PHENCYCLIDINE:
A Bibliography of
Biomedical and Behavioral Research*

ROBERT L. BALSTER** & ROXANNE S. PROSS**

Phencyclidine (1-[1-phenylcyclohexyl] piperidine; PCP) has emerged as a major recreational drug in recent years. It is representative of a group of compounds which is chemically, pharmacologically and behaviorally distinct from other classes of psychoactive compounds. PCP was originally developed in the late 1950s for medical use as a "dissociative anesthetic." It produces a characteristic anesthesia with little effect on respiratory or cardiovascular function. Muscle relaxation, however, is poor. During clinical trials it became apparent that emergence from PCP anesthesia was frequently complicated by unusual psychomotor effects. Patients sometimes became delirious, excited, or fearful, reported hallucinatory experiences and exhibited motor disturbances which occasionally were quite prolonged. As a consequence of these behavioral disturbances clinical trials were discontinued and no further attempt has been made to find a medical use for this drug. However, attention was directed towards a chemically and pharmacologically similar compound, ketamine, which subsequently was approved for humans and is still in use. Although not approved for medical use in humans, PCP was developed as a veterinary product for use in the immobilization of nonhuman primates. Concurrent with these clinical investigations of PCP as a potential anesthetic, other investigators became interested in PCP as a psychotomimetic. A number of studies were carried out looking at the psychological effects of PCP (usually identified by the trade name of Serny[®]) in normals and various clinical populations. In general, these studies led the authors to conclude that PCP produces a reversible schizophreniform intoxication.

In the 1960s PCP resurfaced as a recreational drug, its use having three phases in the United States. Initially it emerged as a new "hallucinogen." Generally used orally, it often produced unwanted effects and quickly fell into disrepute in the drug-using subculture. During the late sixties and early seventies street samples containing PCP were generally misrepresented as other more desirable drugs, most typically tetrahydrocannabinol, mescaline or LSD. In the mid-seventies PCP reestablished itself as a recreational drug in its own right, attracting groups of users who sought its effects. This last phase began on the West Coast and in the intervening years has spread throughout the United States. Typically PCP is now smoked in "crystal joints" under such street names as angel dust, crystal or commonly just PCP. It is also administered by inhalation, orally and rarely intravenously.

Illicit PCP use in the United States has become a major public health concern. As is typical of "new" drugs of abuse, PCP has created a variety of public images, some based on fact, others not. It is in part to provide a resource for interested individuals to sort fact from fiction that we have assembled this bibliography.

Our major purpose for providing this bibliography is to facilitate PCP research. Until recently, the majority of
PCP research was carried out in the context of its potential use as an anesthetic and secondarily as a model for psychosis. However, the recreational use of PCP raises a different set of research questions, most of which have received little attention, and it is our hope that providing a relatively easy means of identifying the research literature on PCP will encourage other investigations of this interesting and important drug.

This bibliography covers the chemical, biomedical and behavioral research literature published in the English Language in archival sources through early 1978. We have not attempted to include articles in the popular press, predominantly socio-cultural studies or the political-legal literature on PCP. It is our impression that restricting the bibliography to English-language sources has not resulted in the exclusion of many papers.

There are two additional areas of information relative to PCP research which we have systematically excluded which may be of interest to some of the users of this bibliography. PCP is widely used for the restraint of nonhuman primates in veterinary practice and in a number of research studies. We elected not to include these papers unless the intent was clearly to evaluate the effects of PCP. Therefore, research designed for other purposes in which the drug was routinely used has not been included. We have also elected not to include papers on PCP analogues. Although research on compounds chemically and pharmacologically similar to PCP is clearly of relevance, the inclusion of these papers would have substantially expanded the scope of this bibliography. In particular, there is considerable literature on ketamine. Unless the research was designed as a direct comparison of PCP and ketamine, ketamine research per se has been excluded. This is true of other PCP analogues as well.

This bibliography is intended to be exhaustive, however we apologize for the inevitable oversights. We hope these will be pointed out to us for inclusion in future bibliographies. We want to thank L.D. Chait for his help in keeping our PCP files current.


Journal of Psychedelic Drugs Vol. 10(1) Jan-Mar, 1978


*Journal of Psychedelic Drugs* Vol. 10(1) Jan-Mar, 1978


*Journal of Psychedelic Drugs* Vol. 10(1) Jan-Mar, 1978


