-taker who is open to reason is more likely to be deterred by considerations of this kind than by a scale of penalties.

88. On summary conviction we think that the fine should be limited to £100. In many ways we would have preferred to have suggested no alternative prison sentence. It has, however, been represented to us that in United Kingdom law, hybrid offences, such as we are suggesting, normally carry some prison sentence

---

<sup>1</sup> In England and Wales offences are dealt with summarily at a magistrates' court, the verdict being decided by the magistrate. Trial on indictment takes place at a court of assize or quarter sessions where the verdict is decided by a jury.

In Scotland offences are dealt with both summarily and on indictment at a Sheriff Court. Trial on indictment may also take place in the High Court.

on summary conviction, and that this gives the judiciary useful discretion in dealing suitably with difficult individual cases. In this instance we can foresee situations where a person, repeatedly engaging in small-scale trafficking, but nevertheless trafficking of a blatantly commercial nature, would not be deterred by modest fines, whereas a short prison sentence without the panoply of proceedings by indictment would be appropriate. We recommend therefore that on summary conviction there be a maximum alternative penalty of four months imprisonment. In choosing this period we have been influenced by the fact that a four month sentence on summary conviction is one which allows the defendant an option of going for trial by jury . . . a not inconsiderable civil liberty. It is relevant to add that under section 39 of the Criminal Justice Act 1967 a court which imposed a sentence of not more than six months imprisonment for a cannabis offence, would be obliged to suspend that sentence except in certain conditions, of which the most important are that the offender has already served a sentence of borstal training or imprisonment, or is already on probation or under conditional discharge.

89. It is socially undesirable for an organised criminal underworld to be able to make large profits from any illicit activity. Therefore we recommend that on indictment the offence should be punishable by an unlimited fine or a sentence of imprisonment not exceeding two years or both. The maximum penalty for smuggling cannabis imposed by the Customs and Excise Act 1952 (as amended by the Dangerous Drugs Act 1967) should be reduced from 10 to 2 years. The existing provision under the Dangerous Drugs Act 1965 whereby proceedings on indictment are subject to the fiat of the Director of Public Prosecutions should be retained. In our view, however, such proceedings should normally only be appropriate in dealing with the large-scale trafficker.

90. It is our explicit opinion that any legislation directed towards a complex and changing problem like the use of cannabis cannot be regarded as final. For the foreseeable future, however, our objective is clear: to bring about a situation in which it is extremely unlikely that anyone will go to prison for an offence involving only possession for personal use or for supply on a very limited scale. We recommend that over the next three years the Advisory Committee should keep that objective under review and be ready to propose further measures if the objective is not being realised.

#### *Use of premises for cannabis smoking or dealing*

91. Section 5 of the Dangerous Drugs Act 1965 makes it an offence for an occupier to "permit" premises to be used for smoking or dealing in cannabis or cannabis resin and for any person to be concerned in the management of premises used for any such purpose. The object of this provision, which was first enacted in the Dangerous Drugs Act 1964 (on the model of a long-standing provision about opium-smoking, now to be found in section 8 of the 1965 Act), was to discourage communal smoking and trafficking in cannabis in premises of public resort by placing the onus on the occupiers or managers to ensure that such premises were not used for these purposes. The precise effect of the law is now the subject of an appeal to the House of Lords. In considering the present provisions we have assumed that the question of the appropriateness of strict liability in the offence will be examined in the Home Secretary's general review (paragraph 82).

92. In favour of the provision it was represented to us that if landlords or occupiers could not be held responsible, smoking parties would tend to increase, and drug-traffickers would be likely to use them to introduce smokers to other types of drugs. This would expose many young people to serious dangers outside the purview of routine checks by the police. In these circumstances it was urged that there should be a special obligation on those in charge of premises to prevent such activities. In the case of public premises, we were told that those having illicit possession of drugs found it easy to evade arrest by simply throwing the drugs on the floor. Unless those in charge of premises had a special obligation to prevent the use of, or traffic in, drugs, their tolerance of these activities it was said, could make for a considerable increase in the misuse of drugs.

93. The "pot party" is the natural focus for public disquiet about cannabis—and for the myths about the drug. If it were clear that intoxication, aggressive behaviour, sexual excesses, multiple drug use and crime were the predictable results of social smoking of cannabis, there would be a strong case for special steps to protect young people and for trying to enlist the help of these in charge of private premises. But, as is shown by the comparison we have drawn above between cannabis and other drugs, there is no evidence that taking cannabis in any special way stimulates behaviour of this kind. If cannabis is taken at a "wild party" it is not because it supplies the spark to what would otherwise not catch fire.

94. Whatever may be the justification for the provisions of section 8 of the Dangerous Drugs Act 1965 in regard to the smoking of opium (see paragraph 91) we are convinced that there is no sufficient justification, in the harmfulness of cannabis, for placing occupiers and landlords of private premises under any special obligation to prevent cannabis-smoking, and there is even less justification for doing so in respect of cannabis-dealing (since this is not distinctively different from dealing in any other kinds of drug). We therefore recommend that section 5 should be repealed in relation to premises to which the public has no access.

95. We think that occupiers and managers of premises open to the public are in a different position. Society expects those who undertake to provide services and entertainment for the public to conduct their premises in a proper way, and it is not unreasonable to place on them a duty to prevent open use of, or trafficking in, drugs. Even here, however, it is evident that the duty may be more onerous in some directions than in others. It is easy enough to detect the odour of burning cannabis, but much more difficult to confirm that an exchange of tablets between two customers is a breach of the law. We think that a reasonable course would be to redefine the scope of section 5 so as to apply it only to premises open to the public, to exclude the reference to dealing in the drug, and to remove the absolute nature of the liability on managers.

96. We are aware that there are some types of premises which are, strictly, not open to the public, but are not private premises in the conventional sense. The Private Places of Entertainment (Licensing) Act 1967 provides, on adoption by a local authority, for a measure of supervision over certain types of club. Although this Act may not cover all the kinds of premises which, reasonably, should be subject to the obligation we have proposed for public premises, we are satisfied that the main sectors about which we know the police to be most concerned are covered by our proposals.

### *Powers of arrest and search*

97. In paragraph 81 we have recommended the separation of cannabis from the opiates in drugs legislation and in paragraph 88 and 89 we have proposed a reduction in penalties. Depending on the form and context in which legislative effect were given to these changes, consequential adjustments would have to be made in the present provisions which govern police powers of arrest and search in relation to cannabis offences. The present position is that under Section 2 of the Criminal Law Act 1967 the police have power to *arrest without warrant* any person who has committed or attempted to commit, or whom they have reasonable grounds to suspect to have committed or attempted to commit an "arrestable offence". Such an offence is one which is punishable with a sentence of at least 5 years imprisonment. In England and Wales this power may be exercised in respect of offences against the Dangerous Drugs Act 1965 (i.e. including cannabis offences) which, on conviction, carry a possible penalty of up to 10 years imprisonment. The Criminal Law Act does not apply to Scotland and Northern Ireland and in those countries the police powers of arrest without warrant for cannabis offences derive from section 15 of the Dangerous Drugs Act 1965, as amended by section 6 of the Dangerous Drugs Act 1967. Under these provisions the police have power to arrest without warrant any person who either has, or who is suspected of having, committed or attempted to commit a dangerous drugs offence, only if they have reasonable grounds for believing that that person will abscond unless arrested, or whose name and address are unknown to the police and cannot be ascertained by them, or in whose case the police are not satisfied that the name and address given to them are true. As regards powers of *search* section 6 of the Dangerous Drugs Act 1967 introduced—for drugs scheduled under the Dangerous Drugs Act 1965 *and* the Drugs (Prevention of Misuse) Act 1964—new powers enabling the police to search persons and vehicles on suspicion. If the penalties for cannabis offences are reduced as we propose and if cannabis were excluded from the Dangerous Drugs Act 1965 the case for retaining these police powers would have to be reopened. This question of police powers cannot be realistically considered in relation to cannabis alone and it has been outside our task to examine the general issues. In the course of our enquiry, however, we have been made strongly aware both of concern about the effect of the exercise of these powers upon the relationship between the police and the public, and of the difficulties faced by enforcement authorities in recent years for which these wide powers of arrest and search have been thought to be essential. Because these features have contributed to so much of the current "protest" against the existing law we recommend that as a matter of urgency the Advisory Committee should begin a general review of police powers of arrest and search in relation to all drug offences with a view to advising the Secretary of State on any changes that may appear appropriate, particularly as regards cannabis. In the meantime, however, changes in cannabis legislation should go forward without any specific recommendation about arrest and search. This omission will not have any immediate practical consequences in that the powers referred to will stand for the other drugs; search on suspicion is normally for drugs in a general sense rather than for cannabis specifically.

### *Control of synthetic cannabinoids*

98. Neither the Single Convention on Narcotic Drugs 1961 nor the Dangerous Drugs Act 1965 applies to synthetic cannabinoids. Preliminary reports have

suggested that some substances in this group are more potent than the natural product. So far no manufacture of such substances for non-scientific or non-medical purposes has come to notice, but such a development may be expected as soon as the necessary technical processes have been evolved. Without further amendment the powers available in the Pharmacy and Poisons Act 1933 and the Drugs (Prevention of Misuse) Act 1964 would permit controls to be applied to manufacture, distribution and sale and to limit authorised possession. We think that these powers should be sufficient, but we recommend that the position should be kept under review.

99. At present cannabis can be prescribed by doctors in the form of extract of cannabis and alcoholic tincture of cannabis. Until very recently the demand for these preparations has been virtually negligible. In recent months however, there has been a striking increase in the amounts prescribed. Our enquiries, supported by what we were told by our witnesses, indicate that there are a number of doctors who are beginning to experiment with the use of cannabis in the treatment of disturbed adolescents, heroin and amphetamine dependence and even alcoholism. Whilst we do not expect cannabis prescription will ever become standard medication in the treatment of these conditions, it is quite likely that the amount dispensed on medical prescriptions will continue to increase and that this process may be accelerated when synthetic cannabis derivatives, properly standardised, become available. We see no objection to this and believe that any new legislation should be such as to permit its continuance. We think, however, that when cannabis or its derivatives are prescribed, records of the kind that can be inspected by H.M. Inspectors of Drugs should be available. This will enable the prescribing trend over the next few years to be kept under methodical review.

#### EDUCATION

100. The law alone cannot dispose of the problem of cannabis. However wise the law and whatever it says there will be those who will use cannabis and some who will suffer by it. Education too has a part to play. By "education" we do not mean formal propaganda (the need for which it has been outside our terms of reference to consider); a proper understanding of the significance of cannabis in our society at this time cannot be given simply by description of the effects of the drug and the relevant law. Rather do we mean the general process of questioning, observation, argument and assessment by which society commonly forms balanced attitudes to community problems and dangers. We hope that this report will contribute to an understanding both of the facts (and uncertainties) about cannabis and of the wider issues surrounding the problem of its control.

101. The following is a summary of our recommendations:

- (1) We recommend that in the interest of public health, it is necessary for the time being to maintain restrictions on the availability of cannabis (paragraphs 70 and 71).
- (2) Every encouragement, both academic and financial, should be given to suitable projects for enquiry into the cannabis problem (paragraph 73). Suggestions about areas in which research is required are made in paragraph 74.

- (3) The law should progressively be recast to give Parliament greater flexibility of control over individual drugs (paragraph 78).
- (4) The association in legislation of cannabis with heroin and the other opiates is inappropriate and new legislation to deal specially and separately with cannabis and its synthetic derivatives should be introduced as soon as possible (paragraph 81).
- (5) Unlawful possession of cannabis without knowledge should not be an offence for which the law provides no defence (paragraph 82). The practicability of distinguishing between possession intended for use and possession intended for supply should be examined (paragraph 84).
- (6) Possession of a small amount of cannabis should not normally be regarded as a serious crime to be punished by imprisonment (paragraphs 87 and 90).
- (7) The offence of unlawful possession, sale or supply of cannabis should be punishable on summary conviction with a fine not exceeding £100, or imprisonment for a term not exceeding four months, or both such fine and imprisonment. On conviction on indictment the penalty should be an unlimited fine, or imprisonment for a term not exceeding two years or both such fine and imprisonment (paragraph 86, 88 and 89).
- (8) The existing law which inhibits research requiring the smoking of cannabis (section 5, Dangerous Drugs Act 1965) should be amended to allow qualified workers to study its use both by observation and by laboratory and social experiments (paragraph 75).
- (9) Section 5 of the Dangerous Drugs Act 1965 (permitting premises to be used for smoking cannabis, etc.) should be redefined in scope so as to apply only to premises open to the public, to exclude the reference to dealing in cannabis and cannabis resin, and to remove the absolute nature of the liability on managers (paragraphs 94 and 95).
- (10) The Advisory Committee should undertake, as a matter of urgency, a review of police powers of arrest and search in relation to drug offences generally with a view to advising the Secretary of State on any changes that may be appropriate in the law, particularly as regards cannabis (paragraph 97).
- (11) The development of the manufacture of synthetic cannabinoids should be kept under review and, if necessary, control should be imposed under powers provided by The Pharmacy and Poisons Act 1933 and The Drugs (Prevention of Misuse) Act 1964 (paragraph 98).
- (12) Preparations of cannabis and its derivatives should continue to be available on prescription for purposes of medical treatment and research. Provision should be made in legislation for records to be maintained so that the position can be kept under review (paragraph 99).

102. We wish to express our most cordial appreciation of the help that we have had from our secretaries, Dr. E. G. Lucas and Mr. D. G. Turner. Their skill in clarifying issues and their patience in feeding our seemingly insatiable appetite for drafts and redrafts far surpassed anything that we had a right to expect. We

would also like to extend our thanks to those other officials of the Home Office, Ministry of Health and Scottish Home and Health Department who assisted us with valuable information and advice.

WOOTTON OF ABINGER

*Chairman*

K. J. P. BARRACLOUGH

THOMAS H. BEWLEY

P. E. BRODIE\*

P. H. CONNELL

J. D. P. GRAHAM

C. R. B. JOYCE

AUBREY LEWIS

NICOLAS MALLESON

H. W. PALMER

TIMOTHY RAISON

MICHAEL SCHOFIELD\*

E. G. LUCAS

D. G. TURNER

*Joint Secretaries*

*4th October 1968*

\*Subject to the following reservations:

1. I am in full agreement with the content of this Report, except for the suggestion in paragraph 89 that for offences of unauthorised possession, supply, sale or smuggling of cannabis the maximum penalty on indictment shall be 2 years' imprisonment with or without an unlimited fine.

2. So long as it is an offence to possess cannabis there will be a "market" for the trafficker to exploit. As some cannabis convictions have shown in the past, the "market" has been sufficiently large to attract organised smuggling of substantial quantities. It seems likely that the demand for cannabis will grow and trafficking may become more extensive. Professional criminals may become more involved, and the problem of urban crime made more serious.

3. To forestall such a development—and to minimise the social dangers to which young people would be exposed if trafficking were uncontrolled—I am much concerned that the large-scale trafficker of cannabis should be effectively discouraged. I am not persuaded that the maximum penalties suggested by my colleagues would be effective. An unlimited power to fine is not a sure safeguard. If the alternative sentence of imprisonment is short, it may be preferred to a large fine. Experience shows that it is often difficult, and indeed sometimes impossible, to recover from a convicted person money which is the proceeds of crime.

4. For these reasons I believe that those who traffic in large quantities of cannabis should be faced with the liability on conviction to more serious consequences than my colleagues propose. I am of the opinion that where a substantial quantity of cannabis is traced to the possession of an individual and there are reasons to believe that this is not for personal use but for sale, then it should be within the powers of the court dealing with the case on indictment to impose a sentence of imprisonment not exceeding 5 years in addition to an unlimited fine.

*Reservations to Paragraphs 85-90*

1. I agree in the main with the first 84 paragraphs of this report. In particular I agree with the last part of paragraph 81 that the present penalties are altogether too high and I would add that the sentences being given at present are too high. Paragraph 80 indicates that there has been greater emphasis on fines and imprisonment for the possession of cannabis, but less use of probation; average fines for possessing cannabis have been almost as high as for dangerous drugs such as heroin. The same paragraph shows that in 1967 about a quarter of all cannabis offenders were sent to prison and 17% of first offenders were imprisoned. A further study of Table C on page 26 shows that even those convicted of possessing small amounts of cannabis run the risk of being dealt with quite severely. Of the 2,419 people who were convicted of possessing less than 30 grams of cannabis, 373 (15%) were imprisoned. This table also shows that 1,857 persons without previous convictions for any type of offence were convicted of possessing less than 30 grams of cannabis; 237 (13%) of these first offenders were sent to prison—119 of them were aged 25 or less.

2. In paragraphs 86, 87 and 88 my colleagues seem to be putting all their trust in the behaviour of the police and the discretion of the judiciary, but the information given in the previous paragraph of this reservation does not inspire trust. It will still be possible to give prison sentences to offenders possessing small amounts of cannabis when they are what my colleagues call "difficult individual cases", but they seem to hope that magistrates will start to give less severe sentences after reading this report. Government reports may be the prelude to legal reform, but they are not a particularly good way of enlightening the judiciary.

3. There is an increasing tendency in modern criminology to limit the sentencing powers of the judiciary. Indeed section 39 of the Criminal Justice Act 1967 (which provides for suspended sentences) removes considerable sentencing powers from the Courts (particularly magistrates) although this Act is quoted by my colleagues (paragraph 88) as a reason for retaining heavier penalties.

4. Nothing emphasizes the generation gap more than a drug offence. The drug user and the magistrate are basically out of sympathy. The cannabis-user is partaking in a form of enjoyment—that is how he looks at it—which was unknown to the magistrate when he was young. In addition to this the clothes, hair style and attitudes of many young drug-takers are unlikely to please the magistrate. Even if we adults feel inclined to put our trust in the magistrate's ability to understand these differences in the generations, it is quite certain that most of the young people of this country do not believe this wide gap can be bridged except by a very few. Why should they have to take their chance whether they get an informed and understanding magistrate or not? The administration of the law should not be a matter of luck.

5. Like my colleagues I would like to distinguish more clearly between possession intended for use and possession intended for supply. Unlike them I think this distinction should be written into the law. I think it would be preferable to

base the distinction on the quantity found in possession. Accordingly I suggest that:

- (1) Illicit possession of up to 30 grams, leaves or resin, should be a summary offence only, punishable on a first or subsequent conviction by a maximum fine of £50.
- (2) Illicit possession of any amount larger than 30 grams should be punishable
  - (a) on summary conviction by a fine not exceeding £100 or imprisonment for a term not exceeding four months;
  - (b) on conviction or indictment a fine or imprisonment for a term not exceeding two years or both.

The existing provision under the Dangerous Drugs Act 1965, whereby proceedings on indictment can only be instituted by or with the consent of the Attorney General or the Director of Public Prosecutions, should be retained.

6. I am not impressed by my colleagues' arguments (paragraph 85) against sentences based on the amount of cannabis found in a person's possession:

- (a) It is suggested that it would be tiresome for the police to determine the exact amount of cannabis found in possession. In fact, however, the police already measure the amounts of cannabis seized and the Courts are influenced by the amount in determining sentence. Therefore it would seem to be imperative that the police should always be exact about the quantity found in possession and defence lawyers should have the right to demand adequate safeguards. For the same reason it is essential to establish equivalent amounts for synthetic cannabinoids when these become widely available. If the sentencing policy suggested in the previous paragraph were to be adopted, there would be less work for the police for only a small number of cases (11% in 1967) will be found in possession of more than 30 grams.
- (b) I agree that the introduction of a quantitative formula might have an effect on trafficking: it will tend to make it more difficult. In such circumstances the cannabis users would wish to buy from the supplier in small quantities. In order to sell the same amount the supplier would have to make more sales; consequently he would be more often at risk and therefore more likely to be caught by the police. We have learned that a substantial part of the smuggling of cannabis is in small amounts (paragraph 37) and is not exploited to any significant extent by professional criminals (paragraph 38). When large illegal imports evade the Customs, they have to be broken up and sold in small amounts. If a quantitative formula were to be introduced, the cannabis would have to be distributed in even smaller amounts: it would make dealing in cannabis, not more, but less attractive to the so-called "professional criminals". The profit to be made on 30 grams of cannabis is not enough to attract big time crooks.

7. Of the 2,419 persons convicted of possessing less than 30 grams of cannabis in 1967, only 191 (under 8%) had previous convictions for drug offences. This may suggest that most first offenders give up cannabis after a conviction for

possession; a more probable explanation is that the convictions only reflect a very small proportion of the total number of cannabis users and detection is mostly a matter of chance.

8. I agree with the views expressed in paragraph 90. If the objective is to bring about a situation in which it is extremely unlikely that anyone will go to prison for an offence involving possession for personal use, then I think my suggestions are more likely to bring this about than the views expressed in this report, which may be forgotten by the time the recommendations become Acts of Parliament. I also agree with the recommendation (in paragraph 90) that the situation should be reviewed over the next three years. If some evidence is produced which shows that cannabis is socially harmful or disruptive, then the penalties can be increased. A recent example (section 7 of the Dangerous Drugs Act 1967 in which penalties were increased from two to ten years) suggests that time can usually be found for a Bill to increase penalties, but as a matter of practical politics any reform of the law which involves reducing penalties takes longer.

#### RESERVATIONS TO PARAGRAPH 95

9. I agree with paragraph 94 in which it is recommended that section 5 of the Dangerous Drugs Act 1965 should be repealed in relation to premises to which the public has no access. I agree that it should still be an offence for occupiers of premises open to the public to "permit" premises to be used for smoking or dealing in cannabis, and for managers to allow public premises to be used for these purposes. I suggest that knowledge should be an ingredient in the offence and, unlike my colleagues, I recommend that the onus should be on the prosecution to show that the occupiers or managers were aware that cannabis was being used or sold on these public premises.

#### RESERVATIONS TO PARAGRAPH 97

10. I agree with my colleagues that if cannabis were excluded from the Dangerous Drugs Act 1965 the case for retaining police powers of search and arrest without warrant would have to be reopened. I agree that it is difficult to consider these police powers in relation to cannabis alone, but as we are recommending new legislation to deal separately with cannabis, it is our duty to make some recommendation. Without doubt there are some occasions when the police search for one drug and find another. But there are other occasions when the reasonable grounds for suspicion relate only to suspected cannabis-use. Consequently I believe it is necessary to state that the existing extensive police powers of search and arrest are not necessary as we all agree that taking cannabis in moderation is a relatively minor offence (paragraph 87).

11. In my opinion the powers of search are already too wide. Section 6 of the Dangerous Drugs Act 1967 gives the police power to stop and search without warrant any person reasonably suspected of being in unlawful possession of drugs. The dangers in these new powers are immense, for there is only the subjective word "reasonably" to prevent the over-zealous from stopping and searching anyone for anything, anywhere. Young people especially are already

being subjected to indiscriminate searches where no grounds for reasonable suspicion exist. Parliament had been led to assume that the purpose of the Dangerous Drugs Act 1967 was to deal with drugs such as heroin, but large-scale searches for cannabis are now made under section 6 of this act. This section was put in as a late amendment and accepted by an unwatchful House of Commons almost without discussion. It should be repealed.

#### RESERVATIONS TO PARAGRAPH 101

12. The previous eleven paragraphs give the reasons for my dissent to items (7), (9) and (10) of paragraph 101. I agree with items (1) to (6) and (8), (11) and (12).

## APPENDIX 1

A Review of the International Clinical Literature by Sir Aubrey Lewis,  
Emeritus Professor of Psychiatry, University of London

### CANNABIS

#### ACUTE INTOXICATION

##### *Physical Effects*

The physical effects of cannabis intoxication are raised pulse rate and blood pressure, dilated sluggish pupils, injected conjunctival vessels, tremor of tongue and mouth, cold extremities, rapid shallow breathing, ataxia and active deep reflexes. The severity of the symptoms depends not only on the dose and preparation but on the individual. A young English-woman on one occasion smoked two-thirds of a home-made hashish cigarette which had not upset her husband; she promptly developed gross inco-ordination of the hands, astasia, rapid pulse, and dyspnoea. In soldiers who took cannabis a temporary loss of consciousness has been reported with slow irregular pulse and low blood pressure. Others have described vertigo and vomiting, and death is said to have occurred from cardiac failure or intestinal distention after gross overeating. But severe physical disturbance is rare. A common initial effect of smoking the drug is intense cough or burning feeling in the throat and chest.

##### *Psychological Effects*

The psychological effects of acute intoxication were first described in detail by Moreau de Tours:— euphoria; excitement; disturbed associations; changes in the appreciation of time and space; raised auditory sensitivity with elaboration of simple phrases or tunes; fixed ideas; emotional upheaval; and illusions and hallucinations.

Suggestibility is much increased (the assassination of General Kleber is supposed to have been carried out by a fanatic whose heightened suggestibility under cannabis made him a pliant catspaw).

There are no aphrodisiac effects, in spite of widespread popular belief. Erotic fantasies may be well to the fore, but they do not lead to action.

There is much individual variation in the psychological effects. Perhaps because of ethnic and social differences and the effects of different preparations of the drug, widely divergent accounts are to be found in published papers. Lord Todd put it succinctly: "To give an accurate picture of the effects of hashish is extremely difficult, partly because they are more subjective than objective and because individual variation in response is probable greater with this than with any other drug. . . . Among the commonest recorded effects are the feeling of well-being alternating with depression, distortion of time and space, and double consciousness. Objectively there is a period of excitation and exaltation, followed often by sleep or coma".

Some subjects feel acute anxiety as soon as the drug takes effect; others are pleased, amused, elated, although they may be aware that their thought processes are somewhat disordered, their memory impaired and their self-control dim-

inished. The phases of abnormality might come in waves, heralded by sudden violent headaches. The emotional state is not in keeping with the subject's situation, and as the intoxication grows less, subjects mostly feel apathetic and depressed. During the acute stage of intoxication, they may have become suspicious and afraid that they will be permanently insane, or that their friends are trying to find grounds for shutting them up in a mental hospital. Characteristic visual phenomena are almost invariably reported; they are not true hallucinations but illusionary falsification, greatly elaborated by some subjects. Perception of one's own body is commonly interfered with, and outright depersonalization may occur. With small doses of cannabis the effect may be wholly subjective, mild and gratifying.

The first signs of intoxication, appearing about three hours after consuming the drug by mouth may be nausea or vomiting, with gross movements and loquacity. Disorders of thinking may be overt, or detectable by close examination. Intoxicated persons may be unable to retain more than a single sentence, so that conversation is disjointed and may be unintelligible; a communication that has been heard and understood may be lost in a few seconds; in the middle of a lively conversation, speech may stop abruptly and the intended remark is gone beyond recovery. The disturbance of memory may be severe in one person and negligible in another. The time schedule varies according to the mode of consumption. After smoking hashish resin, acute anxiety and restlessness may come on within about half-an-hour; then calm and pleasant sensations supervene with visual imagery; and in one to two hours the subject becomes sleepy; when he wakes from the ensuing sleep he may be able to recall details of the intoxication. If, however, he has taken the cannabis in powder form, it may take three to six hours for sleepiness to come on.

In Europeans, though the order of events may vary a great deal, a typical sequence is euphoria with restlessness; then confusion, disturbed visual and auditory perception; then a dreamy state; and finally depression and sleep. On waking after this sleep, there may be numbness, dysarthria and some amnesia. Many Moroccans, when under the influence of the drug, become gay or relaxed, though it is not rare for anger to be expressed in some act of violence. According to one observer, they value cannabis because it frees them temporarily from moral and cultural restraints on conduct. In contrast to the torpor described in some subjects, the Moroccans may feel that they can do difficult things easily, and they may jump and dance. Hesnard, a psychiatrist who has observed Turkish and Syrian hemp addicts, described them as incoherent in speech but self-observant; talkative, exuberant, gesticulating and running hither and thither, but incapable of mental work, and agitated. Noisy laughter may be incongruously accompanied by sadness. Intense depersonalization sometimes occurs.

They have erotic desires which they do not translate into erotic behaviour. In Brazil, according to Wolff and other Brazilian psychiatrists, the picture is different from that described elsewhere; sexual orgies are alleged to take place.

The discrepancies in published accounts of acute intoxication may be, in part, accounted for not only by individual constitution and the effect of adulterants, but also by differences in dosage. Practised hashish consumers have usually learned how to regulate the dose of whatever preparation they use so that the disagreeable effects are minimal.

### *Psychotic Features*

Among the symptoms of *acute* intoxication, gross mental disturbances are described which can properly be called psychotic. They are usually the outcome of taking a fairly large dose of the drug; and the clinical picture is that of a severe exogenous psychosis—delirium with confusion, disorientation, terror or anger, and subsequent amnesia about what happened during the period of intoxication. Although most often described in countries where cannabis is widely resorted to, striking instances are reported also in Europeans.

Within this acute setting, the most frequent psychotic features are: paranoid delusions of being pursued or controlled; delusions of preternatural abilities; strong inclinations to suicide which are not carried into action unless associated with panic; and irritability. Waxy flexibility and other catatonic features have been observed, though infrequently.

The impulse to suicide may be very strong; a doctor who took forty drops of tincture of cannabis indica developed at first great anxiety and fear of death, then "I was possessed with an almost irresistible desire to commit suicide by rushing to the adjoining canal or cutting my throat with the knives on the table close by, though no attempt was made at doing so. Shortly upon this, I was seized with fits of alternate laughter and crying, without any apparent cause. When the symptoms were subsiding my appetite became ravenous accompanied by great thirst. . . . I experienced no pleasurable intoxication or feeling of happiness, but the very reverse".

There is a sharp contrast between the ecstatic and relaxed state described in many reports and the restless activity occasionally observed (along with exaltation, irritability, emotional excess, noisiness and even reckless violence) in some subjects, especially in the Punjab or in Brazil. Evidently, large doses produce anomalous effects, seldom seen in mentally stable persons or in those who have learned to regulate their intake so that it should be pleasurable. An example of how excess can affect the individual is provided by a French youth aged 20 who smoked five hashish cigarettes straight off. He became very agitated and restless, rushed around Paris and eventually, fourteen hours after he had taken the drug, he went into a police station to give himself up for having murdered his stepfather (an entirely baseless delusion). The duration of the psychotic intoxication was longer in his case than is usual; as a rule, the condition clears up in three to six hours.

*Exact psychological studies* of the effects of cannabis have suffered from the limitation that they were carried out either on highly selected subjects—prisoners and drug addicts—or on very small samples, sometimes only two or three persons. The main findings have been that simple functions like tapping speed and reaction time were very little affected by moderate doses of cannabis, but that steadiness of hand movements and complex reaction time were adversely affected, the maximum change occurring about four hours after ingestion.

In intellectual tasks speed and accuracy were impaired, the degree depending on the dose. Surprisingly, the ability to estimate short periods of time was not reduced in an American study, but the subjects were chronic addicts; whereas in an experiment carried out by two psychiatrists on each other, under laboratory conditions, time intervals were overestimated. Two German psychiatrists

examined thirty normal subjects, and found three types of intellectual disorder—incapacity to fuse details into a whole; reduced memory storage; and blocking; these observations were made, however, after the drug had been administered in the form of cannabinal 0.1 g.

#### *Effect on Persons already Psychotic*

In the 1930's, experiments were carried out on schizophrenic and depressed patients in mental hospitals to see what cannabis would do to them and how far the drugs, alleged to be psychotomimetic, would intensify psychotic symptoms. The findings were not uniform. Affectivity was altered but in different ways and degrees; some schizophrenics became euphoric and hyperactive, others became catatonic; surprisingly, only two-thirds of the schizophrenics developed hallucinations. Some of the depressed subjects became euphoric, others passed into a depressive stupor. Autism was intensified in some schizophrenics and symptoms that had previously cleared up were revived. The schizophrenic patients showed less change in time and space perception than normal subjects while under the influence of the drug. Impulsive acts were more prone to occur in schizophrenic subjects than in normal cannabis users.

### CAUSES

#### *Initiation: Social Setting*

Most of those who take cannabis in any society have been introduced to the habit by an acquaintance. The amount of pressure varies from country to country—the commoner the habit, the more ready the compliance—and from group to group. In Egypt (where penalties are severe and include capital punishment for trafficking), the habit is nevertheless very widespread; and, as was shown by a recent investigation on 253 men who had used hashish at least once a month during the previous year, conformity to the ways of the group emerges as a powerful factor, especially among those who have been led to expect a blissful experience and sexual stimulation from it. Taking it is a convivial affair; four to six friends meet in the evening, smoke and engage in light conversation. Similarly, an American report confirmed the view that marihuana is a socially utilized intoxicant, seldom taken in solitude. Those who have studied American college students who smoke marihuana conclude that they do so because they are alienated from the values of adult society, which exposes them to conflicting demands; through this habit they can mortify their parents and flout authorities. This is a speculative interpretation of their motives.

The fullest available description of the social conditions which foster the marihuana habit comes from Oakland, California. It counterbalances, and perhaps corrects, the picturesque and alarming observations made on more degraded, psychopathic, criminal, or poverty-stricken and under-nourished groups. The investigators obtained the confidence of the youngsters, mostly Negroes and Mexicans, through providing them with club amenities, without strings. They were firm in their conviction, based on their own experience, that the use of such drugs as marihuana results in harmless pleasure and increased conviviality, does not lead to violence or madness, can be regulated, does not lead to addiction, and is less harmful than alcohol. They were not interested in being helped to abstain from marihuana, and they cited case after case of

individuals known to them who had not suffered deterioration in health, school achievement, athletics or career as a result of their habit of smoking marihuana. Boys who take the drug in excess were considered by the rest to have a weak personality.

There are several patterns of use and users among these youths. They themselves recognize four types, for which they have cant names. The "rowdy dude" wants to impress and frighten others and has difficulty in getting marihuana from other youths because he is reckless and irresponsible and they fear he will get them into trouble with the police; he is subject to pressures which direct him towards becoming a criminal or an opiate addict. The "rowdy dude" may settle down, when he stops taking alcohol or sniffing glue, and starts to take marihuana instead. In that case he becomes a "pot head" who limits himself to marihuana smoking, or a "mellow dude" who uses amphetamines or barbiturates or methedrine as well as marihuana. Both the "pot heads" and the "mellow dudes" value *sang-froid*. They believe themselves to be intelligent, daring, cool-headed, worthy of respect, and they do not resort to violence; they remain at school or at work and engage in athletics. They will smoke marihuana three or four times a day, especially if they are going to a party; they believe it breaks through their shyness in approaching girls and increases the pleasure of sexual intercourse. The fourth type is the "player", an older youth who sells drugs and becomes a violent criminal or a pimp or fence; he may take to heroin but will mostly be on his guard against any drug that may reduce his alertness.

Initiation into marihuana-smoking in this group is usually effected through the desire to emulate older boys. The Oakland investigators reject firmly the usual assumption that those who take to the habit are mainly influenced by emotional disturbances and social stresses. Their observations do not support the explanation which regards marihuana use as an effort to escape from reality or to vent underlying hatred of organized society. They conclude that "induction into drug use is a developing experience that depends on access to drugs, acceptance by drug-using associates and kinds of image that youngsters have of drugs". So far from retreating from reality, marihuana-users are held to be making a positive effort to be in the mainstream. The investigators likewise reject the notion of a steady progression from marihuana to crime and opiate addiction. It may occur, as the four types indicate, but most users steer away from these courses. Many of the Oakland youths had experimented with heroin, but only four had become addicts.

The summary conclusion by the Oakland observers is unequivocal: "Youthful drug use in Oakland is an appreciably extensive and deeply rooted practice, lodged primarily in the lower strata but currently expanding into middle and upper class strata. It is woven into a round of adolescent life as a collective practice . . . and is buttressed by a body of justifying beliefs and convictions, involves a repertoire of practical knowledge and incorporates a body of precautions and protections against apprehension or arrest. Drug use constitutes for the users a natural way of life and does not represent a pathological phenomena".

The age at which use of the drug began, according to practically all the studies reported, was in adolescence, though children have sometimes begun before puberty. In a group of American negro soldiers who had been admitted to hospital because of their cannabis-taking and its ill effects, 13% said they had started

doing so before adolescence and two-thirds had started before they were seventeen.

The majority of users, apart from university students, belonged to the urban proletariat. In Nigeria, where the habit has only recently been developing on a large scale, the people mostly affected had drifted to the city and live on the fringe of organised society. Others who take it are long distance lorry drivers who believe that it increases staying power and courage, enabling them to take daredevil risks: among twenty-six cannabis-using patients admitted to Aro Hospital in Abeokuta, eight were lorry or taxi drivers. In North Africa, the rural population is also affected but much less so than the industrial workers and the unemployed who are often under-nourished. During Ramadan there is a rise in the number of cannabis-takers that has to be admitted to the mental hospital. Among cannabis users from Upper Egypt, who are predominantly rural, there is a larger proportion of people with average or above average incomes than in those from Cairo. In several Asiatic countries the well-to-do smoke or otherwise consume their cannabis in private and in moderation; they do not get into the statistics or serve to tone down the published description of the coarse effects of cannabis.

In Morocco and Nigeria and some other African countries, cannabis-taking is not exclusively a masculine preserve, though women who do so are far fewer than men. In South Africa, 10,044 male Africans and 632 females were convicted of possessing cannabis; for Europeans, the corresponding figures were respectively 181 male and 4 female.

There is no convincing evidence that, other things being equal, the nationals of any particular country are more prone to take cannabis than, say, Englishmen or Burmese. In American reports, especially those based on military experience, Negroes and Puerto Ricans are to the fore but this is adequately accounted for in terms of the psychological, economic and civic background of their lives.

It is impossible at present to disentangle the psychological, climatic, social and religious factors which may determine the range and style of cannabis-taking. Confident statements about one or other such influence rest on impressions and conjecture. There are sweeping generalizations (such as that Moslems use cannabis because they are forbidden alcohol, whereas Hindus prefer opium) and detailed accounts of the extraordinarily diverse ways in which the drug is prepared and taken in different countries. Ethnic factors are loosely invoked, but never with adequate evidence. It has been asserted, for example, by a psychiatrist who had had extensive experience in Algeria, that hashish is suited to the dreamy and contemplative temperament of the Moslem, alcohol to the hyperactive Westerner. Another authority, well acquainted with the Moroccan situation, says that the people of that country are imaginative and emotional and that they gain relief through the drug when they are in distress. A German psychiatrist who had spent two years in Morocco reported this year, that impulsive behaviour under hashish can be attributed to "the Moroccan mentality", which is also "prone to trance states". Another, with long Egyptian experience, attributes the growth of the practice there to foreign domination, the prohibition of alcohol, and the special tribunals for foreigners which made illicit traffic easy and safe. A Brazilian doctor maintains that dwellers in the lowlands need cannabis while those who live and work in the high plateaux of the Andes need the coca leaf to sustain them amid the extreme rigours of their lives.

Apart from the Brazilians and adherents of the Ras Tafari cult in Jamaica, a direct association with contemporary religions has not been reported; the continuing role of cannabis in Ayurvedic and Unani medicine cannot be regarded as of a religious nature.

### *General Attitudes*

The attitude of the general public towards cannabis is not constant, nor evenly spread through the different sections of society. In India, and particularly in Bengal, taking the drug is not regarded with disapproval, according to most observers. Sixty or seventy years ago, however, most of the population looked down on the drug-takers, largely because of the degraded class they came from; but consumption of the drug by sadhus who were, in many cases, deeply committed to the habit, was viewed tolerantly. The public attitude in Mexico has also been reported to be tolerant. Satisfactory information about the attitude of various sections of Western society does not exist; inference from newspapers tends to be inconsistent.

### *Personality*

Whether or how far particular features of personality conduce to the establishment of the cannabis habit is a highly contentious question, as much so as in the case of alcohol. At one extreme are those (like P. O. Wolff reporting on the peasants of Brazil) who deny that there is any predisposition, and at the other extreme those who regard defects of personality as prepotent—not only in bringing about habituation but also in determining the form of psychological disturbance produced. Since the estimates of personality are made in almost all cases retrospectively on persons known to be cannabis-users, there is much uncertainty as to whether the traits described were consequences of the habit or had preceded it and favoured its development. The temperamental qualities most often cited as predisposing are anxiety and impulsiveness, shyness combined with a longing for social contacts, immaturity and emotional instability, and various neurotic and psychopathic features. They are clearly unspecific.

Two American psychiatrists who studied a hospital group of cannabis-takers concluded that "the personality pattern of these men is one of strong libidinous desires resulting from early home conflict, a weak ego which identifies with an undesirable father image, and a super ego created by the moral mother. . . . Use of marihuana removes the super ego which, in turn, strengthens the ego and enables it to satisfy the libidinous desires at various levels of infantile behaviour". Another writer, less psychoanalytically recondite, has found that homosexual tendencies are at work among the men who take cannabis to excess. A respectable body of opinion is to the effect that, though there is no doubt that faults of character may be found in those chronic users who reach hospital or prison, the majority of moderate users are within the normal range of personality. This is in sharp contrast to reports like that on the United States marihuana-smoking soldiers in the Panama Canal Zone, which found that 85% of the men were mentally abnormal—62% were classified as constitutional psychopaths and 23% as morons.

### *Prevalence*

There are notoriously great differences between countries in the prevalence of cannabis use, but reliable estimates do not exist. Surmises are based on the

quantities of the drug seized by the police, the number of convictions, and the proportion of people in mental hospitals who admit to having taken it. The figures thus arrived at are very high for some countries. Thus the most recent assessment for Egypt is that 27,000 kilograms of hashish were smuggled into the country, to be used by about 80,000 habitués (out of a total young male population of some three million persons). Gross figures are calculated for Morocco (50% of the population—"a million habitués"), and for some other countries. It is difficult to regard these as more than guesses.

The same uncertainty holds good of current estimates in North America and in Europe. A recent cautious statement, based on United Kingdom convictions for possessing or using cannabis, arrived at a figure of 30 regular users per 100,000 of population, and as many more who have tried it a few times.

Interest has centred on university students. In a sample of London students, 4% have been said to be steady users and 10% occasional users; because of penalties, fluctuations of opinion and other obstacles in the way of a trustworthy survey, such a finding cannot be generalized. It has been reasonably stated that the amount of addiction to a drug in any given population is a composite of availability, price, legal codes, suggestion, cultural attitudes, psychological needs and socio-economic factors; the product of such mixed influences could hardly be unchanging. In a questionnaire to which 1,245 students replied at Brooklyn College, New York, it emerged that progression to other drugs very seldom occurred though three-quarters of the students had, at one time or another, experimented with marihuana. One-third had done so on only one occasion.

#### ADVERSE EFFECTS OF ABUSE

##### *Social Effects apart from Crime and Psychosis*

Observers with long experience concur in the opinion that continued excessive use of cannabis over a period of years leads to moral and social decay; countries from which such reports come are South Africa, Morocco, Algeria, Tunisia, Syria, Turkey, Astrakhan and India. In a few reports, such conclusions are extended to cover chronic use of the drug in only moderate doses but the majority of observers distinguish between heavy dosage and restrained use; restrained use is widely regarded as harmless in its effects, provided the consumer had, from the outset, a healthy mental constitution. In defining healthy mental constitution, circular reasoning is apt to creep in.

The Mayor of New York's Committee on Marihuana found that people who had been smoking marihuana daily for years showed no abnormal psychological functioning which would differentiate them from non-users. The population selected for study, however, was composed mainly of men in prison who had volunteered for the study; they were hardly a representative sample of users and non-users. The Indian Hemp Commission of 1894 reported, after an elaborate enquiry, that moderate use produces no injurious effects except in persons with neurotic diathesis but that excessive use may intensify mental instability and moral weakness, and lead to loss of self respect.

The degradation that most writers report in the excessive chronic cannabis-user is apparent in several ways. He is irritable and impulsive, or inert and dreamy; he neglects himself grossly and is incapable of sustained effort; he may

become a beggar or a vagrant, taking no responsibility for his family; he may practise homosexual or other sexual abnormalities or become impotent; he may be hypochondriacal or apathetic. His unkempt and prematurely aged appearance, inflamed eyes, tremor, and malnutrition are said to make up a fairly characteristic picture.

#### *Effect on Occupational Capacity*

Because of his impaired judgment, especially of space relations, and his irresponsibility, the chronic user—as well as the person acutely intoxicated—is dangerous when driving a car or lorry; this has been reported particularly from African countries. But the general occupational record of chronic users is not invariably bad, and no one has succeeded in determining how many continuous users become incapable of regular work. Bouquet and others have pointed out that there are some men who have been smoking hemp for thirty or more years and continue to follow their occupations satisfactorily: “A few daily pipes of kif are merely an agreeable weakness, enough to produce the condition of well-being they desire. They rest content with that”. In contrast, a pronouncement in the United Nations Commission on Narcotic Drugs, E/CN.7/L.91, stated that “the study points up unequivocally the danger of cannabis from every point of view, whether physical, mental, social or criminological”.

#### *Crime*

Published statements regarding the association between crime and cannabis illustrate the confused and contradictory standpoint taken up by experts, and the loose reasoning evident when a causal nexus is being considered.

Taking the views first of those who believe that cannabis can bring about criminal behaviour, some uncompromising conclusions are put forward, e.g. “literature surveys and personal contacts have clearly demonstrated the association between the use of marihuana and the commission of various crimes”. Several describe outbursts by chronic users, in which they are wildly agitated and, seizing some handy weapon, attack a nearby person, often without the faintest motive for hostility: “murders are frequent and motiveless”. A Greek investigator inquired into the subsequent history of 170 people who were arrested for possessing cannabis between 1919 and 1950 but had not previously been before a court for any offence; he found that 117 of these were subsequently sentenced for crimes of violence, blackmail and similar serious offences. P. O. Wolff wrote in 1949 that the drug had given rise to “a most appalling percentage of the tragedies and crimes in Cuban society”, and he described similar consequences in Brazil. One of the outstanding French authorities on cannabis recounts the sequence of events he has often observed in victims of chronic intoxication: they pass into a state of torpor in some secluded spot; then abruptly they become agitated and the slightest opposition now moves them to violence and perhaps to sexual crimes (especially if they combine other drugs with their cannabis). A Moroccan investigator also emphasizes the lack of adequate motive or premeditation in the outburst of persistent, often murderous, violence; arson is fairly common; the impulsive attacks may be in several respects like those of an epileptic, occurring in a state of disturbed consciousness. Lesser crimes, such as theft and procuring, are common but do not seem to have evoked in observers the strong feeling indicated by such epithets as “heinous”, “savage”, which are applied to the

outbursts of violence. Running amuck is considered by some to be a manifestation of chronic cannabism.

Opposite these supporters of the view that cannabis causes crime, are the almost equally numerous and authoritative writers who deny any direct causal connection, though they do not dispute the frequent concomitance of cannabis and crime. The most influential and, in some respects, the most thorough enquiries were made by the Indian Hemp Commission of 1894 and the Mayor of New York's Committee in 1944. The former concluded that "the connection between hemp drugs and ordinary crime is very slight indeed" but that excessive use does, in some very rare cases, make the consumer violent; six hundred witnesses were asked by the Commission whether they knew of cases of homicidal frenzy, and very few had. A considerable majority of the witnesses did not consider that the drugs produced unpremeditated crimes of violence and some said (as other writers have since) that there is a negative relation because cannabis makes men quiet as a rule. The Mayor's Committee reported to a similar effect; many criminals might use the drug but it was not the determining factor in the commission of major crimes.

Eight observers in Brazil reported in 1962 that an exhaustive inquiry which they had made in the jails and hospitals had not produced any evidence that cannabis is an important cause of crime. This finding runs sharply counter to Pablo Wolff's observations in the same country.

Similar negative conclusions about the causation of crime in cannabis-takers come from Vancouver; the American Armed Forces abroad; New York and California and Nigeria. The Nigerian psychiatrist (Asuni), who examined a series of cannabis-takers, found no major crime among them except in one man who was schizophrenic, and another imprisoned for reckless driving. His general findings are in keeping with the moderate contemporary view, viz. that there is an antecedent predisposition towards psychopathic or criminal behaviour in those cannabis-users who do commit crimes, the cannabis often merely revealing or intensifying abnormal tendencies; and that circumstances arising from cannabis-taking may have fomented criminal conduct; "The people involved in cannabis-smoking . . . tend to be driven underground. In this situation their sense of isolation from the main body of society gets intensified. Their sense of value also changes to that of their new subculture, and this new sense of values may be generally asocial or anti-social". The Medical Director of the Lexington Narcotic Center in 1947 described the same downward progression: "It would be difficult for a normal personality to undergo such experiences without harm; for the type of personality that seems to be the background for addiction, they may cause irreversible distortions". Unfortunately, the type of personality that predisposes to cannabis-taking has not so far been described or identified convincingly.

Probable reasons why there should be flat contradiction between the findings of different observers are: criminals in some countries base their defence on alleged cannabis intoxication which provoked behaviour that they cannot remember and for which they cannot be held fully responsible (just as epilepsy is often entered as the defence in our courts for crimes of violence); many who use cannabis in various countries combine it with opium, heroin, amphetamine, barbiturate or alcohol, and it is impossible to tell which, if any, of these is to

blame for the criminal behaviour observed in a given individual; the samples of persons investigated have mostly been small and the history of drug-taking, its duration and degree in each individual has been provided by the man himself, who often believes it to be to his interest to lie about it. When criminal behaviour occurs in people who take cannabis steadily, it is by some confidently assumed, and by others confidently denied, that the crime was caused by the cannabis, though the available data are insufficient to permit a judgment either way. Only rarely in published reports on criminals and cannabis has a satisfactory effort been made to distinguish between chronic cannabis-use and infrequent or casual experimentation, or between criminals who have recognizable mental disorders and those who are mentally normal, apart from the criminal episode.

The one delinquency which receives general reprobation is driving while under the influence of cannabis whether on an isolated occasion or when bemused by chronic excess.

The old story that cannabis was taken to nerve men to go into battle and to commit murders to order, has little or no foundation except perhaps that the mercenaries employed to put down riots and revolts in India were, according to the Indian Hemp Commission, habitual consumers of cannabis who acquired "Dutch courage" thereby. As mentioned earlier, advantage may be taken of the heightened suggestibility of the cannabis-user.

The most likely relation that emerges from the welter of conflicting statements is that chronic or excessive indulgence in cannabis may, in some people—a small minority of the male public at risk—lead to attacks of disturbed consciousness, excitement, agitation, or panic, and reduce self control. The extent to which the affected person may commit a crime in this state of mind depends more on his personality than on the dose or preparation of cannabis which he has been taking.

### *Psychoses*

"Cannabis psychoses" have been frequently described and the accounts include practically every known variety of mental disorder. The predominant and most frequently put forward are schizophrenia—and especially catatonia; paranoid states; manic excitement; depression and anxiety; and dementia. A writer on the subject whose report (1903) has been often quoted or borrowed, was Warnock, the Medical Superintendent of the mental hospital in Cairo. He had recognized as hashish psychoses an acute hallucinosis with restlessness and incoherence, and a manic condition; but he added that "besides these types, there are numbers of cases of chronic mania, mania of persecution and chronic dementia, alleged to be produced by hasheesh, but I have no means of verifying these allegations". He also wrote: "I doubt very much if hasheesh insanity can be at present diagnosed by its clinical characters alone". This is a cautious view; other observers who have seen many patients to whom they gave this diagnosis, dwell on dementia as a fairly common outcome of chronic use of the drug, or assert that there is a typical and striking uniformity of symptoms in the cannabis psychosis. An Indian psychiatrist, Dhunjibhoy, defines it: "A patient admitted to an Indian mental hospital with intense excitement, grandiose ideas, tendency to wilful violence, a peculiar eye condition (marked conjunctival congestion), total amnesia of all events, attacks of short duration, followed by complete

recovery, with a history of the drug habit and without a psychopathic or neuropathic heredity, is a typical case of "hemp insanity". Some observers describe severe mental deterioration as a familiar outcome while others with much experience say this does not occur at all.

The term "Cannabis psychoses" begs the question of the existence of such a syndrome. On the one hand, there is a cloud of witnesses qualified to speak by lifelong contact with the problem in mental hospitals of countries in which cannabism is very common: they are convinced that the condition is correctly identified. "The effects of the drug are detailed in all the well known text-books and that its abuse is a direct source of serious mental disorder is indisputable", wrote a senior doctor of the I.M.S. in 1923. A high proportion of the patients admitted to mental hospitals in India and Egypt and elsewhere were diagnosed as falling in this category.

On the other hand, there were equally informed doubts as to the legitimacy of the diagnosis in many cases. These doubts were cogently expressed by the Indian Hemp Commission in 1894. Out of 1,344 admissions to the asylums of India during 1892, there were only 98 patients in whom the use of hemp drugs could reasonably be regarded as a factor in causing the insanity, and in 37 of these there was a clear history of some other cause which might have co-operated with the hemp drugs. The Commissioners concluded, after an enquiry of still unequalled scope, that "the usual mode of differentiating between hemp drug insanity and ordinary mania was in the highest degree uncertain and therefore fallacious. . . . The excessive use of hemp drugs may, especially in cases where there is any weakness or hereditary predisposition, induce insanity. It has been shown that the effect of hemp drugs in this respect has hitherto been greatly exaggerated, but that they do sometimes produce insanity seems beyond question". Nevertheless, it has been questioned. Even so guarded a statement implies that there are some sure criteria for establishing the causal role of the cannabis, either when it has been established that a man exhibiting a so-called "functional psychosis" had previously been for years smoking or eating cannabis; or when such a history precedes the onset of an "exogenous psychosis" exhibiting the cognitive and other defects attributable to physical or chemical damage to the brain. As a rule the writers on the subject do not give enough detail to warrant any attempt at retrospective diagnosis; but in those who do, there are instances of persistent confusional syndromes shading off with the passage of time into chronic dementia, in which the cannabis seems to have been the major cause.

The reasons for the discrepancy in opinion expressed by equally experienced observers seem to be:

- (1) The notion of a single cause for mental disorder, widely held in the last century, is no longer regarded as tenable. Consequently, the last two decades have seen few assertions about cannabis being *the* cause of insanity, but many espousing the view that it has been either a necessary or a contributory cause, especially where evidence of predisposition to psychosis is forthcoming from a patient's previous personality and health record.
- (2) The clinical picture of what has been regarded as cannabis psychosis has not had any characteristic features (such as delirium tremens has, for example). It has often been indistinguishable from schizophrenia.

- (3) The reasons put forward earlier (page 48) for the discrepant opinion about crime and hashish, apply here.
- (4) In many of the published reports it is made clear that the hashish was combined with other substances—*datura*, alcohol, heroin or amphetamine—which could be responsible for the psychosis which developed. The cannabis might have had nothing to do with it.
- (5) The history of the patient's previous mental state has been only cursorily enquired into, often for lack of dependable informants. Many of these patients may have had established or incipient mental illness, quite independently of cannabis, before the incident—a crime or a catastrophe—which brought them into a mental hospital.
- (6) The diagnostic methods employed in many studies were, by any reasonable standard, woefully inadequate. In one large area, the diagnoses might be made by a policeman. The long-standing belief that cannabis causes insanity could strengthen this diagnosis in a doubtful case. Ingrained beliefs and habits are known to be powerful enemies of unbiased diagnosis.

There is no unequivocal evidence that cannabis can be the major or sufficient cause of any form of psychosis. Neither is there clear evidence that moderate euphoriant or tranquillizing doses, even if taken over a long period, do mental harm in the majority of people of average mental stability, though rare isolated cases are on record in which persons apparently in good mental health have reacted with a pronounced mental disturbance to moderate doses. In large doses, cannabis can result in severe psychosis which may not clear up; it can be of the schizophrenic paranoid form, anxiety, or excitement. It is usually assumed that persons constitutionally predisposed to psychosis will be those most vulnerable to cannabis; but although this is in keeping with current psychiatric theory, it lacks experimental or statistical confirmation. In many cases it could be argued that the patient would have fallen ill with schizophrenia or other psychosis even if he had not had any cannabis. This would be a weak contention if it were not so often stated by clinicians that the "hashish psychosis" may be indistinguishable from schizophrenia.

#### BENEFITS AND THERAPEUTIC USE

Benefits have been claimed from cannabis, but trustworthy reports have been few and vague. It is said to promote relaxation and calm after the trials of daily life, and to assist shy people to enter into warm social relations; it lessens awareness of pain and misery; it helps to allay neurotic anxiety; and it is an aid to religious fervour. A prominent American psychiatrist recently wrote, apropos of eleven university students who had had severe adverse reactions from cannabis: "The evaluation of harm a drug does requires some consideration of its benefits. Users of marihuana state that it is a source of positive pleasure, that it enhances creativity, that it provides insight, and that it enriches their lives. These are hardly minor claims. All but two of the eleven individuals reporting adverse reactions considered the benefits to far outweigh the unfortunate aspects and they planned to continue use of the drug".

From ancient times, cannabis has been credited with therapeutic powers, especially in India. Its introduction into Europe in the mid-nineteenth century led to the familiar burst of enthusiasm for a new remedy. This dwindled as time

passed but died slowly: "During the period 1840 to 1900, there were something over one hundred articles published which recommended cannabis for one disorder or another". Its vogue preceded the advent of synthetic hypnotics and analgesics, and it was lauded for its effect in alleviating pain, migraine, insomnia, dysmenorrhea, difficult parturition and cramps. In 1890, Russell Reynolds wrote that "when pure and administered carefully it is one of the most valuable medicines we possess".

It was also said to be good for mental disturbances though its proponents rather shamefacedly acknowledged that this line of treatment had a homeopathic flavour. As late as 1928, an article appeared reporting that cannabis was valuable for severe melancholia. There are still a few who assert the therapeutic value of the drug; because it heightens suggestibility and weakens inhibitions, they find it a useful adjuvant in eliciting submerged memories and feelings which the patient cannot otherwise communicate. Its antibiotic powers have also been explored in Central Europe.

#### TOLERANCE AND DEPENDENCE

Even on such straight-forward matters as tolerance and the development of physiological dependence, there are contradictory statements. Practically all informed opinion is satisfied that neither of these develops; yet there are statements to the contrary. "Quite serious disorders are observed in those addicted to the drug over a long period when their poison is removed. Attacks of physical prostration and intellectual apathy, especially, are noted". (Bouquet). A Turkish and an Egyptian observer separately describe how the patients increase the quantity of cannabis they take in order to maximize the pleasurable effects. In Russia, Skliar has observed severe symptoms after withdrawal of "anascha"; among them were anxiety, pains in the limbs, vomiting, diarrhoea, sweating, yawning and depression, all of which would clear up quickly if some of the drug was administered. (There seems, however, doubt as to whether opium and cocaine may have been mixed with the cannabis in "anascha".) Frazer in 1949 observed states of extreme violence and confusion developing in Indian soldiers whose supply of cannabis had been abruptly stopped. To round off the picture with a paradox, Meunier and Richet found that the human organism becomes more sensitive to hashish the more it is taken, with the result that the dose could be gradually lessened to half without diminishing the effects.

Although it is said that many of those who take to cannabis prefer it because they know they can stop it without any disagreeable withdrawal symptoms, several observers agree that the psychological symptoms which develop on withdrawal can be very disagreeable, the main ones being loss of appetite, dyspepsia, pain in the abdomen, fatigue, insomnia, agitation, palpitations and headache.

#### COMBINATION AND PROGRESSION

In some countries, notably India and North Africa, it was not uncommon for cannabis to be combined with datura or with opium, alcohol or heroin. Immigrants into Israel from North Africa, the Near East or the Middle East were "prone to take any narcotic drug they could lay their hands on".

Progression from cannabis to heroin, morphia or cocaine is the subject of discordant conclusions, often based on concordant data. From many countries, including the United States, come reports that a very high proportion of all heroin addicts have previously taken cannabis, and that once they have progressed to this stage, they seldom return to cannabis. What determines the progression is contested. The majority of observers attribute it to association with friends or acquaintances who have themselves become heroin or cocaine addicts; others suppose that it arises from dissatisfaction with the relief or pleasure to be obtained from cannabis; and a minority postulate a predisposition to marihuana which is also a predisposition to heroin. No one suggests that there is a truly pharmacological reason why such "escalation" should occur. Some hold that in a large proportion of cannabis-users, especially adolescents, there is some obscure but powerful factor (which could be psychological or social) greatly increasing the risk that they will take to opiates sooner or later; other authorities maintain that the transition from the marihuana stage to the heroin stage occurs only in a small minority of marihuana-users and that there is no more justification for indicting marihuana as a preliminary to dependence on narcotics than for indicting coffee or tobacco.

Into this darkness some light is cast by a recent study of 2,213 addicts admitted to Lexington and Fort Worth hospitals during 1965. The patients were classified according to the state they came from, the opiate they had been taking and whether they had been marihuana-users or not. In each of sixteen states, more than 50% of the subjects had used marihuana as well as opiates. In each of twelve other states, most of the opiate addicts had never used marihuana. The dominant sequence of events had been marihuana-smoking, arrest, and then opiate use; the respective mean ages for these three events were, first, marihuana-use at 17, arrest at 19, and then onset of heroin use at 20. When the marihuana-users were compared with the non-users of this drug, it was found that the former were twice as likely to be heroin addicts and to secure their drugs from underworld pushers as the addicts who said they had never used marihuana. They also had an earlier age of arrest and of onset of opiate use. Ball and his colleagues who made this study conclude: "As to the issue of association, marihuana-smoking is seen as a predisposing influence in the aetiology of opiate addiction in the United States. Among metropolitan residents of the high addiction Eastern and Western states, opiate use is commonly preceded by the smoking of marihuana cigarettes and arrest. Thus, both marihuana-use and delinquency are predisposing factors within the metropolitan host environment. . . . Enough is now known about the association of marihuana and opiate use to delineate the dominant relationship of these two events. The incipient addict is predisposed to opiate addiction by his use of marihuana, for the following reasons: marihuana is taken for its euphoric effects, it produces a "high"; both marihuana and heroin are only available from underworld sources of supply; both are initially taken within a peer group recreational setting; both are illegal; the neighbourhood friends with whom marihuana-use begins are often the same friends who initiate the incipient addict to the use of opiates. . . . Data of the present study support the conclusion that marihuana-use is closely associated with opiate addiction in the high drug use metropolitan areas of the East and West, but not associated with opiate addiction in twelve Southern states".

This detailed and temperate study lends support to the view that marihuana-users are more likely than non-users to progress to opiate addiction.

## PROHIBITION AND PREVENTION

In many countries laws have been passed which make possession and use of cannabis an offence; in some, the penalties are very severe, and may include capital punishment for trafficking in the drug. The extent to which the laws are enforced varies greatly. Penalties and sentences are often equated with those considered appropriate for heroin and morphine addicts: the Medical Director of the Federal Bureau of Prisons in Washington, D.C. said in 1962: "In our Federal prisons we have about 160 marihuana offenders; the average sentence of the group is nearly six years, which is approximately what the average sentence for (all) drug offenders is".

There are diverse opinions about the effectiveness of penal legislation. A few believe that it has a deterrent effect; thus a Greek observer is sure that if the sale of hashish were legal in his country, the power of advertising is so great that very large numbers of people would take to the drug. Others review the fluctuations of state policy in their own country, veering from rigorous application of severe laws to lax administration and tolerance, and conclude that the laws have not achieved their purpose. It seems, reading the contrasting statements on this matter, that most persons with relevant experience would like to have legislation applicable to the excessive user and the trafficker, but they object to blanket legislation which permits, and even encourages, the imposition of long terms of imprisonment or other stringent punitive measures. It is generally acknowledged that it is not so much the law as the way it is acted on by the police, customs officers and magistrates that determines its efficacy (which is, in any case, limited). Lindesmith, advocating that legislation should be on the same lines as for alcoholism, gives an example, that persons driving a car while under the influence of marihuana might be fined and deprived of their licences for a period of time: "Laws such as this, with penalties of a reasonable nature would probably be more effective than those now in effect because they would be more enforceable and more in accord with the nature of the problem being dealt with. They would have the effect of reducing the discrepancy that now exists between the laws as written and the laws as they are actually enforced".

Total prohibition of all indulgence in cannabis was firmly rejected by the Indian Hemp Commission in 1894: "The Commission now unhesitatingly give their verdict against such a violent measure as total prohibition in respect of any of the hemp drugs". Their chief reasons were that cannabis is, in moderation, harmless; that its withdrawal would excite much resentment among the population, especially the poorest sections; and that if it were forbidden, the people would take to more dangerous drugs. But they went on to say: "While opposed to this amount of interference, the Commission feels strongly that a regulating influence is necessary and should, in future, be exercised by the Government of India over the various systems of administration of the excise on hemp drugs".

The fear that the prohibition of hashish would result in recourse to worse drugs such as heroin, datura or alcohol, has been expressed by several workers, especially those with Tunisian experience. An outstanding authority (Bouquet) wrote in 1951 that if cannabis had been absolutely prohibited thirty or thirty-five years ago in North Africa, the problem would now be manageable but the point has been reached at which suppression would result in an increase in heroin addiction. There is, however, some inconsistency in this matter. Writers who fear

that total prohibition would lead to worse dependence on other drugs, at the same time advocate determined police action to cut off all clandestine supplies of cannabis—a measure which would surely have the same effect, if successful, as total prohibition. A variant of this fear is voiced by the W.H.O. Expert Committee on Mental Health (1967) who say that “condemnation by society may arouse guilt feelings in the user, drive him to even greater dependence on drugs, and prevent him from seeking treatment”.

Another observer, chiefly concerned with comparing United States with English methods of dealing with narcotic addiction, emphasized in 1962 that in America people were driven by social, legal and economic pressures to band together to establish their own group way of life, or subculture: “Addiction as such may not be as antisocial as the kinds of behaviour forced on the addict by the punitive approach to addiction”. The more cannabis-taking is driven underground, or the more it is punished by imprisonment, the greater, according to some writers, is the likelihood of cannabis-smokers being corrupted and turned permanently towards antisocial behaviour of other kinds.

Partial prohibition or indirect measures of control have been tried in many countries. The commonest methods are by taxation and setting up a government monopoly. Neither, from the statements of those who have had experience of the effects, has proved effective in limiting the spread or reducing the prevalence of the habit. A few observers have urged that the risks can be reduced by suppressing the resin or other concentrated form while tolerating the powder; or by harrying and supervising adolescent marihuana-users, on the assumption that if they could consume as much as they wished whenever they wished there would be a much larger number of serious chronic victims—“wretched ragamuffins who are a danger and a burden to society”. But these assumptions and assurances are made on the strength of the particular writer’s experience; they lack statistical or other firm support.

It is generally agreed that taxing the drug does not deter the inquisitive or venturesome experimenter, the adolescent who emulates his slightly older associates, or the psychologically dependent man who craves the drug. They find the money somehow to pay for it, as people do for alcohol.

Control by blocking the sources of illicit supply is evidently the ideal. The measures taken have been described in official reports. They bypass the small fry—the pedlars and carriers—and aim at catching the wholesale trafficker; they also try to destroy the hemp crops: thus the United States Bureau of Customs and the corresponding Mexican authorities collaborate in detecting the hemp fields and rooting them out.

A minority of those who discuss prohibition and its problems are concerned with what moral justification the state has for interfering with a citizen’s right to do as he pleases as long as he does not infringe the rights of others or harm society. Some stress the alleged detriment caused by cannabis to the user’s character and his occupational capacity, reducing his social usefulness; or they point to injuries caused by his behaviour in driving lorries or cars under the influence of the drug. On the other hand, some urge that if alcohol and tobacco can be tolerated and taxed, there is no logical ground for abstaining from doing likewise with cannabis (onto which, they suggest, an unwarranted moralistic stigma has been pinned); they believe that if a drug, such as alcohol or cannabis,

is generally and readily obtainable in a given society, most people learn to use it in moderation, while the psychopathic minority who use it to excess would do so with some available alternative drug anyway. The significant débâcle of alcohol prohibition in the United States has a bearing on the argument for treating cannabis like alcohol. A well established, socially permissible drug is evidently ineradicable by total prohibition, whereas a comparative newcomer like cannabis in Western countries, is a weakling which might be kept in check by firm action, some suppose.

At the present time, it is widely accepted that dependence on a drug is a medical condition calling for medical treatment. This contention is easily justified in the case of drugs to which a physical dependence may develop. In the case of cannabis, however, where the dependence is purely psychological, the issue has been contested. The majority of writers are in favour of psychiatric treatment (provided that the user wants to be treated), combined with social measures of rehabilitation and appropriate social investigation. Broadly, of course, a medical approach is concerned with the welfare of the individual, a social approach is directed more at the protection of society: they complement each other. An antithesis between medical research and social research in this field or between medical and social treatment is forced.

#### BIBLIOGRAPHY

The bibliography on cannabis is extensive—1,750 entries up to 1965—and disorderly. Because almost every theme is beset with contradictory observations and opinions, the digest has to be inconclusive on many of the problems raised.

ABDULLA, A. Cannabis indica als Volksseuche in Agypten. Schweiz. med. Wschr., 1953, 83, 541–543.

ADAMS, R. Marihuana. Harvey Lectures, 1941–1942, series 37, 168–197.

ALLBUTT, T. C. and DIXON, W. Opium and other intoxicants. System of medicine. Vol. 2. London 1906 pp. 965–968.

ALLENTUCK, S. and BOWMAN, K. M. The psychiatric aspects of marihuana intoxication. Amer. J. Psychiat., 1942, 99, 248–251.

AMES, F. A clinical and metabolic study of acute intoxication with cannabis sativa and its role in the model psychoses. J. ment. Sci., 1958, 104, 972–999.

AMMAR, S. and BAREK, E. M. Study of the evolutive aspects of toxicophilia in Tunisia. Proceedings of the Third World Congress of Psychiatry, Montreal 1961. Volume 1, p. 407–412.

ANDRADE, O. M. The criminogenic action of cannabis and narcotics. Bull. Narcot., 1959, 16(4), 23–28.

ANSLINGER, H. J. The psychiatric aspects of marihuana intoxication. J. Amer. med. Ass., 1943, 121, 212–213.

ASUNI, T. Socio-psychiatric problems of cannabis in Nigeria. Bull. Narcot., 1964, 16(2), 17–28.

BAKER-BATES, E. T. A case of cannabis indica intoxication. Lancet., 1935, 1, 811.

- BALL, J. C. Marihuana smoking and the onset of heroin use. *Brit. J. Crim.*, 1967, 7, 408-412.
- BALL, J. C., CHAMBERS, C. D. and BALL, M. J. The association of marihuana smoking with opiate addiction in the United States. Annual Meeting of the American Sociological Association, San Francisco, California, August 28-31, 1967.
- BARTHOLOMEW, A. A. and REYNOLDS, W. S. Four cases of progressive drug abuse. *Med. J. Aust.*, 1967, 1, 653.
- BENABUD, A. Psycho-pathological aspects of the cannabis situation in Morocco: Statistical data for 1956. *Bull. Narcot.*, 1957, 9(4), 1-16.
- BERINGER, K., BAEYER, W. VON, and MARX, H. Zur Klinik des Haschischrausches. *Nervenarzt*, 1932, 5, 337-350.
- BEWLEY, T. *Lancet.*, 1965, 1, 818-820.
- BEWLEY, T. Recent changes in the pattern of drug abuse in the United Kingdom. *Bull. Narcot.*, 1966, 18(4), 1-13.
- BLUMER, H. The world of youthful drug use. ADD Center Project, Final Report, (School of Criminology, University of California, Berkeley, California).
- BOETTCHER, Ueber die Anwendung des indischen Hanfs in der Psychiatrie. *Berl. Klin. Wschr.*, 1866, 3, 166-168.
- BOUQUET, J. Cannabis. *Bull. Narcot.*, 1950, 2(4), 14-30; 1951, 3(1), 22-45.
- BOUQUET, J. Marihuana intoxication (letter). *J. Amer. med. Ass.*, 1944, 124, 1010-1011.
- BOZZETTI, L., GOLDSMITH, S. and UNGERLEIDER, J. T. The great banana hoax. *Amer. J. Psychiat.*, 1967, 124, 678-679.
- BROMBERG, W. Marihuana intoxication. A clinical study of cannabis sativa intoxication. *Amer. J. Psychiat.*, 1934, 91, 303-330.
- BROMBERG, W. Marihuana: A Psychiatric study. *J. Amer. med. Ass.*, 1939, 1113(1), 4-12.
- BROMBERG, W. and RODGERS, T. C. Marihuana and aggressive crime. *Amer. J. Psychiat.*, 1945-46, 102, 825-827.
- BROTTEAUX, P. Hachich: herbe de folie et de rêve. Paris 1934.
- Bull. Narcot.*, The illicit traffic in narcotics throughout the world 1951, 3(1), 1-14.
- Bull. Narcot.*, The cannabis problem: A note on the problem and the history of international action. 1962, 14(4), 27-31.
- Bull. Narcot.* Review of the 21st Session of the Commission on Narcotic drugs. 42nd session of the Economic and Social Council of the United Nations. 1967, 19(2), 59-61.
- CARSTAIRS, G. M. Cultural factors in the choice of intoxicants. *Quart. J. Stud. Alcohol*, 1954, 15, 220-237.
- Challenge of crime in a free society. A report by the President's Commission on Law Enforcement and Administration of Justice. U.S. Government Printing Office. Washington, February 1967, p. 211-231.
- CHAPPLE, P. A. Cannabis—a toxic and dangerous substance: A study of eighty takers. *Brit. J. addict.*, 1966, 61, 269.

- CHAREN, S. and PERELMAN, L. Personality studies of marihuana addicts. *Amer. J. Psychiat.*, 1946, 102, 674-682.
- CHEIN, I., GERARD, D. L., LEE, R. S. and ROSENFELD. Narcotics, delinquency and social policy. The road to H. London, 1964.
- CHOPRA, G. N. and CHOPRA, I. C. The use of cannabis drugs in India. *Bull. Narcot.*, 1957, 9(1), 4-29.
- CHOPRA, R. N., CHOPRA, G. S. The present position of hemp-drug addiction in India. *Indian med. res mem.* No. 31. Calcutta 1939, p. 1-119.
- CHOPRA, R. N., CHOPRA, G. S. and CHOPRA, I. C. Cannabis sativa in relation to mental diseases and crime in India. *Indian J. med. Res.*, 1942, 30, 155-171.
- CHOPRA, R. N. and CHOPRA, I. C. Treatment of drug addiction. Experience in India. *Bull. Narcot.*, 1957, 9(4), 21-23.
- CHRISTOZOV, C. L'aspect marocain de l'intoxication cannabique d'après des études sur des malades mentaux chroniques. *Maroc med.*, 1965, no. 483, 630-642; 1965, no. 486, 866-889.
- DE CLÉRAMBAULT, Discussion de l'article de L. Livet intitulé: Les fumeurs de mariguana. *Ann. med.-psychol.*, 1920, 12, (10th series), 267-269.
- CLOUSTON, T. Mental effects of hasheesh. *J. ment. Sci.*, 1897, 42, 790-795.
- COLES, W. H. Cannabis indica (letter). *Lancet*, 1935, 1, 904.
- CONOS, B. Trois cas de cannabisme avec psychose consécutive. *Bull. Soc. Path. exot.*, 1925, 18, 788-793.
- CURTIS, H. C. and WOLFE, J. R. Psychosis following the use of marijuana with report of cases. *J. Kansas med. Soc.*, 1939, 40, 515-517.
- DALLY, P. Undesirable effects of marihuana (letter). *Brit. med. J.*, 1967 3, 367.
- DE BOOR, W. *Pharmakopsychologie und Psychopathologie*. Berlin 1956, 191-198
- DELAY, J. Les mésaventures d'un hachischin. *La Presse méd.*, 1944, 52, 321.
- DESCHAMPS, A. Ether, cocaine, haschich, peyotl et démence précoce. Paris 1932.
- DHUNJIBHOY, J. E. A brief resume of the types of insanity commonly met with in India, with a full description on "Indian hemp insanity" peculiar to the country. *J. ment. Sci.*, 1930, 76, 254-264.
- DRAPKIN, I. and LANDAU, S. F. Drug offenders in Israel: A survey. *Brit. J. Crim.*, 1966, 6, 376-390.
- DREWRY, P. H. Some psychiatric aspects of marihuana intoxication. *Psychiat. Quart.*, 1936, 10, 234-242.
- DURAND, V. J. *Encyclopédie Médico-Chirurgicale*, 37380 A20, page 3.
- DWARAKANATH, S. C. Use of opium and cannabis in the traditional systems of medicine in India. *Bull. Narcot.*, 1965, 17(1), 15-19.
- EDDY, N., HALBACH, H., ISBELL, H. and SEEVERS, M. Drug dependence: L/3 Significance and characteristics. *Bull. WHO.*, 1965, 32, 721-733.
- ELKES, J. The dysleptics: Note on a no-man's-land. *Comprehens. Psychiat.*, 1963, 4, 195.
- EMERICK, C. A. The control program of the U.S. Bureau of Customs. *Proceedings of the White House Conference on Narcotic and Drug Abuse*, Washington, D.C. 1962 p. 28.

- EWENS, G. F. W. Insanity following the use of Indian hemp. In: *Insanity in India*, pages 129-142. Calcutta 1908.
- EWENS, G. F. W. Insanity following the use of Indian hemp. *Indian med. Gaz.*, 1904, 39, 401-413.
- FONTOYNONT, M. A propos de l'intoxication des Malgaches per le "rongony" (chanvre). *Bull. Soc. Path. exot.*, 1938, 31, 446-448.
- FRANKEL, F. and JOEL, E. Beiträge zu einer experimentellen Psychopathologie. Der Haschischrausch. *Z. ges. Neurol. Psychiat.*, 1927, 111, 84-106.
- FRASER, J. D. Withdrawal symptoms in Cannabis indica addicts. *Lancet*, 1949, 2, 747.
- FREEDMAN, H. L. and ROCKSORE, M. J. Marihuana: A factor in personality evaluation and Army maladjustment. *J. clin. Psychopath.*, 1946, 7, 765-782.
- FREUSBERG. Ueber die Sinnestäuschungen im Hanfrausch. *Allg. Z. Psychiat.*, 1877-78, 34, 216-230.
- GASKILL, H. S. Marihuana, an intoxicant. *Amer. J. Psychiat.*, 1945, 102, 202-204.
- GINSBURG, D. and KAUFMAN, J. L. Problems of drug addiction in Israel. *Bull. Narcot.*, 1955 7(1), 15-17.
- GOKAY, F. K. Durch Missbrauch von Heroin und Haschisch entstehende Geisteskrankheiten in der Türkei. *Z. ges. Neurol. Psychiat.*, 1937, 158, 428-436.
- GOMILA, E. M. K. in Walton R. P. Marihuana: America's new drug problem. pp. 27-40. Philadelphia, 1938.
- HALLECK, S. L. Psychiatric treatment of the alienated college student. *Amer. J. Psychiat.*, 1967, 124, 642-650.
- HANEVELD, G. T. Brieven uit den Vreemde. *Ned. T. Geneesk.*, 1959 103(1), 686-688.
- HARMS, E. Drug addiction in youth. London 1965.
- HESNARD, A. Note sur les fumeurs de chanvre en orient. *Encéphale*, 1912, 7, 40-46.
- HOFFMAN, H. R., SHERMAN, I. C., KREVITSKY, F. and WILLIAMS, F. Teenage drug addicts arraigned in the narcotic court of Chicago. *J. A. er. med. Ass.*, 1952, 149, 655-659.
- IGERT, G. Milieu culturel marocain et névroses. *Maroc. med.*, 1955. 34(1), 648.
- Indian Hemp Drugs Commission Report, 1894. Simla 1894.
- Interdepartmental Committee on Narcotics. Report to the President of the United States. *Bull. Narcot.*, 1956, 8(2), 4-10.
- IRELAND, T. Insanity from the abuse of Indian hemp. *Alienist and Neurologist*, 1893, 14, 622-630.
- KABELIK, J., KREJCI, Z. and SANTAVY, F. Cannabis as a medicament. *Bull. Narcot.*, 1960, 12(3), 5-23.
- KANT, F. Ueber Reaktionsformen im Giftrausch. Mit einem Beitrag zum Halluzinationsproblem. *Arch. Psychiat.*, 1930, 91, 694-721.
- KANT, F. and KRAFF, E. Ueber Selbstversuche mit Haschisch. *Arch. exp. Pathol. Pharmak.*, 1928, 129, 319-338.

- KEELER, M. H. and REIFLER, C. B. Grand mal convulsions subsequent to marihuana use. *Dis. nerv. Syst.*, 1967, 28, 474-475.
- KEELER, M. H. Adverse reaction to marihuana. *Amer. J. Psychiat.*, 1967, 124, 674-677.
- KOPPIKAR, G. S. Drug addiction in Bombay: opium, bhang, ganja. *Indian J. med. Sci.*, 1948, 2, 131-136.
- LAMBO, T. A. Medical and social problems of drug addiction in West Africa. *Bull. Narcot.*, 1965, 17(1), 3-13.
- LANCET, Toxic effects of cannabis indica (Anonymous letter). 1890, 1, 621.
- LASAGNA, L., VON FELSINGER, J. M. and BEECHER, H. K. Drug-induced mood changes in man. *J. Amer. med. Ass.*, 1955, 157, 1006-1020; and 1113-1119.
- LINDEMAN, E. and MALAMUD, W. Experimental analysis of the psychopathological effects of intoxicating drugs. *Amer. J. Psychiat.*, 1934, 90, 853-881.
- LINDESMITH, A. R. The addict and the law. Bloomington, Indiana 1965.
- LIVET, L. Les fumeurs de mariguana. *Ann. med.-psychol.*, 1920, 12, (10th series), 257-267.
- LUCENA, J. Maconhismo e alucinacoes. *Neurobiologia*, 1939, 2, 110-120.
- LUCENA, J. La symptomatologie du cannabisme. *Proceedings of the Third World Congress of Psychiatry, Montreal 1961. Volume 1, p. 401-406.*
- LUCENA, J., ATAIDE, L. and COELHO, P. Maconhismo cronico e psicoses. *Neurobiologia*, 1949, 12, 235-258.
- MARCOVITZ, E. Marihuana problems (letter). *J. Amer. med. Ass.*, 1945, 129, 378.
- MARCOVITZ, E. and MYERS, H. J. Marihuana addiction in the Army. *War. Med.*, (Chic.) 1944, 6, 382-391.
- MARIE, A. Note sur la folie haschichique (à propos de quelques Arabes aliénés par le haschich). *Nouv. Iconogr. Salpet.*, 1907, 20, 252-257.
- Mayor's Committee on Marihuana, New York. The marihuana problem in the city of New York. Sociological, medical, psychological and pharmacological studies. Lancaster, Pennsylvania 1944.
- MEGGENDORFER, F. Intoxikations-psychosen. In: *Handbuch der Geisteskrankheiten*. Berlin 1928, 7, 353-355.
- MEUNIER, R. Hachich. In: *Dictionnaire de Physiologie* (Ch. Richet) Paris 1909, 8, 188-200.
- MOREAU, Lypémanie avec stupeur: tendance à la demence. Traitement par l'extrait (principe résineux de cannabis indica), Guérison. *Gaz. Hop. (Paris)*, 1857), 30, 391.
- MUNCH, J. C. Marihuana and crime. *Bull. Narcot.*, 1966, 18(2), 15-22.
- MURPHY, H. B. M. The cannabis habit. *Bull. Narcot.*, 1963 15(1), 15-23.
- New York Academy of Medicine. Report on drug addiction I 1955, 31, 592-607.
- New York Academy of Medicine. Report on drug addiction II 1963, 39, 417-473.
- NYSWANDER, M. The drug addict as a patient. New York 1956.
- O'SHAUGHNESSY, W. B. On the preparations of the Indian hemp, or gunjah. *Trans. Med. and Psychic., Soc. Cal.*, 1842, 8(2), 421-461.

- PARRERIRAS, D. Census of drug addicts in Brazil—The incidence and nature of drug addiction. *Bull. Narcot.*, 1965, 17(1), 21–23.
- PAULUS, I. and WILLIAMS, H. R. Marihuana and young adults. *Addictions*, 1966, 13(3), 26–33.
- PEARLMAN, S. Drug experience in an urban college population. *Amer. J. Orthopsychiat.*, 1967, 37, 297–299.
- PEEBLES, A. S. M. and MANN, H. W. Ganja as a cause of insanity and crime in Bengal. *Indian med. Gaz.*, 1914, 491, 395–396.
- DE PINHO, R., PINTO, L. F., SAMPAIO, A., SANTOS, D., KRUSCHEWSKY, C., AGEVEDO, A., NAZARETH, A. and SILVA, M. Contribuicao a mesa redonda sobre “problemas socio-psicologicos do maconhismo”. VI Congresso da Sociedade de Neurologia, Psiquiatria e Higiene Mental do Brasil. *Neurobiologia*, 1962, 25, 9–19.
- POROT, A. La lutte contre l'opium et les stupéfiants sur le plan international, en ces dernieres annees. *Ann. med.-psychol.*, 1941, 99(i), 97–120.
- POROT, A. Le cannabisme (haschich, kif, chira, Marihuana) *Ann. med.-psychol.*, 1942, 100(i), 1–24.
- PERRUSSEL, G. Notes préliminaires sur la psychopathologie des fumeurs de chanvre en Tunisie. *Arch. Inst. Pasteur Tunis*, 1925, 14, 434–440.
- RECH, M. Des effets du hachisch sur l'homme jouissant de sa raison et sur l'aliéne. *Ann. med.-psychol.*, 1848, 12, 1–37.
- REED, C. F. and WITT, P. N., Factors contributing to unexpected reactions in two human drug-placebo experiments. *Confin. psychiat.*, 1965, 8, 57–68.
- REICHARD, J. D. The marihuana problem: A paper in the Medical Correctional Association meeting, 22nd October, 1943. *J. Amer. med. Ass.*, 1944, 125, 594–595.
- REICHARD, J. D. Addiction: Some theoretical considerations as to its nature, cause, prevention and treatment. *Amer. J. Psychiat.*, 1947, 103, 721–730.
- REKO, V. A. Magische Gifte—Rausch—und Betaubungsmittel der Neuen Welt. pp. 61–75. Stuttgart, 1936.
- REYNOLDS, J. R. on the therapeutic uses and toxic effects of cannabis indica. *Lancet*, 1890, 1, 637–638.
- ROLLS, E. J. and STAFFORD-CLARK, D. Depersonalization treated by cannabis indica and psychotherapy. *Guy's Hospital. Rep.*, 1954, 103, 330–336.
- ROSENBLOOM, J. R. Notes on Jewish drug addicts. *Psychol. Rep.*, 1959, 5, 769–772.
- SCHUR, E. M. Narcotic addiction in Britain and America. London 1962.
- SCOURAS, PH. Le syndrome catatonique des psychoses cannabiques aiguës. *Encephale*, 1939, 34(i), 78–85.
- SHAW, W. S. J. Cannabis indica: a dangerous drug (letter) *Brit., med. J.*, 1923, 2, 586.
- SILBERMAN, M. Aspects of drug addiction. London, 1967.
- SILER, J. F., SHEEP, W. L., BATES, L. B., CLARK, G. F., COOK, G. W. and Smith, W. A. S., Marihuana smoking in Panama. *Milit. Surg.*, 1933, 73, 269–280.

- SINGTON, D. (Ed.) Psychosocial aspects of drug-taking. Proceedings of a one-day conference held at University College, London, 25th September 1964. Oxford, 1965.
- SKLIAR, N. and IWANOW, A. Ueber den Anascha-Rausch. *Allg. Z. Psychiat.*, 1932, 98, 300-330.
- SKLIAR, N. Ueber Anascha Psychosen. *Allg. Z. Psychiat.*, 1934, 102, 304-312.
- SONNENREICH, C. and GOES, J. P. Maconha e disturbios psiquico. *Neurobiologia*, 1962, 25, 69-91.
- SOUEIF, M. I. Hashish consumption in Egypt, with special reference to psychosocial aspects. *Bull. Narcot.*, 1957, 19(2), 1-12.
- STRINGARIS, M. G. Zur Klinik der Haschisch Psychosen (Nach Studien in Griechenland). *Arch. Psychiat.*, 1933, 100, 522-532.
- TODD, A. R. The hemp. *Endeavour*, 1943, 2, 69-72.
- TRAMER, L. and Bentovim, L. Clinical psychological study on Eastern drug addicts. *Confin. psychiat. (Basel)*, 1961, 4, 194.
- TULL-WALSH, J. H. Hemp drugs and insanity. *J. ment. Sci.*, 1894, 40, 21-36.
- UNESCO Commission on Narcotic Drugs. Review of illicit traffic. E/CN.7/506 Geneva, October 1967.
- UNESCO Commission on Narcot Drugs. Abuse of drugs. E/CN.7/496. Geneva, September 1966.
- VAILLE, C. and STERN, G. Drug addiction: medical and social aspects in France, *Bull. Narcot.*, 1954, (2), 1-17.
- VIERTH, G. Psychopathologische Syndrome nach Haschisch-Genuss. Beobachtungen aus Marokko. *Munch. med. Wschr.*, 1967, 109, 522-526.
- VOGEL, V. H., ISBELL, H. and CHAPMAN, K. W. Present status of narcotic addiction with particular reference to medical indications and comparative addiction liability of the newer and older analgesic drugs. *J. Amer. med. Ass.*, 1948, 138, 1019-1026.
- VOGEL, V. H. and ISBELL, H. Medical aspects of addiction to analgesic drugs. *Bull. Narcot.*, 1950, 2(4), 31-40.
- WALTON, R. P. Marihuana problems (letter) *J. Amer. med. med. Ass.*, 1945, 128, 383.
- WALTON, R. P. Marijuana: America's new drug problem. Philadelphia 1938.
- WARNOCK, J. Insanity from hasheesh. *J. ment. Sci.*, 1903, 49, 96-110.
- WATT, J. M. and BREYER-BRANDWIJK, M. G. The forensic and sociological aspects of the dagga problem in South Africa. *S. Afr. med. J.*, 1936, 10, 573-579.
- WOLFF, P. O. Marijuana in Latin America: The threat it constitutes. Washington, 1949.
- WOLSTENHOLM, G. E. W. and KNIGHT, J. (Eds.) Hashish: its chemistry and pharmacology. Ciba Foundation Study Group No. 21. London 1965.
- World Health Organization Expert Committee on Mental Health, 14th Report. Technical Report Series, No.: 363. Geneva 1967.
- YAWGER, N. S. Marijuana: our new addiction. *Amer. J. med. Sci.*, 1938, 195, 351-357.

## APPENDIX 2

### History of the Development of International Control

#### *International Opium Convention 1912*

The Conference at The Hague which drew up this Convention expressed the view that it was "desirable to study the question of Indian hemp from the statistical and scientific point of view, with the object of regulating its abuses, should the necessity therefore be felt by internal legislation or by an international agreement".

2 In 1923 the Government of South Africa proposed to the League of Nations Advisory Committee on Traffic in Opium and Dangerous Drugs that Indian hemp ("the whole or any portion of the plants *C. Indica* and *C. Sativa*") should be treated as one of the habit-forming drugs and included in the international convention. When this proposal was discussed at the 6th Conference of the Advisory Committee in August 1924, the British delegate suggested that governments should be asked to furnish the League with information about production, use and traffic in the drug so that the question could be further considered at the Advisory Committee's meeting in 1925. A general enquiry was circulated by the Secretariat in August 1924.

#### *Second Opium Conference 1924-1925*

3. At this conference of States members of the League of Nations and signatories to the 1912 Convention, convened primarily to devise administrative measures to end opium production and use in the Far East, the Egyptian delegate, supported by the Turkish delegate, submitted proposals that hashish should be included in the list of narcotics with which the Conference had to deal, and that all other noxious drugs should automatically be brought under the Convention. A suggestion by the British delegate that the matter should be left over for the Advisory Committee as already arranged, was rejected.

4. The Annex to this paper contains an extract from the main Egyptian statement. The matter was referred to a sub-committee consisting of doctors, professors and persons with ministerial or administrative experience in public health, hospital or pharmaceutical service drawn from Belgium, Brazil, Canada, Dominican Republic, Egypt, France, Germany, Great Britain, Greece, Italy, Japan, Netherlands, Poland, Spain, Switzerland, U.S.A. Eventually all but 3 members reported in favour of complete prohibition of the production and use of cannabis resin; the delegates of Great Britain, Netherlands and India abstained, the first out of uncertainty whether there was a potential medical value in the resin. The Indian delegate offered co-operation in measures to control international traffic but emphasised "serious difficulties in confining the use of hemp drugs to medical and scientific purposes; for example, there are social and religious customs which naturally have to be considered, and there is the doubt whether the total prohibition of drugs easily prepared from a wild growing plant could in practice be made effective".

5. The Sub-Committee's report was adopted and another sub-committee (consisting of representatives of Belgium, Egypt, France, British Empire, India, Siam, Turkey and Uruguay) was invited to prepare draft provisions for incorporation in the new convention. This group's proposals were adopted on 14th

February 1925 virtually without discussion. As embodied in the International Opium Convention (19th February 1925) these

- (i) defined Indian hemp as "the dried flowering or fruiting tops of the pistillate plant *cannabis sativa* L. from which the resin has not been extracted, under whatever name may be designated in commerce"; and
- (ii) required contracting parties
  - (a) to impose *internal control over galenical preparations* (extracts and tinctures) of Indian hemp (articles 4, 5 and 6);
  - (b) to impose *import/export control* over Indian hemp (as defined in (i) above) and resin prepared from it (articles 12-18);
  - (c) "to prohibit the export of the resin obtained from Indian hemp and the ordinary preparations of which the resin forms the base (such as hashish, esrar, chiras, djamba) to countries which have prohibited their use, and, in cases where export is permitted, to require the production of a special import certificate issued by the Government of the importing country stating that the importation is approved for the purposes specified in the certificate" (these had to be medical or scientific) and that the resin or preparation will not be re-exported;
  - (d) "to exercise an effective control of such a nature as to prevent the illicit international traffic in Indian hemp and especially in the resin" (article 11).

#### *Advisory Committee on Traffic in Opium*

6. A report prepared in August 1925 for the Advisory Committee on Traffic in Opium after enquiries of governments about the South African proposal of 1923, indicated replies as follows:

- (i) *Indian Hemp is not harmful*  
Czechoslovakia, Hungary.
- (ii) *It is harmful, but should not be treated as a dangerous narcotic*  
Belgium.
- (iii) *It is harmful and is already subject to statutory control*  
Argentina, Bulgaria, Canada, Australia, Esthonia, Finland, Great Britain (controlled as poison), Hungary, Monaco, Italy, Latvia, Norway. (The restrictions appeared, in most cases, to limit sale to prescription only).
- (iv) *It is harmful and should be controlled by the international treaty*  
Albania, Ecuador, New Zealand, China, Panama, Portugal.

Only the reply from Portugal claimed experience of the harmfulness of the drug (in Mozambique). A large number of countries (including most of those represented on Sub-Committee F) had not sent replies to the Advisory Committee's enquiry by August 1925.

7. In the decade after 1925 the Advisory Committee moved towards systematic collection of standardised annual reports from governments on administrative measures, and of information about illicit traffic. Little attention was paid to Indian hemp until 1933 when the Committee's report mentioned that

"while a taste for Indian Hemp products appears to be prevalent mainly among the Asiatic and African peoples, it is not by any means confined to

them. A smuggling trade in cigarettes containing Indian hemp ("marihuana" cigarettes) appears to have sprung up between the U.S.A., where it grows as a wild plant freely, and Canada. It may well be that, as the control over the opium and coca derivatives makes it more and more difficult to obtain them, recourse will be increasingly had to Indian hemp for addiction purposes, and it is important that the trade in Indian hemp and its products should be closely watched".

8. This apprehension led the Committee in 1935 to make a special review of the Indian hemp situation. A detailed memorandum by the U.S.A. revealed a widespread of habitual use of marihuana and "the alarming influence of addiction to Indian hemp on the development of criminality"; some 34 out of 46 States had legislated to suppress marihuana traffic. France reported on intensive measures to repress the traffic from Syria. Egypt drew attention to the inadequacy of the 1925 Convention, stressed that hashish had no therapeutic or industrial value and pressed for new provisions to prevent cultivation of Indian hemp with due regard to the special difficulties of certain countries. India said it could not change its policy, under which the moderate use of raw opium and hemp drugs was tolerated, while every measure was taken to prevent abuse. Ganja and bhang were connected with social and religious customs; and prohibition had been tried without success. Poland and Switzerland pointed out that "there was no thorough study available of Indian hemp particularly from the medical and scientific standpoint". The Committee accordingly decided, on the proposal of the Polish delegate, to set up a Sub-Committee on Indian hemp, composed of representatives of Canada, Egypt, Spain, U.S.A. (who was made chairman), France, U.K., India, Mexico, Netherlands, and Poland, with a medical assessor,

"to study the whole problem of Indian hemp. The Sub-Committee might appeal in the course of its investigations for the co-operation of experts, doctors, and others who are duly qualified in the matter of Indian hemp and who have had local experience either in Africa or in Asia or in America. By way of preparation for the work of the Sub-Committee, the Committee requested the Secretariat, on the proposal of the Swiss delegate, to prepare a bibliography of all the literature relating to Indian hemp, and in the probable event of no complete and authoritative work on the question being available, to consider the possibility of publishing, at some future date, a memorandum on the Indian hemp problem bringing up to date the existing information on the subject, particularly from the medical and scientific standpoint".

9. At its first meeting in 1935 the Sub-Committee discussed bibliography and the development of chemical tests for cannabinols, and decided to invite the collaboration of 6 experts<sup>1</sup> in simplifying nomenclature and in determining whether, and in which forms the drug was habit-forming and what treatment might be appropriate. The Secretariat was asked to consider possible improvements in the convention and to arrange for studies of the cause and effect of Indian hemp abuse.

---

<sup>1</sup> Col. Biggam, RAMC, Col. Martin, Syrian Health Service, Dr. Treadway, U.S.A. Public Health Service, Dr. Charnot, Head of Toxicology, Rabat, Dr. Bouquet, Chemist to Tunis hospitals, Prof. Rodhain, Antwerp.

10. In 1936 the Sub-Committee reviewed information presented by the assessor, Dr. Bouquet (whose contribution was particularly commended) and Dr. Treadway. Its report included the following statements:—

“As to the effects of the abuse of cannabis, the Sub-Committee found that the information before it still leaves much to be desired. The Sub-Committee recommends that effort be made to procure further information concerning cannabis addiction in respect of:

- (1) Physiological effects
- (2) Psychological effects
- (3) Psychopathic effects (dementia)
- (4) Addictive properties (withdrawal symptoms)
- (5) Relation to crime.

Information in regard to insanity resulting from the use of cannabis and in regard to the relation between cannabis addiction and crime was informally presented, which leads the Sub-Committee to the conclusion that it would be advisable to collect all information on these subjects available throughout the world. . . . The question was raised in the Sub-Committee of the relation possibly existing between Indian hemp addiction and addiction to other drugs. One may ask whether Indian hemp addicts deprived of hashish have or have not a tendency to become victims of other drugs, and whether there is or is not a relation between these two addictions. The question is whether to fear that the eradication of one evil may lead to the rise of another. . . .”

11. In 1938 the Sub-Committee (joined by Dr. Bouquet) was provided with a variety of scientific papers and reports (including information about the United States Marihuana Tax Act 1937) and summed up its progress as follows:

“The Sub-Committee points out that, as a result of the investigations made up to the present time, progress has been made in respect of the chemical identification of cannabis, and information has been collected on other phases of the problem, while, at the same time, certain points still require clarification, especially in connection with the physiological and psychological and psychopathic effects of cannabis and with the relationships between hashish addiction and insanity and between cannabis addiction and addiction to other drugs, especially heroin.”

There were no further meetings of the Advisory Committee or the Sub-Committee on Indian Hemp.

#### *U.N. Commission on Narcotic Drugs*

12. At its first session in 1946 the Commission decided not to appoint a sub-committee on Indian hemp as the Advisory Committee had before. The Commission's report mentioned that

“Some medical opinion in the United States and in Mexico had been advanced that marihuana did not offer any real danger, and had little influence on criminal behaviour. Indeed, the Mexican physicians were of the opinion that its use had no ill effect on the health of the user. The representative of Mexico wondered whether in these circumstances too strict restrictions on the use of this plant, the production of which was in fact prohibited in Mexico, would not result in its replacement by alcohol, which

might have worse results. The representative of the United States did not share this point of view and quoted a number of concrete examples, proving the relationship between the use of marihuana and crime. He considered the recent report of certain United States physicians on the subject to have been extremely dangerous. These physicians had had, in fact, a very limited field of observation as they had carried out their studies in a penal settlement. . . . The representative of India considered that the effect of cannabis in his country depended generally on the natural and psychological predisposition of the individual. On the whole Indians were moderate in their use of ganja and bhang. The same phenomena had been observed in Egypt. This country had nevertheless limited the quantity of cannabis indica as well as other narcotic drugs that could be prescribed by physicians for medicinal purposes".

13. At its third session in 1948 the question of the medical use of cannabis was raised and the Commission agreed with a proposal of the Soviet Union to insert in the future Single Convention a provision prohibiting the preparation of hashish.

14. From 1949-1952 the Commission concentrated on preparation of a new international convention. In 1953 it noted that new restrictions on cannabis had been imposed in France, Algeria, Morocco, Tunisia and Egypt; agreed that as suggested by W.H.O. the term "cannabis" should be substituted for "Indian hemp"; and requested the Secretariat to carry out surveys of the problem in various countries and studies (1) to find alternative fibre-producing crops without harmful resin (with the Food and Agriculture Organisation) and (2) of the physical and mental effects of cannabis (through W.H.O.).

15. In 1954 the Commission was advised by the W.H.O. Expert Committee on Drugs Liable to Produce Addiction that cannabis preparations no longer served any useful medical purpose and were practically obsolete. The Commission recommended ECOSOC to urge governments to explore discontinuing their use as quickly as possible. Replies to this ECOSOC exhortation later showed that many governments were non-committal about the need for any positive action.

16. In 1955 the Commission received reports on the cannabis situation in six countries in South Africa. It was also provided with a report by Dr. P. O. Wolff (formerly Chief, Addiction Producing Drugs Section of W.H.O.) on the "Physical and Mental Effects of Cannabis" which affirmed that

"It is important to realise that not only is marihuana smoking *per se* a danger but that its use eventually leads the smoker to turn to intravenous heroin injections"

and concluded that

"cannabis constitutes a dangerous drug from every point of view, whether physical, mental, social or criminological".

At the same session the Commission provisionally decided to include cannabis in Schedule IV of the projected new convention.

17. In 1957 the Commission received reports on the problem in Angola, Brazil, India, Morocco, Costa Rica, Egypt, Italy and Pakistan, and requested

surveys in Nepal and Lebanon. The representative of W.H.O. reaffirmed that cannabis did not possess any therapeutic value. The Commission adopted a resolution calling on governments to abolish legal consumption of cannabis and to promote research.

18. In 1958 reports were presented on the cannabis situation in Burma and Lebanon. Brazil reported that use of maconha had spread to nearly all social classes and contributed to crime. India reported that the Indian Pharmacopoeia Committee believed cannabis to have definite clinical value, but its use was declining because of the instability of the active principle and more stable preparations were being sought. The All-India Narcotics Conference in 1956 had recommended steps towards the total prohibition of ganja and bhang by 1959 and 1961.

19. In 1959 the Commission reviewed surveys of the cannabis situation in Jamaica, Mexico, U.S.A. and China; noted active countermeasures being taken in Morocco, the Near and Middle East and Mexico; asked that the U.N. Laboratory should intensify research to identify cannabis drugs and distribute authentic samples for national analysis; and, in the light of new suggestions that cannabis might have a value as an antibiotic, recommended ECOSOC to ask W.H.O. to provide advice on this question for consideration at the proposed Plenipotentiary Conference on the Draft Single Convention.

20. At its sixteenth session in 1961 the Commission was informed that the press in the Netherlands had featured comments by professional persons that cannabis addiction was no worse than alcoholism. The report recorded that

"The Observer of INTERPOL said that cannabis intoxication was known to produce aggressiveness. The representative of W.H.O. drew attention to the opinion of the W.H.O. Expert Committee which was still valid that 'cannabis abuse comes definitely under the terms of its definition of addiction'. There was also the added danger that cannabis abuse is very likely to be a forerunner of addiction to more dangerous addicting drugs. The Commission recalled that it had agreed that cannabis abuse was a form of drug addiction and emphasised that any publicity to the contrary was misleading and dangerous".

The W.H.O. representative stated that

"it was not yet known what component of cannabis was addiction producing, and it was therefore not possible to assess quantitatively its addiction-producing properties".

*Plenipotentiary Conference for Adoption of Single Convention on Narcotic Drugs (January-March 1961)*

21. This Conference had before it a Third Draft of a Convention prepared by the Commission on Narcotic Drugs to consolidate and extend previous international treaties. The broad plan comprised limitation to medical and scientific purposes; and 4 schedules with mandatory obligations for strict controls (and in the case of Schedule IV complete prohibition). For cannabis Article 39 provided for complete prohibition of all handling of cannabis or cannabis preparations except for scientific research or use in indigenous systems of medicine. The Conference also had before it a note by W.H.O. affirming once more

that there was no justification for the medical use of cannabis and advising that prohibition or restriction of such use should be recommended but not mandatory.

22. In the plenary discussions the value of cannabis and its dangers were discussed in general terms. Belgium, Germany and the Netherlands drew attention to the use of galenical preparations. Yugoslavia expressed fear that industrial use would be restricted. The League of Arab States asserted that in the Middle East hashish was preferred to other narcotics. Ghana, with support from Brazil, said that cannabis produced anti-social behaviour which was a threat to the whole community and should be controlled as strictly as opium. Venezuela reported that cannabis was a "grave social danger". The U.S.A. pointed out that although cannabis might be merely habit-forming it was very often "only a stepping stone to heroin addiction". India maintained that cannabis products were less noxious than heroin, and cannabis addiction, like alcoholism, did not constitute a serious social problem in that country where marihuana-smoking did not lead on to the taking of heroin. France and the United Kingdom indicated that the cannabis problem was of little concern in their countries and were concerned that national governments should be free to decide on complete prohibition within their own discretion, the form of control recommended by W.H.O.

23. After further discussion of the general scheme of control and the problems of cannabis it was decided

- (i) to maintain 4 schedules for control purposes, with freedom to Parties to decide in their own discretion whether to prohibit the handling of drugs listed in Schedule IV;
- (ii) to include in the preamble to the Convention an over-riding limitation to restrict the use of scheduled drugs for medical and scientific purposes;
- (iii) to include transitional provisions allowing countries like India and Pakistan to authorise non-medical use of cannabis for a period of 25 years;
- (iv) to exclude the leaves of the cannabis plant from the scope of the Convention, except for an obligation in general terms (Article 28(3) that "the Parties shall adopt such measures as may be necessary to prevent misuse of, and illicit traffic in, the leaves of the cannabis plant",

24. A Technical Committee which worked upon the selection of drugs for the schedules adopted the following criteria for putting substances in Schedule IV:—

- (a) having strong addiction-producing properties or a liability to abuse not off-set by therapeutic advantages which cannot be afforded by some other drugs; and/or
- (b) complete deletion from general medical practice is desirable because of the risk to public health.

On this basis the Conference agreed that cannabis as well as cannabis resin should be included (with heroin, desomorphine and ketobemidone) in the 4th Schedule, Sweden pointing up the conclusion by stressing that heroin was strongly addiction-producing but not abused by many people, whereas cannabis

was used by a large number but was not in itself strongly addiction-producing. The final text of article 3(5) gives effect to these criteria in the words

“particularly liable to abuse and to produce ill effects and . . . such liability is not offset by substantial therapeutic advantages not possessed by substances other than drugs in Schedule IV”.

In other words the presence of cannabis in Schedule IV is to be explained by its wide abuse and its obsolescence in medical practice rather than by its intrinsic danger.

#### *U.N. Commission on Narcotic Drugs*

25. In 1963 and 1965 the Commission reviewed its attitude to cannabis in the light of further publicity, casting doubt on the dangers of the drug. The representative of W.H.O., commenting on the definition adopted by the Expert Committee for dependence of cannabis-type,<sup>1</sup> said that

“while the definition of a type of dependence, was confined to its medical aspects, the socio-economic characteristics and implications should not be overlooked. Thus, the anxiety of the distortion of perception which were among the effects of the drug might lead to the disruption of interpersonal relationships, and abuse of the drug to criminal behaviour”.

26. The Commission stated its position as follows. It

“recognised that the situation differed from one country to another. While cannabis must be subject to the same type of control at the international level, there was perhaps a need to adjust the strictness of control at the national level. . . . There could be no question but that cannabis presented a danger to society, although more and more people were attempting to cast doubt on the necessity of controlling this substance. The Commission reiterated the view that cannabis, the drug that moved most in international traffic, should be fully subject to international control. Under the 1961 Convention, it was indeed subject to the strictest regime of control. Governments should act accordingly, therefore, and while there might be some variations in the type of national control, the principle as such could not be called in question”.

27. At its twenty second session in 1968, the Commission's attention was once more drawn to publicity campaigns in favour of legalising or tolerating the use of cannabis for non-medical purposes. The representative of INTERPOL reported that at its recent Annual Conference it had adopted a strongly worded resolution concerning the need to combat the use of cannabis. On the initiative of the U.S.A., France, Ghana, Jamaica, Japan, Mexico and U.A.R., the Commission decided to recommend the following draft resolution for adoption by ECOSOC:

“The abuse of cannabis and the continuing need for strict control

The Economic and Social Council

Recalling that the Single Convention on Narcotic Drugs 1961, obliges Parties to place cannabis under strict controls to prevent its abuse.

Considering that the problem of the traffic and abuse of cannabis remains serious in many areas where it has long been encountered,

---

<sup>1</sup> Appendix 3 of this Report.

Observing that the traffic and abuse of cannabis appears to be spreading to areas where it has not heretofore been encountered,

Noting that considerable publicity has been given to unauthoritative statements minimizing the harmful effects of cannabis and advocating that its use be permitted for non-medical purposes,

Recognizing that cannabis is known inter alia to distort perception of time and space, modify mood and impair judgment, which may result in unpredictable behaviour, violence and adverse effects on health, and that it may be associated with the abuse of other drugs such as LSD, stimulants and heroin,

Convinced that inefficient controls over, apathy towards and lack of public awareness of the dangers of cannabis and its continued abuse contribute to drug dependence, create law enforcement problems, and injure national health, safety and welfare,

1. Recommends that all countries concerned increase their efforts to eradicate the abuse and illicit traffic in cannabis;
2. Further recommends that governments should promote research and advance additional medical and sociological information regarding cannabis, and effectively deal with publicity which advocates legalization or tolerance of the non-medical use of cannabis as a harmless drug."

#### *Permanent Central Narcotics Board*

28. In its Final Report published in November 1967 the Board stated

"The abuse of cannabis is more widespread than that of any substance under international control. It is also the substance about which for the time being the Board has the least information, as it is only since the entry into force of the Single Convention that governments have been obliged to furnish complete statistical data on cannabis . . .

. . . the Board feels it should repeat the caveat which it included in its report for 1965, namely that opposition to the control of cannabis is contrary to the advice of scientific and medical authorities of international repute and contrary to the policy reaffirmed by the international community of States at the Plenipotentiary Conference which drafted the Single Convention in 1961. This conference in fact classified cannabis amongst the particularly dangerous substances and recommended that governments should impose a general prohibition on its production, distribution and consumption, even for medical purposes. It is worth recalling that this decision was taken by a conference of 74 delegates whose members included many experts familiar with all aspects of the narcotics problem".

#### **Annex: Extract from statement of Egyptian delegate at Second Opium Conference, 1924**

"Hashish, prepared in various forms, is used principally in the following ways:

- (a) In the form of a paste made from the resin obtained from the crushed leaves and flowers, which is mixed with sugar and cooked with butter and aromatic substances and is used to make sweets, confectionery, etc.; known in Egypt by the names of mansul, maagun and garawish.

- (b) Cut into small fragments, it is mixed with tobacco for smoking in cigarettes.
- (c) The Indian hemp is simply smoked in special hookahs, called gozah.

We must next consider the effects which are produced by the use of hashish and distinguished between:

- (1) Acute hashishism
- (2) Chronic hashishism

Acute hashishism occurs when the consumer uses hashish irregularly.

Let us study the effects of this intoxication: taken in small doses, hashish at first produces an agreeable inebriation, a sensation of well being and a desire to smile; the mind is stimulated. A slightly stronger dose brings a feeling of oppression and discomfort. There follows a kind of hilarious and noisy delirium in persons of a cheerful disposition, but the delirium takes a violent form in persons of violent character. It should be noted that behaviour under the influence of the delirium is always related to the character of the individual. This state of inebriation or delirium is followed by slumber, which is usually peaceful but sometimes broken by nightmares. The awakening is not unpleasant; there is a slight feeling of fatigue, but it soon passes.

Hashish absorbed in large doses produces a serious delirium and strong physical agitation; it predisposes to acts of violence and produces a characteristic strident laugh. This condition is followed by a veritable stupor, which cannot be called sleep. Great fatigue is felt on awakening, and the feeling of depression may last for several days.

The habitual use of hashish brings on chronic hashishism, which is more serious than acute hashishism.

The countenance of the addict becomes gloomy, his eye is wild and the expression of his face is stupid. He is silent; has no muscular power; suffers from physical ailments, heart troubles, digestive troubles, etc.; his intellectual faculties gradually weaken and the whole organism decays. The addict very frequently becomes neurasthenic and, eventually, insane.

In general, the absorption of hashish produces hallucinations, illusions as to time and place, fits of trembling, and convulsions.

A person under the influence of hashish presents symptoms very similar to those of hysteria.

From the therapeutic point of view, science has not made much use of hashish with good results. It has, however, been administered with some success in certain cases of delirium tremens.

Taken thus occasionally and in small doses, hashish perhaps does not offer much danger, but there is always the risk that once a person begins to take it he will continue. He acquires the habit and becomes addicted to the drug, and, once this has happened, it is very difficult to escape. Notwithstanding the humiliations and penalties inflicted on addicts in Egypt they always return to their vice. They are known as "hashashees", which is a term of reproach in our country, and they are regarded as useless derelicts.

Chronic hashishism is extremely serious, since hashish is a toxic substance, a poison against which no effective antidote is known. . . .

In view of the great danger involved by the consumption of hashish, special measures have been taken by the Egyptian Government. In 1884 the cultivation of this plant was forbidden. Measures were taken to prevent the production and importation of cannabis indica. The following quantities were seized by the Customs Administration:

	<i>Kg. of Hashish</i>
In 1919	2,709,535
1920	1,869,199
1921	621,822
1922	173,468
1923	2,128,864
1924	3,262,227

The following quantities were seized by the Coastguards Administration:

	<i>Kg. of Hashish</i>
In 1920	3,697,648
1921	1,375,235
1922	1,223,842
1923	2,708,169
1924	2,262,350

I have no information regarding the quantities seized by the police.

The illicit use of hashish is the principal cause of most of the cases of insanity occurring in Egypt. In support of this contention, it may be observed that there are three times as many cases of mental alienation among men as among women, and it is an established fact that men are much more addicted to hashish than women. (In Europe, on the contrary, it is significant that a greater proportion of cases of insanity occur among women than among men).

Generally speaking, the proportion of cases of insanity caused by the use of hashish varies from 30-60 per cent of the total number of cases occurring in Egypt. . . .

I do not see why we should wait until 1925 to take a decision on this question since a large number of countries have pronounced in favour of my proposal.

I earnestly beg all the delegates to give this question their best attention, for I know the mentality of Oriental peoples, and I am afraid that it will be said that the question was not dealt with because it did not affect the safety of the Europeans. . . .

Moreover, I am sure that, if we take a decision regarding opium and the drugs mentioned in the Schedule of the Advisory Committee, without adding hashish, the latter will soon replace the other narcotics and will then become a terrible menace to the whole world. It seems to me that it is better to prevent a disease than to cure it. . . ."

## APPENDIX 3

### World Health Organisation—Appraisal of Cannabis-type Dependence

#### Drug Dependence of Cannabis (Marihuana) Type

It is not known with absolute certainty which of the chemical structures that have been isolated from *Cannabis sativa* L. is responsible for the typical cannabis effects, but these can nevertheless be described as constituting an entity that varies in degree according to the concentration of the active principle or principles in the plant and the preparations obtained therefrom, and to the mode of application. These effects are also producible by certain synthetic substances of similar chemical structure.

Among the more prominent subjective effects of cannabis, for which it is taken occasionally, periodically or chronically, are: hilarity, often without apparent motivation; carelessness; loquacious euphoria, with increased sociability as a result; distortion of sensation and perception, especially of space and time, with the latter reinforcing psychic dependence and being valued under special circumstances; impairment of judgment and memory; distortion of emotional responsiveness; irritability; and confusion. Other effects, which appear especially after repeated administration and as more experience is acquired by the user include; lowering of the sensory threshold, especially for optical and acoustical stimuli, thereby resulting in an intensified appreciation of works of art, paintings and music; hallucinations, illusions, and delusions that pre-dispose to antisocial behaviour; anxiety and aggressiveness as a possible result of the various intellectual and sensory derangements; and sleep disturbances.

In the psychomotor sphere, hypermotility occurs without impairment of co-ordination. Among somatic effects, often persistent, are injection of the ciliary vessels and oropharyngitis, chronic bronchitis and asthma; these conditions and hypoglycaemia, with ensuing bulimia, are symptoms of intoxication, not of withdrawal.

Typically, the abuse of cannabis is periodic but, even during long and continuous administration, no evidence of the development of physical dependence can be detected. There is, in consequence no characteristic abstinence syndrome when use of the drug is discontinued.

Whether administration of the drug is periodic or continuous, tolerance to its subjective and psychomotor effects has not been demonstrated.

Whereas cannabis often attracts the mentally unstable and may precipitate temporary psychoses in predisposed individuals, no unequivocal evidence is available that lasting mental changes are produced.

Drug dependence of the cannabis type is a state arising from chronic or periodic administration of cannabis or cannabis substances (natural or synthetic) Its characteristics are:

- (a) Moderate to strong psychic dependence on account of the desired subjective effects.

- (b) Absence of physical dependence, so that there is no characteristic abstinence syndrome when the drug is discontinued.
- (c) Little tendency to increase the dose and no evidence of tolerance.

For the individual, harm resulting from abuse of cannabis may include inertia, lethargy, self-neglect, feeling of increased capability, with corresponding failure, and precipitation of psychotic episodes. Abuse of cannabis facilitates the association with social groups and sub-cultures involved with more dangerous drugs, such as opiates or barbiturates. Transition to the use of such drugs would be a consequence of this association rather than an inherent effect of cannabis. The harm to society derived from abuse of cannabis rests in the economic consequence of the impairment of the individual's social functions and his enhanced proneness to a social and antisocial behaviour.

## APPENDIX 4

### Alphabetical list of witnesses

Mr. A Lawrence Abel, M.S., M.D., F.R.C.S., Chairman, Medical Science, Education and Research Committee, British Medical Association.

Mr. Stephen Abrams, Psychologist, Head of SOMA.

Dr. H. Dale Beckett, D.P.M., Consultant Psychiatrist, Director of the Salter Unit.

Dr. Joseph H. Berke, M.D., Research Fellow in Psychiatry and Social Sciences with the Philadelphia Association. Chairman of The Research Committee on Cannabis.

Mr. A. Bestic, Author.

Dr. P. A. L. Chapple, M.B., Ch.B., D.P.M.

Mr. Clive Goodwin, Literary Agent.

Sir Harry Greenfield, K.B., C.S.I., C.E.I., President, Permanent Central Narcotics Board (now replaced by International Narcotics Control Board).

Mr. Calvin C. Hernton, M.A., Sociologist, Member of The Research Committee on Cannabis.

Dr. Sam Hutt, M.B., B.Chir., Physician.

Mr. Francis Huxley, Social Anthropologist, Fellow of St. Catherine's College, Oxford.

Dr. R. D. Laing, M.B., Ch.B., D.P.M., Chairman of the Philadelphia Association, Ltd.

Mr. Peter Laurie, Journalist.

Mr. William Levy, Editor, "International Times".

Dr. Robert E. Lister, B.Sc., Ph.D., Head of Applied Pharmacology and Toxicity Division, Arthur D. Little Ltd., Musselburgh.

Mr. Martin R. Sharp, Artist, Representative of "OZ" Magazine.

## APPENDIX 5

### Pharmacology of Cannabis

1. Cannabis is the generic name for Indian Hemp (*C. sativa*). Cannabis drugs are obtainable from the flowing tops or leaves of the plant. The resin of *C. sativa* is often referred to as hashish and its constituents include cannabidiol, cannabinol and several tetrahydrocannabinols referred to collectively as T.H.C. Other constituents are cannabigerol, cannabichromene and cannabidiolic acid. The active principles are T.H.C., two of them,  $\Delta^1$  and  $\Delta^6$  T.H.C., being of great potency. The relations between the constituents and the possibilities of inter-conversion between some of them under different conditions such as the high temperature and degree of oxygenation that occur during smoking have been studied but are not as yet fully elucidated. Work is hindered by the relative insolubility of these substances. The relative and total amounts of the active principles in a sample of cannabis depend upon climatic factors during growth, processing or preparation and the form in which the drug is used. For example,  $\Delta^6$  T.H.C. is approximately 2-5 times as active when smoked as it is when swallowed. The rate and degree of absorption and hence the onset and duration of effect are related to the route of administration (inhalation being faster than oral administration) and the expertise of the smoker in prolonging contact between the smoke and the absorptive surfaces of the lung, etc. In man inhaled smoke initiates effects within a few minutes and a maximal effect may be obtained after a half to one hour. By inhalation a certain degree of control is attained according to the effect desired. The action persists for some 3-5 hours.

2. Chemical methods of analysing the constituents and products of hashish include chromatography and spectrophotometry. Quantitative isolation of the active principles or their metabolites from body fluids is at present not possible and consistent recoveries cannot yet be guaranteed. There is no precise knowledge about absorption, distribution, mode of action or metabolic degradation of the T.H.C. or the other constituents of cannabis in man.

3. In animals gross overdosage with cannabis causes death from respiratory depression. Cannabis prolongs the sleeping time of mice treated with hypnotic doses of barbiturates and this effect is said to persist over a period of 2-3 months. Such a prolonged effect suggests that cannabis has interfered with adaptive lysosomal enzyme systems. Cannabis also intensifies the stimulant effect of amphetamine in mice as judged by the degree of restlessness produced, another effect which may be due to inhibition of hepatic enzymic activity. Whether these two important interactions occur in man is not known. Pharmacological research on man is at present severely limited by the existing drug laws and regulations.

# APPENDIX 6

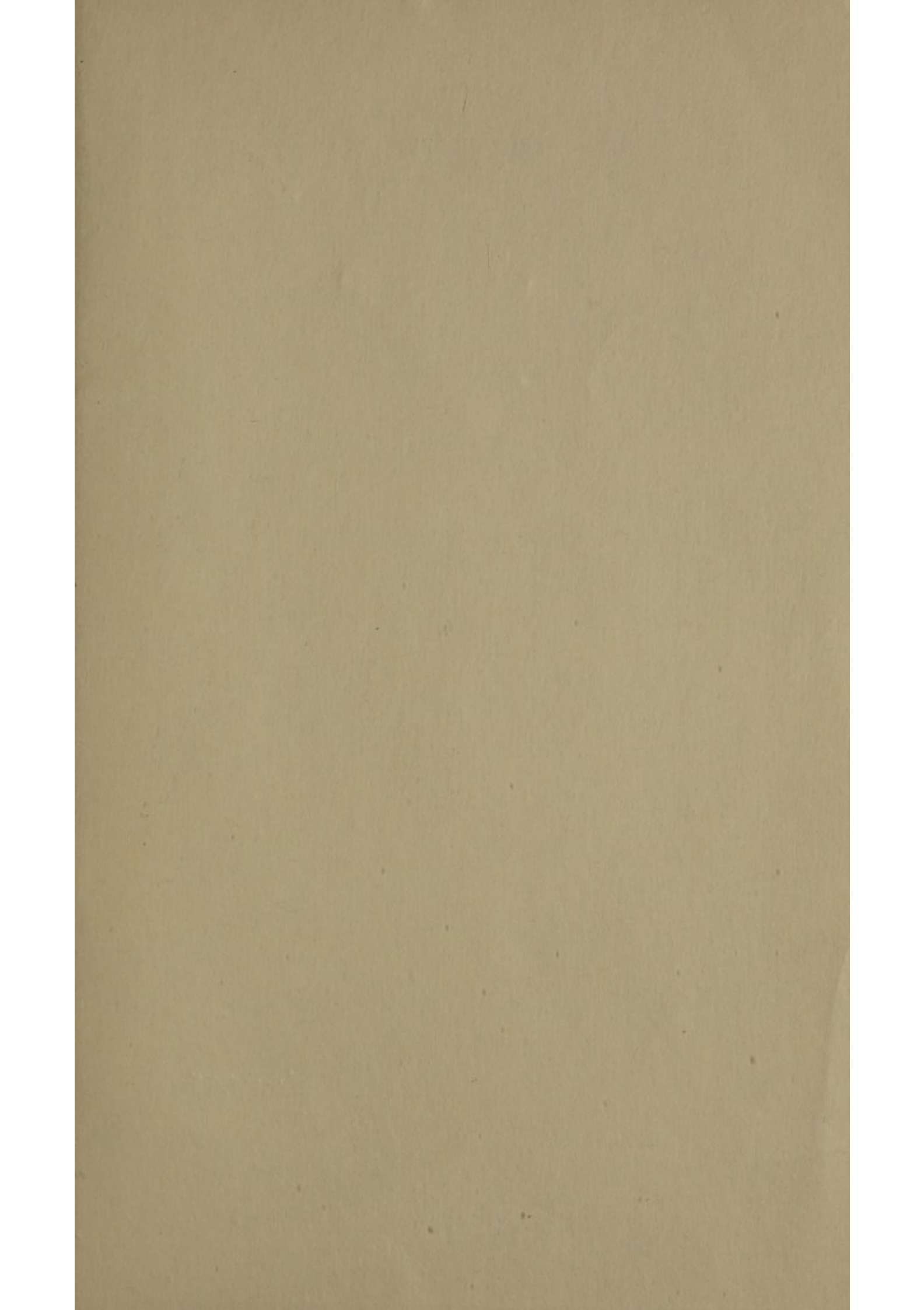
## Summary of Statutory Provisions for the Control of Drugs in the United Kingdom

Acts	I Dangerous Drugs Acts 1965 and 1967; Dangerous Drugs (No. 2) Regulations 1964; Dangerous Drugs (Notification of Addicts) Regulations 1968; Dangerous Drugs (Supply to Addicts) Regulations 1968.	II Drugs (Prevention of Misuse) Act 1965.	III Pharmacy and Poisons Act 1933; Poisons List (No. 2) Order 1968; Poisons (No. 2) Rules 1968.
Drugs controlled	Opiates including Morphine Heroin* Synthetic analgesics Pethidine Methadone, etc. Cocaine* Cannabis*	Amphetamines* and some similar substances.  Lysergic acid diethylamide (L.S.D.25)* and some similar substances, including mescaline.	All those named in the Poisons List including Barbiturates and the drugs named in Cols. I and II. <i>Note:</i> Barbiturate and the drugs mentioned in Cols. I and II are included in Part I of the Poisons List and Schedule IV of the Rules.
Main provisions	(a) Offence to possess without authority  (b) Offence to import and export except under licence.  (c) Persons authorised to possess have to keep records of drug movements.  (d) Drugs to be kept under lock and key by persons authorised to possess.  (e) Medical practitioners must notify all cases of persons addicted† to drugs controlled under the Act of 1965.  (f) <i>Heroin</i> and <i>cocaine</i> may only be prescribed for an addict by a specially licensed medical practitioner.	(a) Offence to possess without authority  (b) Offence to import except under licence.	(a) Offence for a poison in Part I of the Poisons List to be sold retail otherwise than by an authorised seller of poisons from registered premises.  (b) Offence for substances named in Schedule IV to the Poisons Rules to be sold except on a prescription given by a duly qualified practitioner.  (c) Records of sales of Schedule IV substances are not required, but private prescriptions must be retained for two years.
Penalties	Summary—£250 fine and/or 12 months imprisonment. Indictment—£1,000 fine and/or 10 years imprisonment.	Summary—£200 fine and/or 6 months imprisonment. Indictment—unlimited fine and/or 2 years imprisonment.	£50 fine.

\*Drugs commonly obtained illegally.

†As defined in the Regulations.





© *Crown copyright 1968*

Published by  
HER MAJESTY'S STATIONERY OFFICE

To be purchased from  
49 High Holborn, London W.C.1  
13A Castle Street, Edinburgh 2  
109 St. Mary Street, Cardiff CF1 1JW  
Brazennose Street, Manchester M60 8AS  
50 Fairfax Street, Bristol BS1 3DE  
258 Broad Street, Birmingham 1  
7 Linenhall Street, Belfast BT2 8AY  
or through any bookseller