

Phenomenon

Edited by M.M.Glaff and J.Marks

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Dependence Phenomenon

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Foreword

... there is scarcely any agent which can be taken into the body to which some individuals will not get a reaction satisfactory or pleasurable to them, persuading them to continue its use even to the point of abuse . . .

Eddy (1965)

Dependence is one of the major problems of our modern society both in industrialized and developing nations. There is, however, nothing new in man's dependence on drugs.

For many centuries past, there can be few people throughout the world who do not 'overuse', 'misuse' or 'abuse' some drugs. For many the drugs that are 'overused' are caffeine (from tea or coffee), nicotine (from tobacco) or alcohol (from beer, wine or spirits), all socially accepted normal ingredients of everyday life in most communities. For a smaller group 'misuse' concerns commonly prescribed medical substances, such as barbiturates, amphetamines. For an even smaller group there is the less socially acceptable 'abuse' of specific drugs such as morphine and related analgesics, cannabis, or hallucinogens.

Man has employed such drugs in an attempt to banish pain and discomfort, to attain a state of oblivion, or alternatively, euphoria or ecstasy, or to escape from unpleasant reality into a much more agreeable state of fantasy. From time to time some drug may have been regarded as sacred by one culture, but condemned as a devil's instrument by another. Over the ages many such drugs that affect the mind have gained and lost popularity. Some of the best known among them – such as alcohol, the opiates and cannabis, so popular in many parts of the world today – have been great favourites for thousands of years even though their popularity waxed and waned and varied from culture to culture.

Much of this field of study is still covered with confusion, not only because the socially acceptable practices of one generation or community are the legally enforceable abuses of another, but because much of the terminology employed has become subject to lack of general agreement.

Drug dependence, according to the 1969 World Health Organization definition (WHO, 1969), is

a state, psychic and sometimes also physical, resulting from the interaction between a living organism and a drug, characterised by behavioural and other responses that always include a compulsion to take the drug on a continuous or periodic basis in order to experience its psychic effects, and sometimes to avoid the discomfort of its absence. Tolerance may or may not be present. A person may be dependent on more than one drug

and polydrug misuse is nowadays more common in some western countries than the use of just one drug.

It is interesting to note that the current definition refers to 'compulsion' to take the drug, while the older and revised form (WHO, 1957) expanded this to include also an 'overpowering desire' or need. Drug misusers and uncontrolled drinkers often used the alternative term 'overwhelming'. But these terms merely denote a relative and not an absolute state. What is experienced as absolutely overpowering and overwhelming by one individual, in a given situation and under certain circumstances, can be tolerated with a major or minor effort by another individual possibly under a somewhat different set of circumstances. In all aspects of drug dependence not only the 'agent' (the pharmacological nature of the drug concerned) but also the psychological biological makeup of an individual ('host') and social and other environmental factors always have to be considered (Glatt, 1974). This applies to aetiology, the pace of developmental progress of the dependence, treatment, rehabilitation, prevention, prognosis etc. and is reflected in this volume. All too often in the past attention was mainly directed to the nature of the drug without considering the drug user's personality and his social environment.

Dependence can be psychological and/or physical. Contrary to popular belief it is psychological dependence and not physical dependence which in the long run constitutes the main problem. Physical abstinence syndromes can be very distressing and even life-threatening, but with skilled supervision, this acute withdrawal syndrome can usually be handled relatively easily. But psychological dependence is what makes drug dependence so difficult to deal with in the long run, and is responsible for the unfortunate fact that, essentially, states of drug dependence are relapsing disorders. Social factors, too, such as 'subcultures', peer pressure, social conditioning etc. may play a role in precipitating a relapse, after the individual had experienced a period of freedom from drug use.

The current concept of dependence on substances obviously includes both legally used and often widely socially accepted drugs, such as alcohol and tobacco, as well as illicit drugs. The fact that some drugs are legal and others illicit does not in itself tell us anything about the risks or otherwise attached to their use or misuse. Likewise the fact that such a drug or substance has been traditionally accepted by society, whether it is alcohol, tobacco, or even coffee and tea, or prescribed by the doctor.

does not provide a guarantee or an immunity against the development of a state of more or less dangerous dependency. In most countries the problem caused by misuse of, and dependence upon, legal drugs, in particular alcohol, are much more widespread than those posed by illicit drugs; and in many countries the overprescribing and overconsumption of pharmaceuticals also constitutes a significant problem.

Dependence is a complex phenomenon that, as we have seen, may vary in its manifestations according to social environment, local fashion and subculture, regional or national characteristics etc. Cultural acceptance of a given substance or otherwise may even affect symptomatology and the type of personality predominant among drug misusers as reflected, for example, in the difference between the predominantly sociogenic French delta alcoholic (not particularly plagued by guilt feelings over his drinking) and the often sociogenic Anglo-American gamma alcoholic (with his acute, overwhelming remorse the morning

after).

Both of us have stressed in the past (Glatt, 1978; Marks, 1978) that dependence should be regarded in a wider context to include, for example, gambling. One of us (Marks, 1978) has pressed the argument further and spoken about a 'spectrum of dependence'. On this basis it is argued that for a broad-range of human activities that produce a mood change, dependence can occur if this is measured in terms of an unnatural drive towards the specific pleasure-seeking goal. Within these pleasure-giving activities the question of social acceptability is based merely on a value judgement. Such a judgement is difficult, for there are no scientifically definable borders or limits between the various grades of dependence that exist. It was argued that we should view the whole range of pleasure-giving activities as a spectrum (Figure 1). At one end of the scale are the universal commonplace enjoyments to which no one can object, at the other the socially unacceptable patterns of those dependent, for example, on heroin, Between these extremes are dependencies for which we can assign a rating biased by social fashion or our culture, nation and age and by our own predelictions and aversions. Even with an accepted rating order, it is difficult to define the borders between acceptability and non-acceptability without value judgements that are subject to bias.

This view has been criticized Smith (1980) and is not accepted as a valid concept by Keup in this book (Chapter 1). Stepney (1980) on the other hand has propounded a similar model for pleasure-giving 'habits', one class of which includes substances of dependence. In an area where knowledge is negligible, such controversy is good, particularly if it

encourages further thought and experiment.

For this book we have deliberately chosen the provocative title of 'The Dependence Phenomenon' and accepted a broad interpretation of the term dependence. While it touches on many aspects of the subject of dependence this present volume does not attempt to cover the whole subject comprehensively and systematically. Rather does it aim at discussing in greater depth some of the key issues of the subject today.

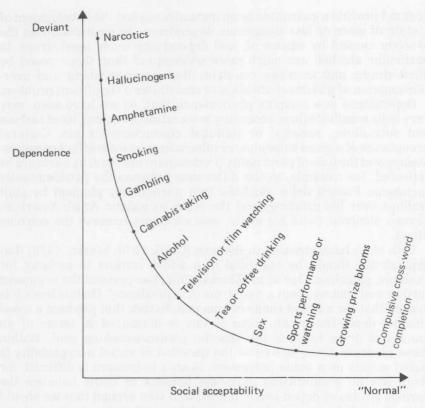


Figure 1 The broad concept of psychotropics as the range of pleasure-giving activities of the community for which some measure of unnatural drive (or dependence) exists. Examination shows that the rating order of the individual activities must represent the bias of the author. While the extremes can be labelled 'Deviant' and 'Normal' with ease, the limit of social acceptability depends upon a value judgement influenced by political, social and individual factors. Reproduced from Marks, J., The Benzodiazepines, 1978, Lancaster: MTP Press

As editors we expect to be criticized as biased in the selection of the topics and this criticism we readily accept. As we have explained above, we believe that subjective value judgements are involved in the definition of the social and medical problems of dependence. Living in another place or at another time our selection would surely have been quite different.

We have attempted to demonstrate the international nature of the problem by inviting contributions from experts from several different countries. The finding that not all experts contributing to this volume see eye to eye on all issues and problems touched upon only serves to underline the fact that so much in this field still awaits further elucidation, and that much more observation, research and interdisciplinary and international cooperation are required.

Foreword

We believe, however, that there is a place for authoritative review and critical analysis of certain aspects of the problem written by observers with first-hand active and practical experience in their particular fields. This we have attempted to provide. Whether we have succeeded others must decide.

> Max Glatt John Marks

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Contents

	List of contributors	vii
	Foreword	ix
1	Pleasure-seeking and the aetiology of dependence $\ensuremath{\mathbf{W}}.\ensuremath{KEUP}$	1
2	Legislation on drug control and drug abuse J. LANGER	21
3	British experience in the management of opiate dependence $\ensuremath{\mathtt{H.B.SPEAR}}$	51
4	The antagonist analgesic concept J. LEWIS	81
5	Cannabis and dependency F. WELLS	103
6	Alcohol dependence: the 'lack of control' over alcohol and its implications M. M. GLATT	119
7	Dependence and psychoactive drugs J. MARKS	157
8	The nature and treatment of cigarette dependence M. RAW	179

9 Compulsive overeating	
J. H. LACEY	199
Index	212

1

Pleasure-seeking and the aetiology of drug dependence

Wolfram Keup

Experiencing pleasure is one of the fundamental abilities for which living beings have the psychological capability. Being one of the strongest motivators of human behaviour, pleasure has been used by nature as a 'tool' to motivate living creatures throughout the developmental chain of animal life up to the highest primate, man. Without pleasure-seeking behaviour, higher life might long since have ended. Nature has been able - generation after generation - to entice animals and man to overcome lethargy, indifference and egocentricity, even to do laborious and painful work, to tackle dangerous and risky tasks in fulfilling superindividual functions such as the continuation of the species, rearing the young, seeking improvements in doing so - with pleasure as an expected reward. We are just beginning to learn about the biological mechanisms behind such behaviour, for example, from experiments in which animals are allowed to selfstimulate certain pleasure-generating areas of the brain, neglecting food, water and sex, continuing until there is complete exhaustion and sometimes even death (Olds, 1962). We know even less about the derangement of such biological mechanisms in addiction and similar pathological conditions.

Man – as well as some higher animals – has been capable of finding loopholes, obtaining pleasures without delivering natural superindividual tasks, then constructing concepts by which such behaviour appears not only justified but might even be cultivated, rationalizing his behaviour rather than adopting one which conforms with philosophical theory. Pleasure is felt by man to be such an important and basic part of his normal behaviour that the lack of the normal drive for pleasure

fulfilment, or to be able to enjoy pleasures, is considered to be grossly abnormal. Thus, Rado (1957) considers the 'pleasure deficit' as one of

the fundamental symptoms of schizophrenia.

Pleasure, though, has a wide range of phenotypes: the hearty eater, the voyeur, the body-building athlete, the scientist who sees his working hypothesis fulfilled, the power-wielding manager, the charitable moralist as well as the political fanatic starving himself to death – all have their own, very private kinds of pleasure fulfilment. In fact, almost any behaviour between total indulgence, total asceticism and total destruction or self-destruction can, by psychological processes, be converted into a pleasure.

Man indulging in 'unmerited' pleasures soon becomes consciencestricken. The duration and the degree of pleasure it takes to reach this point vary widely, yet it seems that the lack of ensuing comfort not only represents the dys-ease with the moral issues of society and its value systems but an inborn braking mechanism against overindulgence and the neglect of other vital functions. Moral issues, though, play a considerable, even a decisive role, and the role of pleasure in life has

surely been debated from time immemorial.

The Greek philosophers gave an example, variations of which re-

emerged later throughout our cultural history.

Democritus (about 460-360 BC) saw 'euthymia', the supreme happiness, in a quiet and serene equilibrium of the soul, free from turmoil of passions, and based this on a steady flow of 'soul atoms', in the frame of a materialistic atomism. Socrates (about 469-399 BC), the venerated teacher and wise man representing and living a reason-ruled life in clear consciousness over the senses and affects, in full knowledge about 'eudaemonia', the true happiness from which all virtue originates, struck a balance between pleasure and control. Yet, while the master had accepted the cup of hemlock in dignity, his disciples battled in controversies over this issue. While Antisthenes (born about 430 BC) saw in the freedom, the independence from lust and pain, the rather puritan supremacy of the personality over these extremes, the highest goal of life, Aristippus (about 435-360 BC) postulated that joyfulness and pleasure (hedone) are the prime goals of human striving. Happy is a life only if it is rich in both physical and mental pleasures. 'Hedonism' bluntly postulated that good is what creates pleasures. although this was later mitigated by Epicurus (341-270 BC). These more extreme positions were somewhat bridged by a third disciple of Socrates, the more balanced Plato (427-348 BC): man cannot live by pleasure only; at the same time he strives for reason and insight, since otherwise he would live a dull and reduced life without remembrance and self-consciousness. These issues have, of course, been debated ever since with little chance of being solved entirely, since the answers cannot be fully binding for each independent individual in his own particular society. Thus, in almost every culture both liberal and puritanical attitudes exist side by side, with changing dominance.

Pleasure-seeking and Aetiology

and pleasure-withholding lie in precarious balance, and determined by many sociocultural factors, some of which are discussed below. Such influences, though, are changing with time, for example, religious beliefs, the cultural development, tolerance exercised towards the young, educational levels, cultural attitudes towards personal freedom and self-determination, etc. From such attitudes have resulted laws and rules regulating certain behaviours as allowable and 'normal', while outlawing and punishing other types of behaviour. Thus, opiates used for pleasure purposes are outlawed in our society, whereas alcohol is not, despite the latter being comparably harmful to individuals and to society. Sexual behaviour is outlawed only outside a certain framework which nevertheless shows a wide range of transcultural tolerances. Pleasures obtained from cruelty against animals are outlawed by all civilized populations, excluding matadors and fox hunters. There are strange lacunae in the way man justifies his behaviour which in themselves would be worth a study.

Pleasure has its price. Not only must it be earned by labour, endurance, suffering and renunciation at times, but it may encompass struggles to obtain it against competitors, the rules, the law, with the corresponding risks and consequences. It may be inseparable from deleterious effects upon physical and mental health - and its enjoyment may be followed by the displeasure of missing it, a dysphoria not at all restricted to substance abuse in general nor to substances to which physical tolerance develops. The longing for a beloved person is basically the same phenomenon as the craving for an addictive substance. But part of the displeasure quite often stems from the feeling of uneasiness with one's own conscience when delinquency is involved in obtaining pleasures, or the avoidance of dysphoria. This is even more pronounced when obsessive-compulsive tendencies are involved, as in dependence (consider the man who sends his girlfriend out to prostitute herself to obtain the money to support his habit!). Those suffering from substance abuse are not simply 'addicts', but men and women with the same personalities and vulnerabilities as the rest of us.

THE HISTORY OF SUBSTANCE ABUSE

It must be assumed that early man was already able to identify those plants yielding psychotropically active principles. A man, lost in the woods without weapons, would try roots and berries, chew leaves and tender young sprouts, thus experiencing their chemical effects. Or he would light a fire and inhale some of the smoke of an accidentally burned psychotropic plant, and hence experience its action (for example, cannabis as used by the Scythians). Thus, he would detect not only the nutritional value of roots and tubers but also the stimulating, sedating, appetite-reducing, psychotropic effects and toxicity of plant material. Hallucinations thus experienced are easily interpreted as voices of the gods; and the way to ritual use is paved. Even hallucinations and illusions due to hypoxia on mountain peaks have been used this way

(among the Andean Indians). Almost without exception the ritual use of psychotropic substances precludes their abuse (alcohol in orthodox Jewish communities, mescaline in the 'Native American Church of North America', coca-leaf use in the early Inca culture, *Ilex vomitaria* used by North American Indians, and many others). The weakening of religious beliefs in the intellectualization of feelings and emotions tends to break down these forces. The age-old opposition of the young to the regimenting traditions of the elders, often simply used as a show of force by the

young, favours this development (generation gap).

Increasing technical knowledge as well as de-ritualization has strongly influenced the spread of addictive substances. Two examples may be mentioned; the development of alcohol distillation which allowed inebriation with very small amounts of fluid. Distillation was described first in an arabic manuscript by Jäbir ibn Hayÿan (712-813 AD), but was forgotten again under the suppressive influences of Islam, to be rediscovered by the Franciscan monk Lully (about 1235-1315 AD) in southern France. Here, in favourable surroundings, it was refined and thus spread easily. A second example is the rapid spread of opiate dependence when the hypodermic needle, invented by Alexander Wood in 1853, was used for the subcutaneous and then intravenous injection of opiates, thus introducing what today is called the 'flash'. The use of cocaine yields the third example: whereas addiction in chronic cocaleaf chewers among the natives of South America leads only infrequently to severe dependence (cocaism), the extracted cocaine is one of our strongest dependence-producing substances (cocainism) (Austin. 1978; Nieschulz, 1969).

Only recently have we learned of yet another important step favouring misuse and dependence. In the course of development of his chemical knowledge in what was called the 'plastic age', man has become the creator of many new substances which are either (a) more addictive than their natural counterparts, (b) have new qualities, and/or (c) represent the addictive qualities in a pure way. As examples we may name highly potent yet equally addictive morphine derivatives and the many artificial hallucinogens like LSD-25, DMT (dimethyltryptamine). DET (diethyltryptamine), DOB (dimethoxybromoamphetamine), etc. Some like phencyclidine (PCP, Angel's Dust) display quite novel qualities dangerously close to the fundamental desires of man. It is obvious that currently the development of new agents occurs faster than the adaptational process by which man learns to deal safely with his creations. To achieve adaptation, it is not sufficient for the problem to be recognized by just a few, but it must be seen by a vast majority of the people so that self-restriction and voluntary controls by learning are popularized. Should man not learn to deal with present and future mindinfluencing and mind-altering chemicals in time, he might soon find himself at the edge of an abyss. Manipulation of the emotions, of willpower, opinions and reduction of resistance against wrongs may lead to Chronos devouring his children, 'big brother' being the natural consequence.

Pleasure-seeking and Aetiology

AETIOLOGY OF DRUG ABUSE

It is not the purpose to discuss here how to deal with future threats, as briefly touched upon above. Instead, it is valid to return to the present and look at the many different factors and complex processes leading, often jointly, to substance abuse and particularly to drug abuse, dependence and its consequences.

Table 1.1 Selective reasons for starting drug abuse (college students, New York City)

Subjective reasons for starting drug abuse	College students (New York, 1969)				
parignals useds high sold whiten the	in morally			0/0	
Sociological reasons					
Status-seeking	1))	
Friends did it	64			A DOUBLE STORY	
Influenced by relatives	1 }		68	} 18.7	
Influenced by news media	1			rui maia antanto	
It's a drug-oriented society	1]			The second second	
Psychological reasons		MAIN.		WEST LELIA GEST.	
For enjoyment	20 25	45	THE PROPERTY.	12.4	
For 'kicks'	25				
Out of curiosity		174		47.8	
As a challenge	3)		mark!		
For new experience	8 }	36	275	9.9 75.6	
As an experiment	25)			/	
To escape, to forget	8		B TOWN	/	
For better insight	4	20	14 2	5.5	
Sick of drinking Out of boredom	3 5		har 12	V 3 00 00 187	
	3)				
Medical reasons				1	
For weight loss	6				
To stay awake Against insomnia	2 1				
Against hisolillia Against headaches	3		17	4.7	
Against neadaches Against asthma	1		1/	4.7	
Against depression					
Hospital-induced	2 2				
Other reasons					
War (Vietnam)	2)				
Coincidental circumstances	$\binom{2}{2}$		4	1.0	
All answers $(n = 605)$,		364	100.0	

SUBJECTIVE REASONS FOR BEGINNING DRUG ABUSE

People who abuse drugs have rather vague ideas about their own reasons for embarking on drug abuse. In 1972, we asked college students in New York City this question, among many others, and the 605