



# *REPORT TO THE CONGRESS*

Controls On Use Of  
Psychotherapeutic Drugs And  
Improved Psychiatrist Staffing  
Are Needed In Veterans  
Administration Hospitals

*BY THE COMPTROLLER GENERAL  
OF THE UNITED STATES*

APRIL 18, 1975



COMPTROLLER GENERAL OF THE UNITED STATES  
WASHINGTON, D.C. 20548

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To the President of the Senate and the  
Speaker of the House of Representatives

We reviewed psychiatric treatment at Veterans Administration hospitals and found a need for (1) controls to insure appropriate use of psychotherapeutic drugs and (2) improved psychiatrist staffing.

Our review was made pursuant to the Budget and Accounting Act, 1921 (31 U.S.C. 53), and the Accounting and Auditing Act of 1950 (31 U.S.C. 67).

We are sending copies of this report to the Director, Office of Management and Budget, and to the Secretary of Health, Education, and Welfare.

A handwritten signature in black ink, reading "Thomas P. Steets".

Comptroller General  
of the United States

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and in some cases delusions and hallucinations. Mood changes include inappropriate emotional responses and loss of empathy. Withdrawn, regressive, and bizarre behavior may be noted.

COMPTROLLER GENERAL'S  
REPORT TO THE CONGRESS

CONTROLS ON USE OF  
PSYCHOTHERAPEUTIC DRUGS AND  
IMPROVED PSYCHIATRIST STAFFING  
ARE NEEDED IN VETERANS  
ADMINISTRATION HOSPITALS

D I G E S T

WHY THE REVIEW WAS MADE

Because of the important role drugs have in the care of the Veterans Administration's (VA's) psychiatric patients, GAO sought to determine if VA had established proper controls over the use of psychotherapeutic drugs and whether other improvements might be needed.

VA estimated that during fiscal year 1976 the average daily number of mentally ill patients in its hospitals will total about 26,000 and the cost of providing care will be about \$518 million.

FINDINGS AND CONCLUSIONS

Medical authorities agree that psychotherapeutic drugs are beneficial in treating certain psychiatric patients. They have cautioned, however, that prolonged or improper use of these drugs can be detrimental.

VA should establish a system to inform its officials about whether psychotherapeutic drugs are being properly used. VA also needs an effective system for disseminating to its physicians

results and implications of current medical research on these drugs.

GAO prepared drug profiles on 6,171 psychiatric patients. The profiles included information on the type of drug or drugs being taken, length of time they had been taken, dosages, and frequency with which they were being administered. (See p. 4.)

Using the drug profiles, GAO found that in many instances psychotherapeutic drugs were not being used as recommended by authoritative medical references.

VA officials were generally unaware that the drugs were not being administered in accordance with these references.

Officials of three hospitals advised GAO that actions would be taken to monitor the prescribing of drugs so that adjustments could be made when conditions warranted. (See p. 18.)

VA has had problems recruiting enough physicians to treat psychiatric patients, many of the physicians assigned to treat such patients had no formal psychiatric training, and the number of patients for which

a physician was responsible varied widely. (See p. 23.)

#### Drugs used in excess of maximum recommended dosage

The proper dosage of a psychotherapeutic drug varies with the individual patient. A physician must consider several factors, including the patient's weight, severity and type of illness, and tolerance level, in determining the proper dosage. Medical authorities generally agree that dosages above the recommended maximum may create an unacceptable risk of toxicity and may fail to provide a substantial additional therapeutic effect. (See p. 5.)

A comparison of drug profiles with maximum recommended dosages showed that 631 of the 6,171 patients, or about 10 percent, were receiving dosages in excess of the recommended daily maximums.

The average percentage of patients taking more than the recommended dosage in the 13 hospitals visited by GAO ranged from 4 to 23. (See p. 5.)

GAO also noted a wide disparity in the number of patients receiving more than the maximum recommended dosage among wards of the same hospital. In some wards more than 40 percent of the patients were receiving dosages in excess of the recommended maximums.

#### Simultaneous use of more than one drug

Numerous studies, including some by VA, have concluded that little evidence exists to support simultaneous use of more than one psychotherapeutic drug on the same patient--a practice commonly referred to as polypharmacy.

These studies have shown that polypharmacy increases the possibility of adverse reactions and have suggested that it be avoided if possible. (See p. 7.)

The drug profiles for the 6,171 patients showed that 2,002, or about 32 percent, were being given more than one psychotherapeutic drug simultaneously. Many were taking more than two drugs simultaneously. (See pp. 7 and 8.)

A disparity also existed in the use of polypharmacy among wards of the same hospital. Some wards at almost every hospital had no patients receiving more than one psychotherapeutic drug; however, every hospital had at least one ward in which polypharmacy was practiced to a considerable extent. (See p. 9.)

#### Use of drugs to treat Parkinson's disease symptoms

One possible side effect of the class of psychotherapeutic drugs known as antipsychotic is the inducement of Parkinson's disease symptoms--but not the disease itself. Drugs used

to treat these symptoms are commonly referred to as antiparkinson drugs.

Studies conducted of antiparkinson drugs have concluded that they (1) should not be used preventively or routinely and (2) can usually be discontinued after about 3 months because the symptoms usually disappear by then.

Of the 1,645 patients taking antiparkinson drugs:

--42 percent appeared to be taking them routinely.

--37 percent had been taking them for longer than 3 months. (See p. 10.)

A wide disparity also existed among hospitals in the use of antiparkinson drugs. Routine use of antiparkinson drugs ranged from 28 percent at one hospital to 54 percent at another.

#### Frequency of administering psychotherapeutic drugs

VA studies state that VA administers many psychotherapeutic drugs to patients three or more times daily. These studies recommend, however, that, after some degree of control over the patient's condition has been obtained (one noted VA psychopharmacologist has suggested that this may take 3 to 6 months), the drug be administered only once or twice daily. (See p. 13.)

A wide disparity also existed in the number of drugs administered three or more times daily for more than 6 months among hospitals and among wards within a hospital.

#### Use of drug holidays

According to studies, including some by VA, a majority of chronic schizophrenics--constituting a large portion of psychiatric patients in VA hospitals--who are stabilized on doses of antipsychotic drugs can receive no medication for 2 or 3 days a week (drug holidays) without substantial clinical change.

Drug holidays are feasible because these psychotherapeutic drugs are stored in various body tissues and released over a period of days or weeks. (See p. 16.)

GAO's analysis of the drug data suggested that drug holidays were not being used to the extent possible. In 6 of the 13 hospitals, no patients were on drug holiday schedules. About 90 percent of all the patients on drug holidays were from three hospitals. (See p. 17.)

#### Staffing problems

VA has had problems recruiting enough physicians to provide care to psychiatric patients. Many of its physicians assigned to provide psychiatric care have had no formal psychiatric training, and the number of patients for which a physician was responsible varied widely.

One hospital had 1 physician for every 21 patients; another had 1 physician for every 100 patients. The overall ratio was 1 for 53.

Considering only the psychiatrists who were certified or eligible to become certified (physicians who specialize in psychiatry) by the American Board of Psychiatry and Neurology, GAO found that the ratio ranged from 1 psychiatrist for every 24 patients to 1 for 399. (See p. 23.)

VA officials and hospital psychiatrists identified the following problems as ones hindering VA in recruiting trained psychiatrists:

- Legislative limits on salaries for full-time physicians.
- Geographical remoteness of many VA psychiatric hospitals.
- The fact that VA primarily treats male patients, thereby preventing its psychiatrists from treating women and children, which is considered necessary for a psychiatrist's professional development. (See pp. 24 and 25.)

#### RECOMMENDATIONS

The Administrator of VA should:

- Establish uniform guidelines for using psychotherapeutic drugs.

--Establish a uniform drug utilization review system to provide management with information on whether psychotherapeutic drugs are being used in accordance with the guidelines.

--Require hospitals using psychotherapeutic drugs to implement the drug utilization review system.

--Design an effective, ongoing educational program to disseminate to hospital personnel the results and implications of current medical research on psychotherapeutic drugs.

--Monitor the drug utilization review system and the educational programs and require an evaluation of the system as part of future management reviews conducted by VA's central office. (See p. 19.)

#### AGENCY ACTIONS AND UNRESOLVED ISSUES

VA concurred in GAO's recommendations and specified actions which, if effectively implemented, should help insure appropriate use of psychotherapeutic drugs. (See pp. 21 and 22.)

VA also generally agreed with GAO observations on psychiatrist staffing and said shortages of psychiatrists in VA reflect nationwide shortages and the difficulty of recruiting with current salary

limitations. (See pp. 25 and 26.)

VA added that many of the problems identified by GAO concerning psychotherapeutic drug use can be attributed to VA's inability to attract and retain professionally trained psychiatrists.

MATTERS FOR CONSIDERATION  
BY THE CONGRESS

This report's findings and conclusions concerning disparities in the use of psychotherapeutic drugs and problems in psychiatrist staffing should assist the Congress in future deliberations on the VA medical program.

## CHAPTER 1

### INTRODUCTION

Veterans with medical disabilities incurred or aggravated in the line of military duty are entitled to all reasonable medical services necessary to treat such disabilities. Veterans may also receive hospital care for nonservice-connected conditions if they cannot pay for it (38 U.S.C. 610).

The Veterans Administration's (VA's) Department of Medicine and Surgery administers VA's health care delivery system, including its 171 hospitals. As of January 1, 1975, VA had classified 33 of the hospitals as psychiatric and 138 as general. Most of the general hospitals have sections for treating psychiatric patients. Psychiatric bed sections are composed of several wards, each of which is generally supervised by one physician.

VA estimates that during fiscal year 1976 its hospitals will contain about 30,000 psychiatric beds, constituting about 31 percent of the average total of 96,300 operating beds in the 171 hospitals. VA estimates the average daily number of psychiatric inpatients during fiscal year 1976 will be about 26,000, out of a total estimated daily inpatient census of 82,000. VA estimates that in fiscal year 1976 about \$2.5 billion will be spent for inpatient care in VA hospitals. About \$518 million of the total will be spent for psychiatric patient care.

Psychiatric patients are usually divided into two major classifications--chronic and acute. Various authorities, including VA's, generally define (1) acute patients as those in the hospital for less than 6 months and (2) chronic patients as those in the hospital for more than 6 months and those currently in the hospital for less than 6 months but who have a history of repeated hospitalization. Using this definition and data obtained during visits to 10 psychiatric and 3 general hospitals, we determined that 55 percent of all inpatients being treated for psychiatric problems were chronic, 44 percent were acute, and 1 percent were of questionable classification.

### USE OF PSYCHOTHERAPEUTIC DRUGS

VA uses behavior-influencing drugs as part of its treatment regimen for psychiatric patients. These psychiatric treatment medications, commonly referred to as psychotherapeutic drugs, include three general classes:

antipsychotic, antidepressant, and antianxiety. During fiscal year 1973 VA spent about \$16.5 million to purchase such drugs.

Psychotherapeutic drugs were first widely used in the 1950s. They ushered in the era of modern psychiatry and have largely supplanted previous methods, such as electroshock therapy and certain brain surgery techniques. More patients are now being treated on an out-patient basis and, according to a noted VA psychopharmacologist, the ratio of psychiatric beds to total beds in U.S. hospitals has steadily declined from about 1 to 2 in the 1950s to as low as 1 to 20 in some hospitals today. Although this trend may not be solely attributable to the use of psychotherapeutic drugs, one noted psychopharmacologist said this trend would not have been possible without these drugs.

#### SIDE EFFECTS OF PSYCHOTHERAPEUTIC DRUGS

As with many drugs, psychotherapeutic drugs produce various side effects. Following are some of the possible side effects of each class of psychotherapeutic drugs.

##### Antipsychotic drugs

A main side effect of antipsychotic drugs is the development of Parkinson's disease symptoms, such as tremors, rigidity, loss of motor function, shuffling gait, and motor restlessness. One antipsychotic drug, thioridazine, may cause ocular damage if taken in excess of the recommended maximum daily dosage of 800 milligrams. Antipsychotic drugs also produce drowsiness, dizziness, and fatigue, particularly when large doses are taken.

##### Antidepressant drugs

The most common side effects of antidepressant drugs include lowered blood pressure, blurred vision, and dryness of the mouth. Others are cardiac abnormalities, loss of appetite, anxiety, and insomnia.

##### Antianxiety drugs

Drowsiness is the most common side effect attributable to antianxiety drugs. Long-term use of large doses may also cause psychic and physical dependence. Withdrawal reactions, including delirium and convulsions, may occur if the drugs are abruptly discontinued. Also, an undesired intensified action of the antianxiety drugs may

result if they are given with antipsychotic and antidepressant drugs. Thus, medical authorities recommend that anti-anxiety drugs be given cautiously and in small doses when administered with other types of psychotherapeutic drugs.

#### SCOPE OF REVIEW

We made our review at 10 psychiatric hospitals, 3 general hospitals with a significant number of psychiatric beds, and VA's central office in Washington, D.C. The hospitals reviewed were in California, Illinois, Indiana, Maryland, Massachusetts, New York, North Carolina, Ohio, Oregon, Pennsylvania, and Virginia. (See app. V.)

We discussed our review with representatives of one Federal (Washington, D.C.), two State, and four private psychiatric hospitals and with representatives of the National Institutes of Health, the American Psychiatric Association, and the American Society of Hospital Pharmacists.

Lists of medical references and research studies used in the review appear on page 5 and in appendix IV.

## CHAPTER 2

### CLOSER MONITORING NEEDED TO PRECLUDE

### OVERUSE OF PSYCHOTHERAPEUTIC DRUGS

Medical authorities, in both the private medical community and the VA medical system, agree that psychotherapeutic drugs are beneficial in treating certain psychiatric patients. However, many of these authorities have cautioned that prolonged or improper use of these drugs can be detrimental to the patients. Our review showed that VA should establish a system to inform its officials about whether psychotherapeutic drugs are being properly used. VA also needs an effective educational program for disseminating the results and implications of current medical research on these drugs.

We prepared drug profiles on 6,171 psychiatric patients in the hospitals visited. The profiles included information on the type of drug or drugs being taken, the length of time they had been taken, the dosages, and the frequency with which they were being administered.

A comparison of the drug profile data to information in authoritative medical references on the proper use of psychotherapeutic drugs showed that:

- Many patients were receiving drug dosages above the maximum recommended by medical authorities, including those of VA, thereby increasing the risks of undesirable side effects.
- A significant number of patients were simultaneously taking more than one drug despite research findings that this should be avoided if possible.
- Drugs used to treat Parkinson's disease symptoms were being given to patients routinely and for prolonged periods even though routine and prolonged use of these drugs is usually unnecessary.
- The frequency with which psychotherapeutic drugs were administered could be reduced, thereby benefiting patients, saving staff time, and reducing drug costs.
- A large number of patients could be given intermittent drug-free periods (drug holidays), which would benefit patients and reduce the nursing staff workload.

VA officials were generally unaware that the drugs were not being administered as set forth in the medical references.

After discussing the results of our analysis of drug use with hospital officials, several of the hospitals took action to install systems wherein use of psychotherapeutic drugs would be more closely monitored. These actions are discussed on page 18.

#### DRUGS USED IN EXCESS OF RECOMMENDED MAXIMUM DOSES

The proper dosage of a psychotherapeutic drug varies with the individual patient. A physician must consider several factors in determining the proper dosage, including the patient's weight, severity and type of illness, and tolerance level. Medical authorities generally agree that dosages above recommended maximums may create an unacceptable risk of toxicity and may fail to provide a substantial additional therapeutic effect.

Our comparison of the drug profiles with maximum recommended dosages showed that 631 of the 6,171 patients, or about 10 percent, were receiving dosages in excess of the recommended daily maximums. The average percentage of patients taking more than the recommended dosage in the 13 hospitals ranged from 4 to 23. Our analysis of one antipsychotic drug, thioridazine, which may cause ocular damage if taken in dosages of more than the recommended maximum of 800 milligrams daily, showed that 33 patients were receiving more than this dosage.

Our analysis of VA's psychotherapeutic drug usage was not intended to identify specific patients receiving too high a dosage of psychotherapeutic drugs. Rather, we wanted to determine if adequate safeguards existed to preclude unwarranted prolonged and heavy use of these drugs.

Data on each patient's dosage was compared to the daily maximum dosages recommended by the following references:

- Physicians Desk Reference to Pharmaceutical Specialties and Biologicals (PDR).
- American Medical Association (AMA) Drug Evaluations.
- American Hospital Formulary Service.
- VA study: "Drug Treatment in Psychiatry."

The above references sometimes contain different daily maximum recommended dosages for the same drug. Officials of the National Institutes of Health advised us that the reference most widely accepted by the medical profession is PDR. However, for our review we used the highest recommended maximum dosage for each drug contained in any of the references. (See app. II for a listing of drugs, the maximum recommended dosages, and the references used to establish the dosage.)

The results of our analysis are shown in the following schedule.

Psychiatric Patients Receiving More Than  
Daily Maximum Recommended Dosage  
of at Least One Psychotherapeutic Drug

<u>Hospital</u>	<u>Number of psychiatric patients</u>	<u>Number of Patients taking psycho- therapeutic drugs</u>	<u>Patients taking more than maximum recom- mended dosage</u>	
			<u>Number</u>	<u>Percent</u>
Brecksville	598	550	95	17
Brockton	602	530	70	13
Downey	1,152	1,018	235	23
Lebanon	531	479	23	5
Los Angeles (Brentwood)	361	312	32	10
Marion	399	356		6
Menlo Park	392	312		8
Montrose	1,046	925		6
Palo Alto	234	163	10	6
Perry Point	490	470	17	4
Roseburg	162	148	6	4
Salem	519	395	20	5
Salisbury	565	513	20	4
Total	<u>7,051</u>	<u>6,171</u>	<u>631</u>	10

Although the average percentage of patients taking more than the recommended maximum dosages ranged from 4 to 23 among the 13 hospitals, many of these hospitals had wards with 20 percent or more of the patients in that category.

We compiled data to show the disparity in the number of patients receiving more than the maximum recommended dosage among wards of the same hospital. The data is summarized in the following schedule.

<u>Hospital</u>	<u>Percentage of patients receiving more than the recommended maximum dosage</u>					<u>Total</u>
	<u>0-10%</u>	<u>11-20%</u>	<u>21-30%</u>	<u>31-40%</u>	<u>More than 40%</u>	
	<u>(Number of wards)</u>					
Brecksville	7	2	4	3	-	16
Brockton	10	6	-	3	-	19
Downey	2	8	2	3	2	17
Lebanon	15	2	1	-	-	18
Los Angeles (Brentwood)	9	7	-	-	1	17
Marion	6	1	-	-	-	7
Menlo Park	13	4	-	-	-	17
Montrose	18	4	1	-	-	23
Palo Alto	5	2	2	1	-	10
Perry Point	7	2	-	-	-	9
Roseburg	3	-	-	-	-	3
Salem	10	2	-	-	-	12
Salisbury	<u>15</u>	<u>2</u>	<u>1</u>	<u>-</u>	<u>-</u>	<u>18</u>
Total wards	<u>120</u>	<u>42</u>	<u>11</u>	<u>10</u>	<u>3</u>	<u>186</u>

SIMULTANEOUS USE OF MORE THAN ONE PSYCHOTHERAPEUTIC DRUG

Numerous research studies, including some by VA, have concluded that little evidence exists to support simultaneous use of more than one psychotherapeutic drug on the same patient-- a practice commonly referred to as polypharmacy. These studies have also shown that polypharmacy increases the possibility of adverse reactions and have suggested that it be avoided if at all possible. At the hospitals visited, of the 6,171 patients, 2,002 patients, or about 32 percent, were taking more than one psychotherapeutic drug.

A May 1973 VA booklet on pharmacotherapy stated:

"In most cases, there are no animal studies or controlled clinical trials on efficacy, interaction effects and toxicity for the various dosage combinations of drug mixtures used with schizophrenic patients. This should make the clinician cautious in prescribing drug combinations, particularly since surveys indicate that adverse drug reactions are related to the number of drugs the patient is receiving."

Other studies have indicated that polypharmacy should be avoided because taking more than one drug may alter the patient's ability to metabolize the drugs. According to these studies, the more medicines prescribed concurrently, the greater the possibility of adverse reactions and toxicity. Further, adding another drug may reduce the effectiveness of the original drug. Polypharmacy may also make it difficult, if not impossible, to know which drug to increase or decrease if a change occurs in a patient's clinical state.

Officials of VA's Central Neuropsychiatric Research Laboratory cited three reasons why, in their opinion, polypharmacy should not be used:

- No tests on animals or humans have shown polypharmacy to be a safe means of treating psychosis.
- The more medication a patient is given, the greater the risks of adverse side effects.
- Unnecessary drug costs are incurred.

VA's Director of Pharmacy Service also believed that polypharmacy was not a good practice. According to him, the chemical reaction of the drugs may make each less effective. Because the cause of the ineffectiveness may not be known, a physician may increase the dosage of each drug.

The drug profiles of the 2,002 patients on polypharmacy showed that many were taking 3 or more psychotherapeutic drugs. One patient was taking eight different drugs--three antipsychotic, two antianxiety, one antidepressant, one sedative, and one antiparkinson. Three of these drugs were being given in dosage equal to the maximum recommended. Another patient was taking seven different drugs--three antipsychotic, two antianxiety, one sedative, and one antiparkinson. Two of these drugs were being given in dosages above the maximum recommended.

Many physicians were prescribing three or more drugs of the same class simultaneously to the same patient. One such patient had been taking six different antipsychotic drugs simultaneously. He had been taking five of these for half a year or longer.

The following schedule shows the incidence of polypharmacy at the hospitals visited.

Hospital	Number of patients taking psychotherapeutic drugs	Patients taking two or more drugs of the same class		Patients taking two or more drugs of different classes		Patients taking three or more drugs, two of which were the same class		All patients taking two or more drugs	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
Brecksville	550	103	19	98	18	26	5	227	41
Brockton	530	143	27	50	9	16	3	209	39
Downey	1,018	82	8	62	6	3	-	147	14
Lebanon	479	106	22	70	15	21	4	197	41
Los Angeles (Brentwood)	312	37	12	53	17	7	2	97	31
Marion	356	97	27	40	11	5	1	142	40
Menlo Park	312	107	34	28	9	8	3	143	46
Montrose	925	175	19	87	9	28	3	290	31
Palo Alto	163	22	14	24	15	1	1	47	29
Perry Point	470	114	24	60	13	19	4	193	41
Roseburg	148	15	10	14	9	-	-	29	20
Salem	395	86	22	37	9	10	3	133	34
Salisbury	513	60	12	79	15	9	2	148	29
Total	<u>6,171</u>	<u>1,147</u>	19	<u>702</u>	11	<u>153</u>	2	<u>2,002</u>	32

Some wards at almost every hospital we visited had no patients receiving more than one psychotherapeutic drug; however, every hospital had at least one ward in which polypharmacy was practiced to a considerable extent. In fact, 1 out of every 5 wards in the 13 hospitals had 50 percent or more of the patients on polypharmacy.

The following schedule shows the lowest and highest incidences of polypharmacy at each hospital.

Hospital	Wards with lowest incidence of polypharmacy			Wards with highest incidence of polypharmacy		
	Number of patients taking drugs	Number	Percent	Number of patients taking drugs	Number	Percent
Brecksville	19	-	-	32	23	72
Brockton	12	-	-	33	19	58
Downey	112	-	-	115	37	32
Lebanon	18	-	-	19	15	79
Los Angeles (Brentwood)	13	-	-	14	10	71
Marion	43	-	-	57	42	74
Menlo Park	11	-	-	21	16	76
Montrose	12	-	-	69	49	71
Palo Alto	12	1	8	20	12	60
Perry Point	65	6	9	63	45	71
Roseburg	32	-	-	53	24	45
Salem	34	-	-	8	4	50
Salisbury	19	2	11	49	19	39

Officials at the hospitals visited generally agreed that polypharmacy is used more than necessary. In many cases, they were not aware that polypharmacy was used so extensively.

According to the hospital officials, widespread polypharmacy may be a result of the large number of patients for which most VA physicians are responsible. These officials believed that in many instances the large caseload does not allow physicians sufficient time to adequately study the medication histories of

all of their patients. (Physician staffing problems are discussed in ch. 3.) As a result of our review, one hospital reduced its incidence of polypharmacy by more than 30 percent. (See GAO note, p. 43.)

POSSIBLE OVERUSE OF DRUGS TO TREAT  
PARKINSON'S DISEASE SYMPTOMS

One possible side effect of antipsychotic drugs is the inducement of Parkinson's disease symptoms--but not the disease itself. These symptoms include tremors, rigidity, loss of motor function, motor restlessness, agitation, shuffling gait, postural abnormalities, and excessive salivation. Other persistent symptoms, such as rhythmic movements of tongue, jaws, and face, occur in older patients.

Several drugs, commonly referred to as antiparkinson drugs, are available for treating these symptoms. Various research studies on the use of antiparkinson drugs have concluded, however, that they (1) should not be used routinely and (2) can usually be discontinued after about 3 months.

The drug profiles showed that 1,645, or about 27 percent, of the 6,171 patients taking psychotherapeutic drugs were taking antiparkinson drugs. Of these 1,645 patients, 686, or about 42 percent, were taking them routinely and 607, or about 37 percent, had been taking them for longer than 3 months.

Antiparkinson drugs used routinely

According to studies on antiparkinson drug usage, no logical basis exists for the preventive or routine use of these drugs. Routine use of antiparkinson drugs refers to simultaneous initiation of both an antipsychotic drug and an antiparkinson drug without first observing whether the patient develops Parkinson's disease symptoms. Officials of VA's Central Neuropsychiatric Research Laboratory and officials at the National Institutes of Health also believed that there is no need for routine use of these drugs. Various reasons given for not routinely prescribing these drugs include:

--Only a minority of patients develop Parkinson's disease symptoms of any consequence.

--Side effects can be caused by relatively small doses of these drugs.

--Treatment becomes more expensive.

--When used with some antipsychotic drugs to control such symptoms, they may also produce toxic reactions.

--No evidence proves that they will prevent such symptoms.

Some VA psychiatrists said they routinely prescribe antiparkinson drugs when administering antipsychotic drugs. Nine of the 13 hospitals had at least 1 ward in which at least 50 percent of the patients taking psychotherapeutic drugs were also taking antiparkinson drugs.

The following schedule shows the routine use of antiparkinson drugs at each hospital.

<u>Hospital</u>	Number of patients taking antiparkinson drugs	Patients who had an anti- psychotic and an antiparkinson drug prescribed simultaneously	
		<u>Number</u>	<u>Percent</u>
Brecksville	183	85	46
Brockton	172	85	49
Downey	213	68	32
Lebanon	132	35	27
Los Angeles (Brentwood)	114	43	38
Marion	34	10	29
Menlo Park	114	62	54
Montrose	335	151	45
Palo Alto	64	28	44
Perry Point	107	51	48
Roseburg	38	15	40
Salem	96	41	43
Salisbury	43	12	28
Total	<u>1,645</u>	<u>686</u>	42

Prolonged use of antiparkinson  
drugs may be unnecessary

Various studies, including some by VA, have stated that, of those patients taking antipsychotic drugs who require antiparkinson drugs, only a minority should take them for a prolonged period. These studies have recommended that the antiparkinson drugs be discontinued after about 90 days and then reinstated only if Parkinson's disease symptoms recur.

According to a VA study appearing in an April 1972 psychiatric publication, only 7 percent of patients taken off

antiparkinson drugs after receiving them for at least 3 months had symptoms requiring resumption of the drug. Other studies have stated that, after a 3-month period, more than 90 percent of the patients continuing anti-psychotic drugs without antiparkinson drugs have no return of the symptoms.

According to VA's Director of Pharmacy Service, any drug orders for inpatients may not be written for longer than 30 days at a time. We found that several patients had been taking antiparkinson medication continuously for from 4 to 7 years. Another had been taking the same dosage of the same antiparkinson medication continuously for 13 years.

The drug data furnished by the hospitals showed that about 37 percent of the patients taking antiparkinson drugs had been taking them continuously for more than 3 months.

The following schedule shows the statistics for each hospital.

<u>Hospital</u>	Number of patients taking antiparkinson drugs	Patients taking anti- parkinson drugs for longer than 3 months	
		<u>Number</u>	<u>Percent</u>
Brecksville	183	65	36
Brockton	172	105	a/61
Downey	213	53	25
Lebanon	132	64	49
Los Angeles (Brentwood)	114	20	18
Marion	34	13	38
Menlo Park	114	25	22
Montrose	335	177	53
Palo Alto	64	4	6
Perry Point	107	29	27
Roseburg	38	-	-
Salem	96	37	39
Salisbury	43	15	35
Total	<u>1,645</u>	<u>607</u>	37

a/ About 40 percent of the patients at Brockton taking anti-parkinson drugs had been on the medications for longer than 9 months.

## FREQUENCY OF ADMINISTERING PSYCHOTHERAPEUTIC DRUGS

VA studies state that VA administers many psychotherapeutic drugs to patients three or more times daily. These studies recommend, however, that after some degree of control over the patient's condition has been obtained (one noted VA psychopharmacologist has suggested that this may take 3 to 6 months), the drug be administered only once or twice daily. Benefits of less frequent administration include

- increased patient attendance at therapeutic and recreational activities, resulting in increased patient sociability and broadened patient interests;
- a savings in staff time, freeing nurses for other patient-care duties; and
- reduced drug costs.

Thirty percent of all psychotherapeutic drugs administered for longer than 6 months, 34 percent of the drugs administered for longer than 1 year, and 32 percent of the drugs administered for longer than 2 years were being administered three or more times daily.

Advocates of reducing the frequency with which psychotherapeutic drugs are given do not necessarily suggest that the total daily dosage be reduced. The total daily dosage may be maintained if larger approved dosages are available. For example, a patient receiving a 100-milligram tablet of a drug four times daily--totaling 400 milligrams--could instead receive a 200-milligram tablet twice daily.

Reducing the frequency of administering medication is possible because of the chemical properties of psychotherapeutic drugs. Studies have shown that, because these drugs are eliminated from the body tissues slowly, taking them three or more times daily is not clinically superior to taking them once or twice daily. According to various studies, the practice of administering drugs more frequently than is necessary may be a holdover from traditional medical practice which used drugs with short-lived actions.

### Reduced drug administration schedules may benefit patients

Recent literature on drug administration schedules note that administering drugs once or twice daily rather than

three or more times daily enables patients to attend therapeutic and recreational activities without the disruption of taking medication. Additionally, one study indicated that, when a single bedtime administration replaced a multiple-dose schedule, patients' sociability increased and patients' interests broadened.

The inherent capacity of some psychotherapeutic drugs to cause drowsiness or alertness may be used to advantage by scheduling divided doses in unequal strengths. For example, a drug causing drowsiness may have two-thirds of the daily dosage administered at bedtime to facilitate sleep. This may eliminate the need to prescribe sleeping medication.

According to studies on administration schedules, if an antipsychotic drug is taken in divided doses with the major portion taken before retiring, the patient may suffer less disabling Parkinson's disease symptoms because the major drug impact occurs while the patient is asleep.

Advocates of administering medication less frequently recognize the need for adequate preparation to determine whether widespread implementation is feasible. The studies caution that, to gain maximum therapeutic benefit from reduced schedules, such schedules must be constructed on an individual basis, taking into account such factors as age, absorption efficiency, concentration of the drug in blood and body tissues, and body size.

Recent medical research suggests, however, that a patient can have administration reduced to once or twice daily after his condition has been somewhat controlled.

According to a recent book by a noted psychopharmacologist, although patients generally show marked improvement during the first 3 months of drug administration, they show only gradual improvement after 3 months. The book added, however, that some patients may require up to 6 months to show sufficient improvement to warrant switching to another drug.

Accordingly, we analyzed all prescriptions administered for longer than 6 months. In only two of the hospitals, Palo Alto and Roseburg, were no drugs being administered three or more times daily for longer than 6 months. In the other 11 hospitals, many drugs were being administered in this manner. However, we noted that at each of these hospitals at least one ward had no drugs being administered in this manner. The following schedule shows the data for each of the 11 hospitals, including the ward with highest incidence within each hospital.

<u>Hospital</u>	<u>Percent of drugs administered three or more times daily for longer than 6 months</u>	<u>Percent in ward with highest incidence</u>
Brecksville	40	90
Brockton	21	65
Downey	12	33
Lebanon	63	100
Los Angeles (Brentwood)	60	67
Marion	7	9
Menlo Park	72	79
Montrose	16	57
Perry Point	47	59
Salem	32	35
Salisbury	48	52
Average	30	

Our analysis also showed that about 34 percent of the patients on the same prescriptions for longer than 1 year and about 32 percent of the patients on the same prescriptions for 2 years were receiving the medication three or more times daily.

#### Savings in hospital staff time

Reducing the frequency of psychotherapeutic drug administration also saves staff time, particularly for nurses. According to VA, one State hospital study found that nurses spent 53 minutes per patient per week administering medication three or more times daily but only 19 minutes per patient per week administering medication twice daily. The time savings was attributed mainly to the reduction in time spent searching for patients, particularly during the day when they may attend an activity off the ward, such as recreation, medical exams, or therapy. Other factors consuming staff time included preparing medication and making sure that the patients took it.

#### Potential savings in drug costs

According to the Director of VA's Pharmacy Service, the cost of psychotherapeutic drugs is not proportional to dosage strength.

Actual procurement costs from the VA Supply Catalog for three widely used psychotherapeutic drugs illustrate the differences between the costs of various dosage strengths of the same drugs.

<u>Drug</u>	<u>Strength of tablets</u>	<u>Price</u>
Chlordiazepoxide Hydrochloride	5 mg--2 bottles of 500 tablets each	\$26.10
	10 mg--1 bottle of 500 tablets	<u>13.91</u>
	Difference (percent)	<u>\$12.19</u> (47)
Chlorpromazine	100 mg--2 bottles of 1,000 tablets each	\$53.54
	200 mg--1 bottle of 1,000 tablets	<u>32.43</u>
	Difference (percent)	<u>\$21.11</u> (39)
Diazepam	5 mg--2 bottles of 500 tablets each	\$38.52
	10 mg--1 bottle of 500 tablets	<u>28.35</u>
	Difference (percent)	<u>\$10.17</u> (26)

Significant cost differences clearly exist between different dosage strengths of the same drugs. Because VA's psychotherapeutic drug procurements cost \$16.5 million in fiscal year 1973, any substantial switch to higher strength dosages could result in greatly decreased drug costs.

#### INADEQUATE USE OF DRUG HOLIDAYS

Various studies, some by VA, have shown that most chronic schizophrenics stabilized on doses of antipsychotic drugs can receive no medication for 2 or 3 days per week (drug holidays) without substantial clinical change.

Drug holidays are feasible because, according to pharmacological studies, antipsychotic drugs are stored in various body tissues and released slowly over a period of days or weeks.

The benefits claimed for drug holidays are:

--A reduction in the amount of drugs accumulated in patients' tissues, which could reach an undesirable level.

- Less of a feeling of drug dependency.
- A reduction in staff workload.
- Lower drug costs.
- A chance for physicians to test their patients' needs for continued medication.

The Director of VA's Pharmacy Service, officials of VA's Central Neuropsychiatric Research Laboratory, and some individual psychiatrists agreed that drug holidays are a proven treatment practice.

According to data furnished by VA, patients treated for schizophrenia constitute about 67 percent of VA's psychiatric inpatients. Because 55 percent of the patients in the 13 hospitals were classified as chronic, a substantial number of the patients taking antipsychotic medication could apparently be considered for drug holiday schedules. Our analysis of the data suggests that drug holidays are not being used to the extent possible. Only about 12 percent (565) of the 4,832 patients taking antipsychotic drugs were on drug holiday schedules. Six of the 13 hospitals had no patients on drug holiday schedules. Only 3 of the 13 had a substantial number of patients on drug holiday schedules; their patients constituted about 90 percent of all those on such schedules. The results of our analysis are presented below.

<u>Hospital</u>	<u>Number of patients taking drugs</u>	<u>Number of patients taking antipsychotic medication</u>	<u>Number of patients on drug holidays</u>
Brecksville	550	429	1
Brockton	530	394	-
Downey	1,018	811	282
Lebanon	479	411	20
Los Angeles (Brentwood)	312	218	12
Marion	356	223	-
Menlo Park	312	247	-
Montrose	925	805	153
Palo Alto	163	115	-
Perry Point	470	411	-
Roseburg	148	81	-
Salem	395	293	14
Salisbury	513	394	83
Total	<u>6,171</u>	<u>4,832</u>	<u>565</u>

ACTIONS TAKEN BY HOSPITAL OFFICIALS  
AS A RESULT OF OUR FINDINGS

VA officials were generally not aware of the manner in which psychotherapeutic drugs were being administered. After discussing the matters noted during our review, three hospitals (see app. III) said the following actions had been taken to monitor the prescribing of drugs so that adjustments could be made when conditions warranted:

- Establishing consultation procedures between the pharmacy service and senior clinical staff, whereby prescriptions above a predetermined level must be approved in advance.
- Establishing an education program to upgrade the use of psychotherapeutic drugs.
- Reviewing medications prescribed in medical record reviews.
- Issuing prescription-writing guidelines to hospital staff.
- Establishing a drug-prescribing review process.
- Establishing a polypharmacy review process resulting in a decrease of about 31 percent in polypharmacy cases in one hospital.

Officials of several other hospitals said they had taken the following actions concerning the matters found during our review:

- Discontinuing antiparkinson drugs for patients who had been taking them for 3 months or longer. These drugs were to be represcribed only for those patients developing Parkinson's disease symptoms.
- Reducing a high dosage of a drug capable of causing ocular damage for two patients, one of whom had been receiving the dosage for 14 months.
- Presenting information on drug holidays and anti-parkinson drugs to the hospital staff.

CONCLUSIONS

The matters noted in this report demonstrate a need for VA to establish uniform guidelines for using

psychotherapeutic drugs. These guidelines should cover such matters as maximum recommended dosages, polypharmacy, drug holidays, antiparkinson drugs, and frequency of administering medication. VA should also establish a uniform drug utilization review system for all its hospitals to provide its officials with information on whether psychotherapeutic drugs are being used in accordance with the guidelines.

Also, VA should establish an effective educational program to disseminate to its physicians the results and implications of current medical research on psychotherapeutic drugs.

#### RECOMMENDATIONS

We recommend that the Administrator of VA:

- Establish uniform guidelines for using psychotherapeutic drugs.
- Establish a uniform drug utilization review system to provide management with information on whether psychotherapeutic drugs are being used in accordance with the guidelines.
- Require hospitals using psychotherapeutic drugs to implement the drug utilization review system.
- Develop an effective, ongoing educational program to disseminate to hospital personnel the results and implications of current medical research on psychotherapeutic drugs. Such a program should be centrally directed so research results can be consistently emphasized and interpreted at all hospitals.
- Monitor the drug utilization review system and the educational programs and require an evaluation of the system as part of future management reviews conducted by VA's central office.

#### AGENCY COMMENTS AND OUR EVALUATION

VA stated that its officials at the headquarters and hospital level are also concerned about the use of psychotherapeutic drugs. (See app. I.) VA emphasized that no absolute criteria exist for using psychotherapeutic drugs and that, although much research has been conducted on this matter (including some by VA), more is needed. VA agreed that, in spite of its previous research into the proper use of psychotherapeutic drugs, it should actively expand and develop educational and research programs concerning mental health and behavioral sciences.

According to VA, many of the problems of psychotherapeutic drug use are due to the inability to attract and retain professionally trained psychiatrists. With regard to some of the specific matters discussed in the report, VA said:

- Polypharmacy, which seems to linger in spite of extensive criticism about its use, needs further scrutiny.
- Overuse of antiparkinson drugs, partly due to old prescribing habits, is lessening.
- The practice of administering psychotherapeutic drugs three or more times daily is also lessening.
- Drug holidays are recommended for patients who have been hospitalized 6 months or longer, who have stabilized drug routines, and who are found to tolerate days without medication.

A VA official subsequently said that the claim that the use of antiparkinson drugs and the administration of drugs three or more times daily is lessening represents the opinion of knowledgeable VA officials, although the degree of lessening is not known.

With regard to drugs used in excess of maximum recommended dosage, VA stated that the figure of 10 percent of the patient population identified in our review as receiving dosages in excess of the recommended maximum may not be unreasonable. According to VA, more data, namely the severity of the patient's illness, age, and effectiveness of the dose, would be necessary to wisely explain this usage.

We reiterate, however, that the 10-percent figure was the average for all 13 hospitals visited. In some hospitals the percentage of patients taking more than recommended maximum doses exceeded 10 percent; in one hospital it was 23 percent. Moreover, an analysis of individual ward drug use showed that the 10-percent figure was exceeded in about one-third of the wards. In some wards over 40 percent of the patients were taking drugs in excess of recommended maximum doses.

With regard to the awareness of officials that drugs were not being administered in accordance with authoritative medical references, VA said:

"The statement in the GAO report that all officials seem to have been unaware that drugs were not being administered in accordance with authoritative medical references must refer to non-professional

officials. Professionals in leadership positions have been aware of this problem, concerned about its dimensions and have tried a variety of approaches to lessen and solve it."

The basis for our comments on the awareness of officials of the manner in which drugs were being administered was our discussions with both professional and nonprofessional officials at the hospitals we visited. As a result of these discussions, officials at several of the hospitals took specific actions to promote more effective use of psychotherapeutic drugs. (See p. 18.)

In an addendum to VA's comments on our report, VA said it concurred with each of our recommendations and stated that the following actions would be taken to implement them:

- A study by VA's Neuropsychiatric Research Laboratory entitled "Guidelines for Anti-Psychotic Drug Use" has been accepted by VA. It will be redistributed to the VA psychiatry staff and its principles will be established as a guide to psychotherapeutic drug use.
- A drug utilization review system, as part of a patient-care evaluation system, will be instituted to provide for management information not only on psychotherapeutic drug overuse but also on total patient care.
- The patient-care evaluation system, which includes the review of psychotherapeutic drug use, will be required for all hospitals.
- Educational programs will be expanded to include programs by central office personnel to further disseminate new information and research about psychotherapeutic drugs. Hospitals will be encouraged to have ongoing educational programs for their staffs, including a periodic review of the guidelines.
- Monitoring of the drug utilization review system and educational programs will be part of the patient-care evaluation system, presided over by the Treatment Services Division of the Mental Health and Behavioral Sciences Service. This monitoring will look at all aspects of patient care, including not only overutilization of drugs but also possible underutilization.

The actions planned by VA, if effectively implemented, will help insure appropriate use of psychotherapeutic drugs. In view of the magnitude of the problems noted during our

review, we believe that the VA central office should take necessary steps to insure that the proposed actions are effectively and promptly implemented.

## CHAPTER 3

### STAFFING OF PSYCHIATRIC WARDS IN VA HOSPITALS

VA has had problems recruiting enough physicians to provide care to psychiatric patients. Many of its physicians assigned to provide psychiatric care have had no formal psychiatric training, and the number of patients for which a physician was responsible varied widely.

Governing bodies (known as boards) of various medical specialties have established procedures whereby physicians wishing to specialize may become certified in a certain medical field. For psychiatrists, the American Board of Psychiatry and Neurology (ABPN) is the certifying body. To become certified by ABPN, a physician must have at least 3 years specialized psychiatric training and at least 2 years psychiatric residency and must pass an ABPN written examination. A physician who has fulfilled ABPN's training and residency requirements but has not passed the examination is deemed to be board eligible.

Many of the physicians who have had no formal psychiatric training were board certified in other medical specialties, including general practice, internal medicine, obstetrics-gynecology, pathology, ophthalmology, and radiology.

At the hospitals visited, the number of patients for which a psychiatrist was responsible varied. The Los Angeles (Brentwood) hospital ratio was 1 physician for every 21 patients; the Montrose ratio was 1 physician for every 100 patients. The overall average ratio for the 13 hospitals was 1 for 53. However, the ratios of ABPN certified or eligible psychiatrists to patients ranged from the Los Angeles hospital's 1 to 24 to the Marion hospital's 1 to 399. The overall average ratio for the 13 hospitals was 1 ABPN-certified or ABPN-eligible psychiatrist for every 91 patients.

VA has not developed firm staffing guidelines for its psychiatric hospitals. The Veterans Health Care Expansion Act of 1973 provides that VA enter into an agreement with the National Academy of Sciences to determine the number and categories of personnel and resources needed to provide quality medical care in VA hospitals. We were advised in October 1974 that the National Academy study would be started shortly and would take about 36 months to complete. Standards or guidelines to determine personnel and resources required in VA hospitals will not be available until the study is completed.

VA physicians are hired on either a full- or part-time basis. The following schedule shows, on the basis of full-time-employment equivalency (FTEE), the ratio of total physicians

and the ratio of board-certified or board-eligible psychiatrists to psychiatric patients for each of the hospitals visited.

<u>Hospital</u>	<u>Number of patients</u>	<u>Number of FTEE physicians</u>	<u>Number of patients per FTEE physician</u>	<u>Number of FTEE board-certified or board-eligible psychiatrists</u>	<u>Number of patients per FTEE board-certified or board-eligible psychiatrist</u>
Brecksville	598	15.5	38.6	2.5	239.2
Brockton	602	9.85	61.1	5.1	118
Downey	1,152	13.87	83.1	7.87	146.4
Lebanon	531	9.0	59	3	177
Los Angeles (Brentwood)	361	17.22	21	15.22	23.7
Marion	399	4.5	88.7	1	399
Menlo Park	392	9.5	41.3	8	49
Montrose	1,046	10.5	99.6	7.5	139.5
Palo Alto	234	10.5	22.3	9.5	24.6
Perry Point	490	7	70	6	81.7
Roseburg	162	.2	81	2	81
Salem	519	14.75	35.2	5.41	95.9
Salisbury	565	8.63	65.5	4.35	129.9
<b>Total</b>	<b><u>7,051</u></b>	<b><u>132.82</u></b>	<b>53.1</b>	<b><u>77.45</u></b>	<b>91</b>

Various VA officials and hospital staff psychiatrists identified the following problems in recruiting trained psychiatrists for VA hospitals.

--Salaries that can be offered to physicians are limited. The salary range for a VA physician is set by legislation (38 U.S.C. 4107) and ranges from \$14,671 for an associate-grade physician to \$36,000 for a chief-grade physician. The opportunity for a full-time physician to augment his income is limited by legislation prohibiting such physicians from engaging in private practice. Generally, full-time physicians are permitted to engage only in teaching and consultative activities for remunerative purposes.

The military services have encountered a similar problem. However, legislation was recently enacted to help alleviate physician shortages in the military services. Public Law 93-274 provides for annual bonus payments of up to \$13,500 to physicians who extend their active duty agreements. The bonus amount will depend on how long the physician agrees to remain in the military. Army and Navy medical personnel recruiters said the annual bonus payments should increase the military's ability to attract and retain physicians.

--Many VA psychiatric hospitals are geographically remote. Many physicians are reluctant to move to remote areas because of the lack of social and cultural activities and educational opportunities.

--Almost all VA hospital patients are adult males. Qualified psychiatrists may shun VA's hospital system because they would have little, if any, opportunity to treat women and children. Treating a variety of patient types is considered necessary for a psychiatrist's development.

On March 31, 1974, the President directed VA to evaluate its health services and prepare a report itemizing the strengths and weaknesses of its health care delivery system to serve as a guide for action by the executive branch. The study, entitled "Report of a Special Survey of the Level of the Quality of Patient Care at Veterans Administration Hospitals and Clinics," was completed on July 31, 1974.

It concluded that the salary limitation was, and will continue to be, the major hindrance to VA's recruiting and retaining physicians. The study's major recommendations concerning physician salaries were that:

--The \$36,000 salary limitation be lifted.

--A new pay schedule be established for physicians, dentists, and nurses.

--The Administrator of Veterans Affairs be authorized to pay full-time physicians, dentists, and nurses incentive compensation of up to 25 percent of their annual salary, depending upon such factors as qualifications, responsibilities, and competition for services.

--Sabbatical leave be authorized for certain full-time physicians, dentists, and nurses.

### CONCLUSIONS

VA has experienced difficulty in recruiting psychiatrists because of (1) the statutory limitation on salaries, (2) the limited opportunities to treat women and children, and (3) the geographical remoteness of its hospitals.

Although VA can do nothing to change the location of its existing hospitals, we believe the recommendations in VA's report to the President, if implemented, should enable it to alleviate many of the problems being experienced in attracting well-qualified psychiatrists.

### AGENCY COMMENTS

VA generally agreed with our observations on psychiatrist staffing and said that the shortage of qualified psychiatrists

in VA merely reflects nationwide shortages and the difficulty of recruiting and retaining psychiatrists with the prevailing salary limitations. VA agreed that implementing the recommendations in its report to the President should alleviate many of the problems being experienced in attracting well-qualified psychiatrists.



VETERANS ADMINISTRATION  
OFFICE OF THE ADMINISTRATOR OF VETERANS AFFAIRS  
WASHINGTON, D.C. 20420  
FEBRUARY 7 1975

Mr. Gregory J. Ahart  
Director, Manpower and  
Welfare Division  
U. S. General Accounting Office  
Washington, D. C. 20548

Dear Mr. Ahart:

We appreciate the opportunity to review and comment on the draft report "Controls Needed to Help Assure Appropriate Use of Drugs Used to Treat Psychiatric Patients and Improvements Needed in Psychiatrist Staffing". The concerns expressed in the study are precisely the concerns of the professional management at the Central Office and Hospital level. Before responding to the specific recommendations, however, there are several points which should be made to keep the facts in their proper perspective:

1. There are no absolute criteria as to the proper amount of medication for any individual patient. Research studies continue to clarify indications and dosage for psychopharmacological agents. More experience with these drugs is now making it possible to identify patients who are likely to benefit from very high doses, those who are not and those who perhaps should receive no drugs.
2. Therapeutic benefit from skill in the use of psychopharmacological drugs is not simply a matter of education as to what constitutes overdosage on polypharmacy or inappropriate drug use. These two problems may only be secondary consequences of a dehumanizing environment, a stressful ward milieu, or a pseudotherapeutic treatment team. To assure that none of these conditions exists, the Department of Medicine and Surgery constantly emphasizes the aspects of comprehensive care and uses internal and external evaluation procedures to monitor our treatment programs.

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3. The problem relating to drug utilization in a psychiatric hospital is not exclusively the province of the physician. While technically responsible for prescribing and monitoring drugs, invariably he must rely on the assistance of a multidisciplinary professional team via continuing and systematic observations. This feedback to the physician does effect his decision as to the type of drug therapy instituted, maintained, increased or decreased. Thus, the type of non-physician staffing can also indirectly influence drug usage and policies of the Department of Medicine and Surgery encourage the responsible use of this information.

4. Techniques for educating non-specialty trained physicians on drug use are challenging and difficult. A physician who conscientiously prescribes according to experience should not be bound by administratively imposed rigid guidelines. Prescribing should be based on solid professional education, experience, and judgment of the individual patient's condition. The education is likely to be more lasting and valuable if trained competent colleagues work closely with non-specialists. Studies are in process to determine the most effective educational method. (See attachment #2)

5. Basic research is still needed and much needs to be learned about the use of psychopharmacological agents. Much of the research done to date has been done by the Veterans Administration. All of this information has been forwarded to the VA Hospitals and their physicians. The following quote from the recent Consumer's Union publication, The Medicine Show, shows the important role of VA. "The most comprehensive studies of all three classes of psychotherapeutic drugs have come from the Department of Medicine and Surgery of the U. S. Veterans Administration (VA). Almost sixty-five thousand patients were treated in thirty-three VA psychiatric hospitals in the year ending February 1973, and many tens of thousands of additional patients rely on the VA's general hospitals and 83 mental hygiene clinics for care. Thus the VA patient population includes moderately troubled patients as well as severely ill ones. Out of this wide experience and out of the VA's

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'Cooperative Studies of Chemotherapy in Psychiatry' have come a series of distinguished reports on the effects of psychotherapeutic drugs."

6. We subscribe to the belief that the better trained psychiatrist who is experienced and has been Board Certified is generally the most competent to provide the patient with comprehensive care including the appropriate utilization of drugs. Although we have rigorously pursued recruitment of this type of psychiatrist, we usually are not successful in competing with non-federal health care systems in recruitment or retention for exactly the same reasons presented in the "Report of Special Survey of Level of Quality of Patient Care at VA Hospitals and Clinics." (See House Committee Report, Print No. 163, p. 19). We feel that many of the problems of psychotherapeutic drug usage referred to in the GAO Report are due to our inability to attract and retain professionally trained psychiatrists.

The specifics of the GAO Report recommendations for controls needed to help assure appropriate use of drugs used to treat psychiatric patients essentially reflect the following five points:

1. There is a need for the VA to establish a system which would provide VA officials with information on whether psychotherapeutic drugs are being properly used.

RESPONSE: The monitoring of drug usage is the responsibility of the professional staff at the individual hospital. There should be a local Review Committee which addresses itself to drug utilization. VA Central Office has designed a study proposal to identify patterns of drug use and evaluate the most effective educational approach.

2. The VA does not have an effective education system for its physicians through which the results and implications of current medical research on these drugs is disseminated.

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RESPONSE: The VA has already provided leadership in the investigation and proper use of psychotherapeutic drugs. As a part of a continuing education effort, studies have been published and distributed to the VA Hospitals and their physicians. Many of the VA Hospitals participated in our collaborative studies. (See attachment #1) In addition the VA has provided considerable opportunities for postgraduate study. For example, there is an AMA-approved 40-hour course given annually by one VA psychiatric hospital. Consultants are regularly utilized for educational purposes. VA Hospitals also have excellent medical libraries with all current literature available. The VA also has continued to do basic and clinical research in Psychiatry. Nevertheless, in spite of these significant achievements we believe VA should actively expand and develop educational and research programs in the area of mental health and the behavioral sciences.

3. Psychotherapeutic drug usage in many instances is not within the scope of authoritative medical reference in these ways:
  - a. Drugs used in excess of maximum recommended dosage.

RESPONSE: The usage of drugs in excess of the recommended dosage is identified as 10% of the patient population. This 10% may not be unreasonable. More data would be necessary to wisely respond to this usage. Namely, the effectiveness of this dosage, the severity of psychopathology, the age of the patient and the clinical course.

- b. Simultaneous use of more than one drug.

RESPONSE: Polypharmacy is identified and although this practice has generated extensive criticism, it seems to prevail. Therefore, this is an area which needs further objective scrutiny. A pattern of prescribing which seems to linger in spite of data to the contrary needs to be reviewed.

Mr. Gregory J. Ahart  
Director, Manpower and  
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U. S. General Accounting Office

c. Use of drugs to treat Parkinson Disease symptoms.

RESPONSE: The overuse of anti-Parkinsonian drugs is partly due to old prescribing patterns and the over-concern about the appearance of extra-pyramidal signs and symptoms. New information that many patients can discontinue these drugs after three months without a recurrence of symptoms is too recent to have had a significant impact. Although these drugs are still overused there is evidence that their overuse is lessening.

d. Frequency with which psychotherapeutic drugs are administered.

RESPONSE: The infrequency of QID or BID dosages for psychotherapeutic drugs is affected by many factors but there is evidence that their overuse is lessening

e. Use of drug holidays.

RESPONSE: Drug "holidays" are recommended primarily for patients who have been hospitalized six months or longer, who have stabilized psychotherapeutic dosage routines, and who are found to tolerate days without medication. A statistical analysis would require a breakdown of these criteria.

4. VA officials are generally unaware that drugs are not being administered in accordance with authoritative medical references.

RESPONSE: The statement in the GAO Report that all officials seem to have been unaware that drugs were not being administered in accordance with authoritative medical references must refer to non-professional officials. Professionals in leadership positions have been aware of this problem, concerned about its dimensions and have tried a variety of approaches to lessen and solve it.

Mr. Gregory J. Ahart  
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5. Serious staffing problems are a causal factor particularly in recruiting a sufficient number of physicians to provide care to psychiatric patients, in that:
- a. Many physicians in VA have no formal psychiatric training.
  - b. The number of patients for which a physician is responsible varies widely.
  - c. The ratio of trained psychiatrists to patients varies widely.
  - d. VA has not developed firm staffing guidelines for its psychiatric hospitals.
  - e. VA is hindered in recruiting trained psychiatrists.

RESPONSE: (Summary a through e): The problem is not only one of recruiting a sufficient number of physicians but of recruiting those physicians with specialty training in psychiatry. These problems are compounded by not being able to retain well-qualified psychiatrists.

Firm staffing guidelines have not been established but suggested ratios have been submitted in the past to the Hospital Directors. There are limitations and disadvantages to setting firm staffing guidelines due to the wide variation of types of patients treated in the various psychiatric hospitals. Serious consideration will be given to establishing general staffing guidelines.

The VA has testified before Congressional Committees in support of additional or incentive compensation for physicians, dentists, and nurses. As there has been no specific problem in availability of funds for additional psychiatrists, we concur in general with the last paragraph, page 44, of the subject draft report.

[See GAO  
note 2,  
p. 33.]

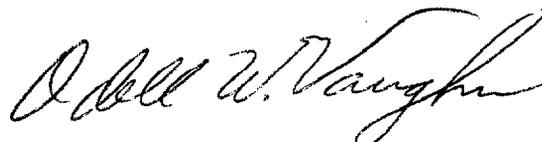
Mr. Gregory J. Ahart  
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The following are worthy of re-emphasis:

1. It must be understood that general prescribing guidelines relating to "recommended dosages," duration of use of anti-Parkinsonian drugs, use of several similar drugs simultaneously, and desirability of "drug holidays" can only be guidelines. Once a specific patient is under treatment and his response is observable, such general guidelines become of minimal value. In fact, it is poor medicine to follow general therapeutic guidelines strictly in the treatment of an individual patient.
2. The shortage of qualified psychiatrists in the VA merely reflects the shortage of these expertly-trained professionals in the nation and the extreme difficulty of recruiting and retaining these professionals with the prevailing salary limitations. This shortage does not represent an Agency policy or administrative deficiency.

We hope that these comments will be of assistance to you in preparation of the final report.

Sincerely,



Deputy Administrator - in the absence of  
RICHARD L. ROUDEBUSH  
Administrator

#### Attachments

- GAO notes:
1. VA's Chief Medical Director subsequently provided GAO with additional comments included on the following pages.
  2. Page reference will not correspond to that of the final report.

Addendum to communication of February 7, 1975 from Richard L. Roudebush, Administrator, to Mr. Gregory J. Ahart regarding GAO report, "Controls Needed to Help Assure Appropriate Use of Drugs to Treat Psychiatric Patients and Improvement Needed in Psychiatric Staffing."

The following are specific responses to the GAO recommendations:

1. Establish uniform guidelines for using psychotherapeutic drugs.

Response: Concur. We have accepted "Guidelines for Anti-Psychotic Drug Use: (VA Central NP Research Lab. Research Report No. 95). This guideline will be redistributed to the VA Psychiatry staff and the principles of the paper will be established as a guide to psychotherapeutic drug usage.

2. Establish a uniform drug utilization review system to provide management with information on whether psychotherapeutic drugs are being used in accordance with the guidelines.

Response: Concur. We are instituting, as part of our evaluation system, a drug utilization review system which will provide for management information not only about the psychotherapeutic drug overuse but also provide information on the total patient care.

3. Require hospitals using psychotherapeutic drugs to implement the drug review system.

Response: Concur. The patient care evaluation system, which includes the review of psychotherapeutic drug usage, will be a requirement for all hospitals.

4. Develop an effective, ongoing education program to disseminate to hospital personnel the results and implications of current medical research on psychotherapeutic drugs. Such a program should be centrally directed so research results can be consistently emphasized and interpreted at all hospitals.

Response: Concur. We are planning to expand our present educational programs to include educational programs established by Central Office personnel to further disseminate new information and research about psychotherapeutic drugs. We also are encouraging individual hospitals to have ongoing educational programs for their staff, including a periodic review of the guidelines.

5. Monitor the drug review systems and the educational programs and require an evaluation of the system as part of future management reviews conducted by VA's Central Office.

Response: Concur. The monitoring of drug review systems and educational programs will be part of the patient care evaluation system, presided over by the Treatment Services Division of Mental Health and Behavioral Sciences Service. This monitoring process will look at all aspects of patient care including not only overutilization of drugs but possible underutilization as well.

DRUGS AND RECOMMENDED MAXIMUM DAILY DOSAGES

<u>Drug (note b)</u>	<u>U.S. trade name</u>	<u>Recommended maximum daily dosage (note a)</u>			
		<u>VA study (note c)</u>	<u>AMA drug evaluations</u>	<u>PDR (1973)</u>	<u>American hospital formulary service</u>
<b>Antipsychotic:</b>					
Acetophenazine maleate	Tindal	80	80	120	80
Butaperazine maleate	Repoise	100	100	100	-
Carphenazine maleate	Proketazine	400	400	-	400
Chlorpromazine	Thorazine	1,600	1,000	1,000	1,600
Chlorprothixene	Taractan	600	600	600	600
Fluphenazine HCL	Prolixin, Permitil	20	20	20	20
Flurothyl	Indoklon	-	1 ml	-	1 ml
Haloperidol	Haldol	15	15	15	15
Lithium carbonate (also antidepressant)	Eskalith, Lithane, Lithonate	1,500	1,800	1,800	1,800
Mesoridazine	Serentil	-	400	400	-
Perphenazine	Trilafon	64	64	64	64
Piperacetazine	Quide	160	160	160	160
Prochlorperazine	Compazine	150	150	150	150
Promazine HCL	Sparine	-	1,000	-	800
Thiopropazate HCL	Dartal	150	100	-	100
Thioridazine HCL	Mellaril	800	800	800	800
Thiothixene	Navane	60	60	60	-
Trifluoperazine HCL	Stelazine	30	20	20	30
Triflupromazine HCL	Vesprin	200	150	-	150
<b>Antianxiety:</b>					
Benactyzine HCL	Suavitil	-	10	-	10
Chlordiazepoxide HCL	Librium	300	40	100	100
Chlormezanone	Trancopal	-	800	800	800
Diazepam	Valium	60	40	40	40
Doxepin HCL	Sinequan	-	300	300	300
Hydroxyphenamate	Listica	-	800	-	-
Hydroxyzine HCL	Atarax, Vistaril HCL	400	400	400	400
Mephenoalone	Trepidone	-	1,600	-	-
Meprobamate	Equanil, Miltown	3,200	1,600	2,400	-
Oxanamide	Quiactin	-	1,600	-	-
Oxazepam	Serax	120	120	-	-
Phenaglycodol	Ultran	1,200	1,200	-	1,200
Tybamate	Solacen, Tybatran	3,000	3,000	3,000	3,000
Benactyzine HCL/Meprobamate	Deprol	-	-	6/2,400	-

Antidepressants:					
Amitriptyline HCL	Elavil HCL	225	300	300	300
Amphetamine sulfate	Benzedrine	-	100	-	100
Desipramine HCL	Norpramin, Pertofrane	200	200	200	200
Dextroamphetamine sulfate	Dexedrine	60	50	-	25
Doxepin HCL (also antianxiety)	Sinequan	-	300	300	300
Imipramine HCL	Tofranil	225	300	300	300
Isocarboxazid	Marplan	50	30	-	30
Lithium carbonate (also antipsychotic)	Eskalith, Lithane, Lithonate	1,500	1,800	1,800	1,800
Methamphetamine HCL	Desoxyn, Drinalfa, Methedrine	30	60	-	60
Methylphenidate HCL	Ritalin HCL	60	30	60	60
Nialamide	Niamid	450	200	-	200
Nortriptyline	Aventyl HCL	100	100	100	100
Phenelzine sulfate	Nardil	75	75	75	45
Pipradrol	Meratran	10	-	-	7.5
Protriptyline HCL	Vivactil HCL	60	60	60	-
Tranlycypromine sulfate	Parnate Sulfate	30	60	30	30
Combination drugs:					
Amtriptyline HCL/ Perphenazine	Etrafon, Triavil	-	16/100	36/225	-
Benactyzine HCL/Meprobamate	Deprol	-	-	6/2 400	-
Anticonvulsants:					
Diazepam (also antianxiety)	Valium	-	40	40	40
Diphenylhydantoin	Dilantin	-	600	400	600
Ethosuximide	Zarontin	-	1,000	1,500	1,500
Ethotoin	Peganone	-	3,000	3,000	3,000
Mephentoin	Mesantoin	-	800	800	800
Mephorbarbital	Mebaral	-	600	600	800
Meprobamate (also anti-anxiety)	Equanil, Miltown	-	2,400	-	-
Metharbital	Gemonil	-	800	800	800
Methsuximide	Celontin	-	1,200	1,200	1,200
Paramethadione	Paradione	-	2,100	2,400	2,100
Phenacemide	Phenurone	-	3,000	5,000	1,500
Phenobarbital	Various	-	300	-	-
Phenobarbital sodium	Luminal	-	300	600	650
Phensuximide	Milontin	-	3,000	3,000	3,000
Primidone	Mysoline	-	2,000	2,000	2,000
Quinacaine HCL	Atabrine HCL	-	100	-	100
Trimethadione	Tridione	-	2,100	2,400	2,100
Antiparkinsonism:					
Amantadine HCL	Symmetrel	-	-	-	450
Atropine sulfate	Atropine sulfate	-	-	-	2,400
Benzotropine mesylate	Cogentin Mesylate	-	8	8	6
Biperiden HCL	Ankineton HCL	-	8	8	8

Chlorphenoxamine HCL	Phenoxene	-	400	-	400
Cycrimine HCL	Pagitane HCL	-	15	-	20
Diphenhydramine HCL	Benadryl	-	300	-	400
Ethopropazine	Parsidol	-	1,000	-	600
Levodopa	Dopar, Larodopa	-	-	-	8 qms
Orphenadrine citrate	Norflex	-	200	-	400
Orphenadrine HCL	Disipal	-	150	-	400
Procyclidine HCL	Kemadrin	-	60	20	60
Scopolamine hydrobromide	Scopolamine hydrobromide	-	1.8	-	4
Trihexyphenidyl HCL	Artane, Pipanol, Tremmin HCL	-	20	15	-
<b>Sedatives and hypnotics:</b>					
Amobarbital	Amytal	-	300	360	200
Aprobarbital	Alurate	-	160	120	160
Bromides	Bromides	-	6,000	-	-
Butabarbital	Butatab	-	120	-	200
Chloral betaine	Beta-Chlor	-	1,700	1,740	-
Chloral hydrate	Felsules, Notec	-	2,000	1,000	750
Cyclobarbital calcium	Phanodorn Calcium	-	400	-	-
Ethchlorvynol	Placidyl	-	1,000	1,000	500
Ethinamate	Valmid	-	2,000	1,000	500
Glutethimide	Doriden	-	1,000	500	1,000
Mephobarbital (also anti- anxiety)	Mebaral	-	-	600	800
Methaqualone	Quaalude, Sopor	-	400	300	400
Methyprylon	Noludar	-	400	400	400
Paraldehyde	Paral	-	30	-	20
Pentobarbital	Nembutal	-	500	120	120
Phenobarbital	Various	-	200	-	-
Phenobarbital sodium	Luminal	-	-	600	650
Secobarbital	Seconal	-	500	100	200
Vinbarbital	Delvinal	-	400	-	200
<b>Combination drugs:</b>					
Amobarbital sodium/ Secobarbital sodium	Tuinal	-	-	200	-

a/ Unless otherwise stated, dosages are in milligrams.

b/ Listed by class and generic name.

c/ Drug Treatment in Psychiatry, Central NP Research Laboratory, Veterans Administration Hospital, Perry Point, Maryland, January 1970.



VETERANS ADMINISTRATION  
HOSPITAL  
DOWNEY, ILLINOIS 60064

February 5, 1974

YOUR FILE REFERENCE:

IN REPLY REFER TO: 556/00

Mr. Frank M. Mikus  
Assistant Director  
United States General Accounting Office  
Washington, DC 20548

Dear Mr. Mikus:

The visit to our hospital by your staff resulted in the following changes relevant to the utilization of psychotropic drugs:

1. The Therapeutic Agents and Pharmacy Review Committee was delegated responsibility for an ongoing review process relevant to drug utilization (see attachment - Hospital Memorandum No. 11-21).
2. The weekly course on Psychopharmacology originally presented to psychiatric residents, was opened for all physicians (see attachment - weekly schedule).
3. [See GAO note, p. 40.] , who had consistently utilized megadoses as a routine practice, resigned as of 12-14-73.

The GAO focus upon the issue of megadoses resulted in a peer review of several cases whereby megadoses were used by . The Peer Review Committee found that the prescribing practices by were too routinized. The resulting pressures upon that prevented her utilization of megadoses may have been, at least in part, responsible for her resignation.

The most significant change is an ongoing process whereby the prescribing practices of physicians are reviewed following any and all acting-out behavior on the part of patients.

Following an incident, a Form 10-2633, "Report of Special Incident Involving a Beneficiary," and/or a Reference Slip, (VA Form 3230) is filled out (see attachment).

The medication orders are listed and they are evaluated within the context of "Basic Principles in the Psychoses." All physicians were given a copy of these principles (see attachment).

A memo (see attachment) is sent to the physician responsible for a given patient, through the Chief of the Service, indicating those principles that may have been violated.

Include Zip Code in your return address and give veteran's social security number.  
*Show veteran's full name and VA file number on all correspondence. If VA number is unknown, show service number.*

The goal here is to develop a continuing education program in drug use, not only for Brentwood staff, but which may be helpful to teaching and training programs in other hospitals in this area, and possibly throughout the VA. Approval and guidelines are being developed through contacts with the appropriate professional and state organizations.

I hope that this information will be helpful in answer to your inquiry.

Yours truly,



M. STRAKER, M. D.  
Chief, Psychiatry Services

2 attach.



VETERANS ADMINISTRATION  
HOSPITAL  
10701 EAST BOULEVARD  
CLEVELAND, OHIO 44106

April 23, 1974

IN REPLY  
REFER TO: 541/11(B)

Mr. Frank M. Mikus  
Assistant Director  
United States General Accounting Office  
Room 137, Lafayette Building  
811 Vermont Avenue, N.W.  
Washington, D. C. 20420

Dear Mr. Mikus:

Thank you for sending us the results of your polypharmacy analysis at our Brecksville Division. We felt that your study indicated a need for re-emphasizing our policy on this subject. We have made it a source of discussion at service meetings and asked that records which are reviewed be scrutinized very carefully in regard to medications. Also, each physician is required to report monthly all patients under his care receiving two or more drugs of the same type.

[See  
GAO  
note.] To measure the results of our efforts we recently redid your study. The results are attached. As you can see, the overall picture shows a downward trend in both numbers and percentage of possible polypharmacy patients. The number of patients receiving two or more drugs of the same type (col. 2 & 4) fell sharply to about one third of the original number, 129 in November, 46 in March.

We feel that there is a need for continuing attention to this subject and are planning to conduct similar studies on a continuing basis.

Thank you for your study and analysis of this matter.

Sincerely,

  
SAMUEL L. ASPIS, M.D.  
Hospital Director

Enclosures 2

GAO note: Total polypharmacy cases decreased from 227 to 157 during this period.

*Show veteran's full name, VA file number, and social security number on all correspondence.*

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VA HOSPITALS REVIEWED

<u>Hospital</u>	<u>Location</u>	<u>Number of beds</u>	<u>Type of hospital</u>
Brecksville			
(note a)	Brecksville, Ohio	899	Psychiatric
Brockton	Brockton, Mass.	853	Psychiatric
Downey	Downey, Ill.	2,046	Psychiatric
Los Angeles			
(Brentwood)	Los Angeles, Calif.	476	Psychiatric
Lebanon	Lebanon, Pa.	896	General
Marion	Marion, Ind.	1,335	Psychiatric
Menlo Park			
(note b)	Menlo Park, Calif.	735	Psychiatric
Montrose	Montrose, N.Y.	1,511	Psychiatric
Palo Alto			
(note b)	Palo Alto, Calif.	801	General
Perry Point	Perryville, Md.	1,072	Psychiatric
Roseburg	Roseburg, Oreg.	436	Psychiatric
Salem	Salem, Va.	1,233	General
Salisbury	Salisbury, N.C.	909	Psychiatric

a/ Effective May 16, 1973, Brecksville became a division of the Cleveland, Ohio, VA hospital.

b/ The Palo Alto hospital is composed of the Palo Alto and Menlo Park divisions.

PRINCIPAL VA OFFICIALS  
RESPONSIBLE FOR ADMINISTERING  
ACTIVITIES DISCUSSED IN THIS REPORT

	<u>Tenure of office</u>	
	<u>From</u>	<u>To</u>
<b>ADMINISTRATOR OF VETERANS AFFAIRS:</b>		
R. L. Roudebush	Oct. 1974	Present
R. L. Roudebush (acting)	Sept. 1974	Oct. 1974
D. E. Johnson	June 1969	Sept. 1974
<b>DEPUTY ADMINISTRATOR:</b>		
O. W. Vaughn	Nov. 1974	Present
Vacant	Oct. 1974	Nov. 1974
R. L. Roudebush	Jan. 1974	Oct. 1974
F. B. Rhodes	May 1969	Jan. 1974
<b>CHIEF MEDICAL DIRECTOR:</b>		
J. D. Chase, M.D.	Apr. 1974	Present
M. J. Musser, M.D.	Jan. 1970	Apr. 1974

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