

NOTICE: When government or other drawings, specifications or other data are used for any purpose other than in connection with a definitely related government procurement operation, the U. S. Government thereby incurs no responsibility, nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use or sell any patented invention that may in any way be related thereto.

CATALOGED BY DDC
AS AD No. 454930

US ARMY MEDICAL RESEARCH LABORATORY

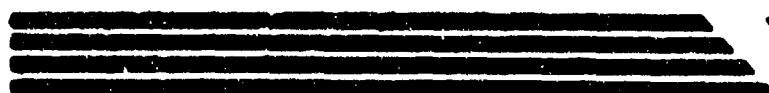
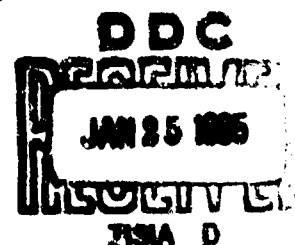
PORT HICK, KENTUCKY

REPORT NO. 608

A METHOD FOR EVALUATING PREMEDICATION EFFICACY
IN DENTAL PATIENTS

Capt W. O. Evans, MSC
Capt K. Tannenbaum, DC
Capt B. Turek, DC
Maj E. E. Alling, DC

454930



UNITED STATES ARMY
MEDICAL RESEARCH AND DEVELOPMENT COMMAND

13 July 1964

Report Submitted 6 July 1964

Authors

Capt W. O. Evans, MSC
(Ph. D.)

Department of Response Processes
Division of Psychology
USAMRL

Capt K. Tannenbaum, DC
(D. D. S.)

Dental Clinic No. 4
Dental Detachment
USAARMC

Capt B. Turek, DC
(D. D. S.)

Dental Clinic No. 4
Dental Detachment
USAARMC

Maj E. E. Ailing, DC
(D. D. S.)

Dental Clinic No. 4
Dental Detachment
USAARMC

Qualified requestors may obtain copies of this report from DDC.

Foreign announcement and dissemination of this report by DDC
is limited.

AD	Accession No.	UNCLASSIFIED	AD	Accession No.	UNCLASSIFIED
US Army Medical Research Lab, Ft. Knox, Ky.	US Army Medical Research Lab, Ft. Knox, Ky.	US Army Medical Research Lab, Ft. Knox, Ky.	US Army Medical Research Lab, Ft. Knox, Ky.	US Army Medical Research Lab, Ft. Knox, Ky.	US Army Medical Research Lab, Ft. Knox, Ky.
A METHOD FOR EVALUATING PREMEDICATION EFFICACY	A METHOD FOR EVALUATING PREMEDICATION EFFICACY	A METHOD FOR EVALUATING PREMEDICATION EFFICACY	A METHOD FOR EVALUATING PREMEDICATION EFFICACY	A METHOD FOR EVALUATING PREMEDICATION EFFICACY	A METHOD FOR EVALUATING PREMEDICATION EFFICACY
IN DENTAL PATIENTS - W. O. Evans, K. Tennessee.	IN DENTAL PATIENTS - W. O. Evans, K. Tennessee.	IN DENTAL PATIENTS - W. O. Evans, K. Tennessee.	IN DENTAL PATIENTS - W. O. Evans, K. Tennessee.	IN DENTAL PATIENTS - W. O. Evans, K. Tennessee.	IN DENTAL PATIENTS - W. O. Evans, K. Tennessee.
B. Turk, and E. E. Alling	B. Turk, and E. E. Alling	B. Turk, and E. E. Alling	B. Turk, and E. E. Alling	B. Turk, and E. E. Alling	B. Turk, and E. E. Alling
Report No. 608, 13 Jul 64, 9 pp & 1 - DA Project	Report No. 608, 13 Jul 64, 9 pp & 1 - DA Project	Report No. 608, 13 Jul 64, 9 pp & 1 - DA Project	Report No. 608, 13 Jul 64, 9 pp & 1 - DA Project	Report No. 608, 13 Jul 64, 9 pp & 1 - DA Project	Report No. 608, 13 Jul 64, 9 pp & 1 - DA Project
No. 3A012501A807, Unclassified Report	No. 3A012501A807, Unclassified Report	No. 3A012501A807, Unclassified Report	No. 3A012501A807, Unclassified Report	No. 3A012501A807, Unclassified Report	No. 3A012501A807, Unclassified Report
A method of testing for the efficacy of dental	A method of testing for the efficacy of dental	A method of testing for the efficacy of dental	A method of testing for the efficacy of dental	A method of testing for the efficacy of dental	A method of testing for the efficacy of dental
premedication in children, using a double blind	premedication in children, using a double blind	premedication in children, using a double blind	premedication in children, using a double blind	premedication in children, using a double blind	premedication in children, using a double blind
condition for obtaining ratings of manageability	condition for obtaining ratings of manageability	condition for obtaining ratings of manageability	condition for obtaining ratings of manageability	condition for obtaining ratings of manageability	condition for obtaining ratings of manageability
by dentists and of emotionality by psychologists.	by dentists and of emotionality by psychologists.	by dentists and of emotionality by psychologists.	by dentists and of emotionality by psychologists.	by dentists and of emotionality by psychologists.	by dentists and of emotionality by psychologists.
was investigated. Film and sound recordings made during a standard	was investigated. Film and sound recordings made during a standard	was investigated. Film and sound recordings made during a standard	was investigated. Film and sound recordings made during a standard	was investigated. Film and sound recordings made during a standard	was investigated. Film and sound recordings made during a standard
dental procedure on apprehensive children were used for judgments.	dental procedure on apprehensive children were used for judgments.	dental procedure on apprehensive children were used for judgments.	dental procedure on apprehensive children were used for judgments.	dental procedure on apprehensive children were used for judgments.	dental procedure on apprehensive children were used for judgments.
Variables of the study were degrees of "emotionality" and "manage-	Variables of the study were degrees of "emotionality" and "manage-	Variables of the study were degrees of "emotionality" and "manage-	Variables of the study were degrees of "emotionality" and "manage-	Variables of the study were degrees of "emotionality" and "manage-	Variables of the study were degrees of "emotionality" and "manage-
ability" on the first and second visits; and, the effects of pre-	ability" on the first and second visits; and, the effects of pre-	ability" on the first and second visits; and, the effects of pre-	ability" on the first and second visits; and, the effects of pre-	ability" on the first and second visits; and, the effects of pre-	ability" on the first and second visits; and, the effects of pre-
medication with chloral hydrate and methamprone.	medication with chloral hydrate and methamprone.	medication with chloral hydrate and methamprone.	medication with chloral hydrate and methamprone.	medication with chloral hydrate and methamprone.	medication with chloral hydrate and methamprone.
yielded a reliable, valid, and sensitive index.	yielded a reliable, valid, and sensitive index.	yielded a reliable, valid, and sensitive index.	yielded a reliable, valid, and sensitive index.	yielded a reliable, valid, and sensitive index.	yielded a reliable, valid, and sensitive index.
UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED
1. Pediatric Dentistry	1. Pediatric Dentistry	1. Pediatric Dentistry	1. Pediatric Dentistry	1. Pediatric Dentistry	1. Pediatric Dentistry
2. Dental Pre-medication	2. Dental Pre-medication	2. Dental Pre-medication	2. Dental Pre-medication	2. Dental Pre-medication	2. Dental Pre-medication
3. Clinical Drug Testing	3. Clinical Drug Testing	3. Clinical Drug Testing	3. Clinical Drug Testing	3. Clinical Drug Testing	3. Clinical Drug Testing

REPORT NO. 608

**A METHOD FOR EVALUATING PREMEDICATION EFFICACY
IN DENTAL PATIENTS**

Capt W. O. Evans, MSC
Capt K. Tannenbaum, DC*
Capt B. Turek, DC*
Maj E. E. Alling, DC*

*
Dental Clinic No. 4
Dental Detachment
US Army Armor Center
Fort Knox, Kentucky

and

Department of Response Processes
Division of Psychology
US Army Medical Research Laboratory
Fort Knox, Kentucky

13 July 1964

Combat Dentistry
DA Project No. 3A012501A807
Title of Study: A Clinical Evaluation of Chloral
Hydrate and Sodium Methampyrone as a Pre-
medication for the Control of Apprehensive
and Difficult Dental Patients

USAMRL Report No. 608
DA Project No. 3A012501A807

ABSTRACT

**A METHOD FOR EVALUATING PREMEDICATION EFFICACY
IN DENTAL PATIENTS**

OBJECT

The purpose of this investigation was: first, to determine the utility of using observer ratings as a method of studying the efficacy of dental premedicating agents; and second, to test the effects of chloral hydrate and sodium methamprone on apprehensive children.

RESULTS

The method of obtaining observer ratings from film and sound recordings of a standard dental procedure was shown to yield high inter-observer reliabilities. Both the ratings of "manageability" by dentists and of "emotionality" by psychologists were reliable and sensitive. Differences were able to be shown under double blind conditions between the first and second visit to the dental office. Contrary to expectation, a dose of 15 mg/lb body weight plus 500 mg of methamprone had no effect on either manageability or emotionality.

CONCLUSIONS

The method was proven reliable, valid, and sensitive. Chloral hydrate and methamprone are of no benefit as premedicating agents at the doses tested.

APPROVED:

Maurice A. Meador

MAURICE A. MEADOR
Colonel, DC
The Dental Surgeon
US Army Armor Center

APPROVED:

Sven A. Bach

SVEN A. BACH
Colonel, MC
Director
US Army Medical Research Laboratory

A METHOD FOR EVALUATING PREMEDICATION EFFICACY IN DENTAL PATIENTS

INTRODUCTION

Fear and anxiety are common problems in a large majority of dental patients. In some patients, these conditions merely manifest themselves to a moderate degree, whereas in others, the anxiety is of such a level as to hinder dental procedures. This latter difficulty is particularly apparent in patients in the younger age groups.

There are many ways in which the dental practitioner may help his patients overcome these problems and accept the treatment more readily--through education, through reassurance, through the use of premedicating agents and, most often, with the combination of these methods. Regardless of which method or methods is used, it is of importance that the dentist have all three available in his armamentarium in order to conduct a successful and satisfying practice.

A major problem, which has occurred in choosing premedicating agents in dental practice, has been the lack of carefully controlled studies which can guarantee to the dentist that a particular agent is truly efficacious. This difficulty has arisen from two sources: first, from a tendency of most authors to report only their own subjective impressions as to the utility of the agent and not evidence from controlled studies; and second, in the difficulty of devising quantitative methods of measurement for accurately examining subjective responses, such as anxiety and fear. Recently, however, new methods have been developed which will allow for this analysis (1, 2). Using these newer methods, it has been found that subjective responses, such as the measurement of pain, tranquility, etc., and the effects of various drugs upon these subjective emotions can be quantified with a high degree of accuracy. The major purpose of the present study is the demonstration of the applicability of these methods to the study of premedicating drugs in dental practice.

A second purpose of this study is the examination of a mixture of a sedative agent, chloral hydrate, and of an analgesic, sodium methamprone. Chloral hydrate was chosen as the sedating agent since it is among the oldest of the sedative-hypnotic group of drugs. It is one of the safest, most efficient, and least expensive of the medications. A pleasant taste and odor may be imparted to chloral hydrate when it is provided with an appropriate vehicle. It is readily absorbed from the

intestinal tract, and has a wide margin of safety. Also, it produces a rapid sedation, usually within 20 minutes, which can be of particular utility in that it may be administered to the patient during the visit in which the dental operation is to be accomplished. In addition to these advantages, the drug causes no appreciable depression of blood pressure or respiration and has no depressant after effects in comparison to the barbiturates. The only major disadvantage of chloral hydrate is its irritant effects upon the gastrointestinal tract. These effects, however, can be obviated if the preparation is sufficiently dilute. It is contraindicated in the presence of renal, hepatic, or cardiac disease (3, 4, 5). It also has often been recommended for use with children (6-9).

The analgesic chosen for this study was sodium methampyrone (10) (dipyrone sodium, pyralgin), a derivative of aminopyrine. It was selected since it has been shown to provide rapid and effective pain relief in small doses and is liquid soluble.

Since the primary purpose of this study was a methodological examination, rather than an attempt to study a specific drug compound, it was deemed best by the investigators to combine both a sedative and analgesic to maximize the potential effectiveness of the compound. Thus, the essence of this investigation is the examination of the effect of a mixture of chloral hydrate and sodium methampyrone upon the manageability and the emotionality of young dental patients, who were specifically known to be difficult to handle in dental procedures.

METHOD

Subjects. From the normal flow of patients seen at the Dependents' Dental Clinic, Fort Knox, Kentucky, 75 patients were chosen for this study. They were chosen on the basis of the following criteria: one, between the age of 3 and 8 years; two, a negative health history with regard to cardiac, renal and hepatic disfunction, allergies, or coincidental drug administration; three, no overt mental deficiencies or mental disturbances; four, they appeared to be apprehensive and/or difficult to manage during treatment.

All such patients were referred to the study by dental officers who had rendered treatment. The candidates for the study were interviewed by an examining doctor, at which time a detailed health history was obtained. The patient was then given an appointment for an operative dental procedure, with the participating clinician on the project. All patients received treatment by the same dentist who had had no previous contact with them. No attempt was made to control for the sex of the subjects.

Apparatus. Treatment for the study was accomplished in a dental operatory prepared with a framed glass picture window. Behind this was concealed a 16 mm motion picture camera and a tape recorder which was synchronized with the camera. A microphone was inconspicuously attached to the dental unit.

In all cases, the recording was initiated when the patient entered the room, continued through the administration of the anesthetic and then was stopped until the commencement of the operative procedure. The film was again stopped when the dentist had completed the operative procedure. Thus, the film sequence covered the same aspects of the dental treatment in both visits. In some cases, however, this was modified since the patients were unable to be anesthetized. In these cases, the filming of the operative procedure was not made.

The compounds used in this study were a placebo composed of fruit flavored syrups, and chloral hydrate and methampyrone in vehicles composed of flavored syrups. In the case of the drug group, the methampyrone and the chloral hydrate were in separate bottles, although both were mixed in syrups. The placebos were also given to the patient from two separate bottles.

The doses of the drugs given to the patient were 15 mg/lb body weight of chloral hydrate and a standard (10) 500 mg dose of sodium methampyrone. In the case of 10 subjects, a dose of only 12 mg/lb of chloral hydrate was administered. This occurred due to an error by the pharmacist compounding the drug. However, statistical analysis of the results for the 15 mg/lb of chloral hydrate and the 12 mg/lb indicate no differences between the doses. Thus, all the data were pooled together and treated as if only one dose had been administered.

This particular dose of chloral hydrate was chosen upon the basis of previous work, which has shown it to be an effective sedative dose. Goodman and Gilman (3) recommended between 6 and 12 mg/lb of chloral hydrate as the usual sedative dose for the adult. The Physicians Desk Reference (11) lists a sedative dose of chloral hydrate for children by the oral route as 5 to 10 mg/lb body weight. Thus, the dose used in this study of chloral hydrate alone, not including the fact that sodium methampyrone was added to it, is well above what might be regarded as an effective dose.

Procedure. The total treatment procedure consisted of infiltration anesthesia with 2% lidocaine hydrochloride, an occlusal cavity preparation on an upper deciduous molar, and the placement of a silver amalgam restoration, or zinc oxide and eugenol temporary.

At the conclusion of the first treatment visit, the patient was given another appointment for an operative procedure with the same doctor, at approximately the same time of day as his first appointment. The child's parent was given two bottles of medicine. In the case of the drug group, one bottle contained chloral hydrate and the other bottle contained sodium methamprone. In the placebo group, both bottles contained the fruit flavored syrup. Which particular combination of drugs was received by any patient was unknown to the clinician or to any of the observers until the conclusion of the study.

In all cases the medication, whether placebo or drug, was administered by the parent 30 minutes prior to the second operative session. The parents were informed that it was wise to feed the child approximately 30 minutes prior to the administration of the medication in order to prevent possible gastric irritation. The drug code information was known only to the pharmacist compounding the drug and by another dentist located in the same clinic; the latter was prepared to break the code in order to treat any untoward reactions. At the second treatment visit, the same operative procedures were repeated as during the first appointment; and again, audio and visual recordings were made.

The films and recordings of these procedures were edited and then, at a later date, viewed by a panel consisting of three psychologists, the clinician who performed the operative procedures, and two other dentists. Ratings were made on a manageability scale by the dentists and on an emotionality scale by the psychologists. The ratings were made upon a six point scale; varying from one, in which the patient was described as either completely emotional or completely unmanageable; to a value of six, in which case the patient would be completely unemotional or completely manageable. A six point rating scale was used, since it has been proven in past studies that a six category scale can be effectively used for the accurate estimation of subjective impressions (12). The films had been edited so that the raters had no knowledge of whether the patient was on his first or his second visit, or whether the patient had received either the placebo or drug. This statement must be modified to a degree since, in some cases, either through statements by the clinician or by the patient in the film, the raters could determine if it was the first or the second visit. However, in no case was there any possibility of the raters knowing whether the patient had received the drug or the placebo. Thus, the study is truly double blind.

RESULTS AND DISCUSSION

The data were first analyzed using contingency coefficients to determine the inter-rater reliabilities of the observations. Since the basic

purpose of this study was to determine the efficiency of the method for analysing drugs in general, this was one of the most crucial aspects in the study. Unless it could be shown that the various observers rated the films on the same criteria, further analysis of data would be unnecessary. The Pearson "r"s between the various observers, which were estimated from the contingency coefficients, are as follows: for the emotionality ratings by the psychologists: "r" = .86, .78, and .86; for the observations of manageability made by the dentists, "r" = .94, .94, and .93 (13). It can be seen from these estimated correlation coefficients, that both the judgments of emotionality and of manageability had high and significant reliability. Thus, we may say, that although the ratings of the observers were completely independent, a high degree of agreement does exist in making these judgments. Therefore, we may state that the filming procedure that was used is adequate to lead to a high degree of inter-judge reliability.

Having established the reliability between the observers, a Pearson product moment "r" was calculated between emotionality and manageability, without regard to drug treatment or first and second visit. For this, "r" = .69. Thus, approximately 47% of the variance in manageability could be explained by emotionality, or vice versa. Approximately 50% of the variance could not be accounted for of one in terms of the other. It seems that though emotionality and manageability are related there are some aspects of difference. We might speculate that whereas manageability is strictly judged in terms of the degree of accomplishment of certain operative procedure by the dentist, in the case of the emotionality, the psychologists were judging subtler variables such as tension in the body, breathing rate, etc. It may be that in states of excessive tension and emotionality, a subject may be quite easily handled by the dentist; one might draw an analogy to a catatonic schizophrenic. Such a patient, although highly emotional, would still be placid and easily managed in the dental chair.

Since the inter-observer reliability was high, comparisons of the first and second visit, and also of the placebo vs drug effects, were based upon score totals for manageability and the emotionality categories. The scores were, therefore, free to vary between 3 and 36. It was deemed appropriate to use "t" scores rather than non-parametric statistics. The mean difference score for emotionality between the first and second visit was 1.15. The "t" score for emotionality changes between the first and second visit is 2.50; this is significant with $p < .01$. The mean difference score for manageability between the first and second visit was 0.25. The "t" score for manageability was 0.60, which is non-significant at $p < .05$.

From these data, we see that regardless of drug condition, the patients tended to be less emotional on the second visit than they were on the first. On the other hand, they did not tend to be more manageable on the second visit than they were on the first. This difference in the degree of change between the first and second visit for emotionality and manageability leads to some interesting speculations. First, we would guess that the lack of the novelty in the experience on the second visit of itself might tend to reduce the emotionality; whereas, the unpleasantness of the operation, having not been changed, might still lead the patient to be relatively unmanageable. A second speculation might be that the change in the emotionality is a direct result of the unmanageability of the patient. In this case, the lower emotionality on the second visit is due to the child learning that by being unmanageable, he can control the situation to a great degree. Certainly these speculations must be regarded as tentative, but they offer interesting possibilities for future research.

Finally, the groups were analyzed to determine the degree of change between the first and second visits for the group receiving the placebo and the group receiving the drug. That the particular procedure used in this investigation is extremely sensitive to drug differences, is shown by the fact that for the emotionality scores a mean difference of as little as .90 and for manageability of .91 would have yielded significant drug effects at $p < .05$. Thus, if on the average, the patients would have changed as little as one score category on the six point scale between drug and placebo conditions, we would have shown a drug effect at a significant statistical level. The mean change on the emotionality scale for the drug is 1.05. The mean change for the placebo group is 1.25. Therefore, the difference between the drug and placebo group means is .20. Since it would have required a mean difference of .90 to achieve significance and we have only found a difference of .20, this must be interpreted as a non-significant effect.

For the manageability scale, the mean difference for the drug group between the first and second sessions is 0.22 and for the placebo group, 0.28. Thus, the difference between the placebo and the drug for the change between the first and second session is 0.06. Since it was required to have a difference of at least .91, we again see that the difference cannot be regarded as significant. For that matter, in both cases, the direction of the change toward unemotionality or manageability is greater in the placebo group than in the drug group.

The analysis of these data show the drug to have no effectiveness in either increasing manageability or reducing emotionality. This particular result was a surprise to the investigators since we had chosen

dosages of the drugs, both sodium methamprone and chloral hydrate, which from references to the literature, would have been expected to yield positive results. Our only possible interpretation of this data is that in the present study, in which a carefully controlled, double blind procedure was used, the failure to find drug effects must be considered as a failure of drug action. We, therefore, must wonder as to the relevance of the evidence previously reported by other investigators who have not used as rigorous a methodology.

On the whole, the authors regard this study as having accomplished, for the most part, the aims for which it was designed. We have demonstrated, that by using a carefully controlled, double blind procedure, in which films and recordings are made of patients undergoing a dental operation, independent observers will make judgments in regard to the manageability and the emotionality of the patients which are highly reliable and closely in agreement. We have also found that a degree of relationship exists between emotionality and manageability. We have found that changes take place in emotionality between the first and the second visit of these patients to the dentist; whereas, changes do not take place in the degree of manageability of the patients. And finally, we have found that at the doses tested in this study, the mixture of chloral hydrate and sodium methamprone is not an effective pre-medication for improvement of the emotional status or the manageability of children who are known to be difficult patients.

SUMMARY

The present investigation is a methodological approach to determine the efficacy of premedication with sedative and analgesic drugs in dental operative procedures. The study was carried out on young dental patients known to be difficult to handle during such dental treatment. Each patient underwent a standard dental operative procedure on two occasions; the first time without drug and the second time either with a placebo or with a mixture of chloral hydrate and sodium methamprone. During both visits, a standard set of film and sound recordings were taken. These sound and film recordings were later rated by three dentists as to the manageability of the patient and by three psychologists as to the emotionality of the patient on a six point scale. It was found that a high degree of agreement existed between the observers on both the emotionality and the manageability scales, with all "r" values ranging between .78 and .94. It also was found that an "r" of .69 existed between the emotionality and the manageability ratings. The "t" scores showed that a significant reduction in emotionality took place between the first and second visit without regard to drug effect. However, no similar

reduction took place in the difficulty of managing the patients. Finally, it was shown that the administration of 15 mg/lb body weight of chloral hydrate and of 500 mg of sodium methampyrone had no efficacy in either reducing the emotionality of the patients or making them more manageable.

ACKNOWLEDGEMENT

The authors would like to thank Lt Colonel Francis de S. Tucker, Jr., DC, Dental Detachment, US Army Armor Center, Marvin J. Herbert, Ph.D. and Lee S. Caldwell, Ph.D., US Army Medical Research Laboratory, for aid in rating the patients; Mr. Richard A. Wheeler of the US Army Medical Research Laboratory who was responsible for all sound and film recording; and Colonel Maurice A. Meador, DC, Dental Surgeon, Fort Knox, Kentucky, who provided the facilities for the study and permitted the full cooperation of the Fort Knox Dependents' Dental Clinic. It should also be noted that suggestions by Robert Sager, D. D. S., led to this study.

REFERENCES

1. Beecher, H. K. Measurement of Subjective Responses: Quantitative Effects of Drugs. New York, Oxford University Press, 1959.
2. Wikler, A. The Relation of Psychiatry to Pharmacology. Baltimore, The Williams and Wilkins Co., 1957.
3. Goodman, L. S. and A. Gilman. The Pharmacological Basis of Therapeutics. New York, The Macmillan Co., 1956.
4. Anderson, J. L. Use of Chloral Hydrate in Dentistry. North-West Dent. 39: 33-35, 1960.
5. Reynolds, C. Chloral Hydrate. Oral Health, 51: 473, 1961.
6. Root, B. Oral Premedication of Children with Chloral Hydrate and Scopolamine. Anesth. Analg. 41: 194-200, 1962.
7. Stetson, J. B. and Jessup, G. S. Use of Chloral Hydrate Mixtures for Pediatric Premedication. Anesth. Analg. 41: 203-215, 1962.

8. Grimes, J. G., Jr. Oral Premedication in Children. *Anesth. Analg.* 41: 201-202, 1962.
9. Carabelle, R. W. Chloral Hydrate: A Useful Pediatric Sedative. *Amer. J. Ophthal.* 51: 834-835, 1961.
10. *Modern Drug Encyclopedia and Therapeutic Index*. Ninth Ed., New York, The Reuben H. Donnelley Corp., 1963.
11. *Physicians Desk Reference to Pharmaceutical Specialties and Biologicals*. Medical Economics, Inc., 1964.
12. Egan, J. P., G. Z. Greenburg, and A. I. Schulman. Operating Characteristics, Signal Detectability, and the Method of Free Response. *J. Acoust. Soc. Amer.* 33: 993-1007, 1961.
13. McNemar, Q. *Psychological Statistics*. New York, John Wiley and Sons, Inc., 1955.

ARMED FORCES

DISTRIBUTION

Armed Forces Institute of Pathology, Washington, D. C.
Army Attache, Fleet Post Office Box 79, Navy 100, New York, N. Y.
Chief, Life Sciences Division, Office of the Commanding General, Washington, D. C.
Chief, Medical Gen Lab, 406, Japan, US Army Med Cond, APO 343, San Francisco, Calif.
Chief, Preventive Med Div, Directorate of Professional Svc, SGO, Washington, D. C.
Chief, Research and Development Command, Scientific Information Br, Washington, D. C.
Comdt, Brooke Army Med Center, Med Field Svc School, Stinson Library, Ft. Sam Houston, Tex.
CG, I Corps Group, APO 358, San Francisco, Calif.
CG, Second US Army, Ft. George G. Meade, Md.
CG, 7th Logistical Command, APO 612, San Francisco, Calif.
CG, Eighth US Army, Attn: Surgeon, APO 301, San Francisco, Calif.
CG, US Army Alaska, APO 940, Seattle, Wash.
CG, US Army Chemical Research and Development Laboratories, Edgewood Arsenal, Md.
CG, US Army Europe, APO 403, New York, N. Y.
CG, US Army Hawaii, APO 957, San Francisco, Calif.
CG, US Army Materiel Command, ATTN: AMC-MD, Washington, D. C.
CG, US Army Materiel Research Lab, Biomechanical Lab, SGO, Washington, D. C.
CG, US Army Medical Research and Development Command, Washington, D. C.
CG, US Army Munitions Command, CBR Center, Edgewood Arsenal, Md.
CG, US Army Natick Laboratories, (M1-7055) Natick, Mass.
CG, US Army Ordnance Tank Auto Command, Detroit, Mich.
CG, US Army Pacific Medical Office, APO 508, San Francisco, Calif.
CG, US Army Quartermaster R&E Command, Technical Library, Natick, Mass.
CG, US Army Ryukyu Islands, IX Corps, APO 331, San Francisco, Calif.
CG, US Army Transportation R&E Command, Ft. Eustis, Va.
CG, US Continental Army Command, Medical Section, Ft. Monroe, Va.
CO, Brooke Army Medical Center, Surgical Research Unit, Ft. Sam Houston, Tex.
CO, Chemical Corps, Biological Documents Laboratory, Ft. Detrick, Md.
CO, Medical Technical Library, Fitzsimons General Hospital, Denver, Colo.
CO, Picatinny Arsenal, Dover, N. J.
CO, Quartermaster R&E FEA, US Army, Attn: Technical Publications Br, Ft. Lee, Va.
CO, US Army Aeromedical Research Unit, US Army Aviation Center, Ft. Rucker, Ala.
CO, US Army Combat Development Command, Combined Arms Group, Ft. Leavenworth, Kan.
CO, US Army Combat Development Command, Materiel Svc, Ft. Sam Houston, Tex.
CO, US Army Combat Development Command, Quartermaster Corps, Ft. Lee, Va.
CO, US Army Combat Development Command, Engineering Command, Ft. Belvoir, Va.
CO, US Army Command & General Staff College Library, Ft. Leavenworth, Kan.

ARMED FORCES Cont.

DISTRIBUTION

CO, US Army Electronic Proving Ground, Ft. Huachuca, Ark.
CO, US Electronics R&D Laboratories, Attn: SELRA-GDA, Ft. Monmouth, N. J.
CO, US Army Engineer R&D Command, STINFO Br, Ft. Belvoir, Va.
CO, US Army Environmental Hygiene Agency, Library Br, Edgewood Arsenal, Md.
CO, US Army Medical Liaison Br, Attn: Surgeon, Gorgas Hosp, Balboa Hts, Canal Zone
CO, US Army Medical Res & Nutrition Lab, Fitzsimons General Hosp., Denver, Colo.
CO, US Army Medical Research Unit, Ft. Clayton, Canal Zone
CO, US Army Medical Research Unit, Inst for Medical Research Kuala Lumpur, Malaya
CO, US Army Medical Research Unit, Ft. Detrick, Md.
CO, US Army Medical Research Unit, APO 180, New York, N. Y.
CO, US Army Missile Support Command, Attn: SMIDW-HO, Redstone Arsenal, Ala.
CO, US Army Ordnance Arsenal, Frankford, Philadelphia, Pa.
CO, US Army Personnel Research Office, Washington, D. C.
CO, US Army Research Inst of Environmental Medicine, Natick Labs, Natick, Mass.
CO, US Army Tropical Research, APO 851, New York, N. Y.
CO, US Aviation Human Research Unit, US Continental Army, Ft. Rucker, Ala.
Director of Research, US Army Air Defense, Human Research Unit, Ft. Bliss, Texas
Director of Research, US Army Infantry, Human Research Unit Library, Ft. Benning, Ga.
Director of Research, US Army Leadership, Human Res Unit Library, Presidio of Monterey, Calif.
Director, US Army SEATO, Medical Research Laboratory, APO 146, San Francisco, Calif.
Director, Walter Reed Army Inst of Res, Walter Reed Army Med Cent, Washington, D. C.
Historical Univ, US Army Medical Service, Walter Reed Army Med Cent, Washington, D. C.
Office of the Chief Psychi & Neuro Consultant, SGO, Washington, D. C.
Office of the Chief R&D, Human Factors & Operations Research Div, Washington, D. C.
Office of the Dir, Division of Neurophy, Walter Reed Army Inst of Res, Washington, D.C.
Post Surgeon, US Army Dispensary, Springfield Arsenal, Springfield, Mass.
Senior Medical Advisor, Hqs KMAG, APO 102, San Francisco, Calif.
Walter Reed Army Inst of Res, Dept of Atomic Casualty Studies, Washington, D. C.

HOSPITALS

CG, Brooke General Hospital Medical Library, Ft. San Houston, Tex.
CG, Letterman General Hospital, Presidio of San Francisco, Calif.
CG, M. D. Anderson General Hospital, Tacoma, Washington.
CG, William Beaumont General Hospital Library, El Paso, Tex.
CO, Bassett Army Hospital, Ft. Jonathan Wainwright, Fairbanks, Alaska.
CO, DeWitt Army Hospital, Ft. Belvoir, Va.
CO, Dunham Army Hospital, Carlisle Barracks, Pa.

ARMED FORCES - HOSPITALS Cont.

DISTRIBUTION

CO, Ireland Army Hospital, Ft. Knox, Ky.
CO, Irwin Army Hospital, Ft. Riley, Kan.
CO, Kenner Army Hospital, Ft. Lee, Va.
CO, Kimbrough Army Hospital, Ft. George G. Meade, Md.
CO, Kirk Army Hospital, Aberdeen Proving Ground, Md.
CC, McDonald Army Hospital, Ft. Eustis, Va.
CO, Martin Army Hospital, Ft. Benning, Ga.
CO, Munson Army Hospital, Ft. Leavenworth, Kan.
CO, Noble Army Hospital, Ft. McClellan, Ala.
CO, Patterson Army Hospital, Ft. Monmouth, N. J.
CO, Watson Army Hospital, Ft. Dix, N. J.
CO, Walter Reed General Hospital, Washington, D. C.
CO, Wesch Army Hospital, Ft. Bragg, N. C.
CO, US Army Hospital, Ft. Benjamin Harrison, Indianapolis, Ind.
CO, US Army Hospital, Ft. Campbell, Ky.
CO, US Army Hospital, Ft. Carson, Colorado.
CO, US Army Hospital, Ft. Dix, N. J.
CO, US Army Hospital, Ft. Devens, Mass.
CO, US Army Hospital, Ft. Gordon, Ga.
CO, US Army Hospital, Ft. Hood, Tex.
CO, US Army Hospital, Ft. Jackson, S.C.
CO, US Army Hospital, Ft. Jay, N. Y.
CO, US Army Hospital, Ft. Leonard Wood, Mo.
CO, US Army Hospital, Ft. McPherson, Ga.
CO, US Army Hospital, Ft. MacArthur, Calif.
CO, US Army Hospital, Ft. Monroe, Va.
CO, US Army Hospital, Ft. Ord, Calif.
CO, US Army Hospital, Ft. Polk, La.
CO, US Army Hospital, Ft. Rucker, Ala.
CO, US Army Hospital, Ft. Sill, Okla.
CO, US Army Hospital, Ft. Stewart, Ga.
CO, US Army Hospital, Ft. Walters, Tex.
CO, US Army Hospital, Dugway Proving Ground, Utah.
CO, US Army Hospital, Redstone Arsenal, Ala.
CO, US Army Hospital, Sierra Army Depot, Meridian, Calif.
CO, US Army Hospital, White Sands Missile Range, N. Mex.

ARMED FORCES - NAVY

DISTRIBUTION

Aviation Medical Acceleration Lab, US Naval Air Development Center, Johnsville, Pa.
Aviation Psychol Laboratory, US Naval School of Aviation Medicine, Pensacola, Fla.
Bureau of Naval Weapons, Washington, D. C.
Chief, Bureau of Yards and Docks, Washington, D. C.
Chief of Naval Air Research Training, Glenview, Ill.
Chief of Naval Air Technical Training, US Naval Air Station (75), Memphis, Tenn.
Commander, Naval Missile Center, Technical Library, Point Mugu, Calif.
CO, Naval Air Materiel Center, Technical Library, Philadelphia, Pa.
CO, US Naval Civil Engineer Lab, Port Hueneme, Calif.
CO, US Naval Medical Field Research Lab, Library, Camp Lejeune, N. C.
CO, US Naval Ordnance Test Station, Station Hospital, China Lake, Calif.
CO, US Naval Radiological Defense Lab, San Francisco, Calif.
CO, US Naval Weapons Station, Attn: QE Laboratory, Concord, California
Director, Aerospace Crew Equipment Lab, Naval Air Engr Center, Philadelphia, Pa.
Director Research Division (71) Bureau of Medicine & Surgery, Washington, D. C.
Director, US Naval Research Laboratory, Code 2027, Washington, D. C.
Director of Laboratories NME, National Naval Medical Center, Bethesda, Md.
Office of Naval Res Br, Document & Tech Infor, Box 39, Navy 100, Fleet PO, New York, N.Y.
Office of Naval Research, Code 456, Washington, D. C.
Officer in Charge, Exper Diving Unit, US Naval Sta, Navy Yard Annex, Washington, D. C.
Officer in Charge, Operations Evaluations Group, Washington, D. C.
Special Assistant, Medical Allied Sciences, Washington, D. C.
Technical Ref. Library, Naval Med Res Inst, Nat'l Naval Med Center, Bethesda, Md.
US Naval Research Laboratory, US Naval Submarine Base, Groton, Conn.
US Naval Supply Research & Development Facility, Library, Bayonne, New York
US Navy, Medical Neuropsychiatric Research Unit, San Diego, Calif.

US AIR FORCE

Assistant for Ground Safety, US Air Force, Washington, D. C.
Comdr, Rome Air Development Center, Griffiss AFB, N. Y.
Comdr, 6578 AMRL (HMRBA) Wright-Patterson AFB, Ohio
Comdr, 6578 AMRL (HMRBR) Wright-Patterson AFB, Ohio
Comdr, 6578 AMRL (HMRBL) Wright-Patterson AFB, Ohio
Comdr, Wilfred Hall, US Air Force Hospital, Lackland AFB, Texas
Electronic Systems Div, Division Sci Lab, L. G. Hanscom Field, Bedford, Mass.
Hqs-AF Office of Scientific Research, (Tempe Bldg D) Washington, D. C.

ARMED FORCES - US AIR Cont.

DISTRIBUTION

Langley Research Center, National Aeronautics & Space Admin, Hampton, Va.
Office of the Surgeon, Air Tag Command, Randolph AFB, Tex.
Office of the Surgeon, Hqs Strategic Air Command, Offutt, AFB, Neb.
School of Aerospace Medicine, Aeromedical Library, Brooks AFB, Texas
Science Division, AFRSTA, Hqs US Air Force, The Pentagon, Washington, D. C.
US Air Force Epidemiological Laboratory, US Air Force, Lackland AFB, Tex.
6571st Aeromedical Research Laboratory Library, Holloman AFB, N. Mex.

GOVERNMENTAL AGENCIES

Argonne National Laboratory, Library Service Department, Argonne, Illinois
Armed Forces Radiobiology Research Inst, National Naval Medical Center, Bethesda, Md.
Brookhaven National Lab, Associated Universities Inc, Library, Upton, L. I., N. Y.
Chief, Defense Atomic Support Agency, Document Library Branch, Washington, D. C.
Chief, Radiation Br, National Cancer Institute, Bethesda, Md.
Defense Documentation Center Hqs, Cameron Station, Alexandria, Va.
Department of Health Educ & Welfare, Div of Radiol Health-PHS, Washington, D. C.
Division of Biology & Medicine, US Atomic Energy Commission, Washington, D. C.
Division of Medical Sciences, National Research Council, Washington, D. C.
Executive Secretary, Committee of Vision, National Res Council, Washington, D. C.
Federal Aviation Agency, CARL Library - AC-43.2, Oklahoma City, Oklahoma
Library of Congress, Science & Technology Division, Washington, D. C.
National Aeronautics & Space Administration, Washington, D. C.
National Institute of Health, Division of Research Grants, Bethesda, Md.
National Library of Medicine, Bethesda, Md.
Office of Civil Defense, Technical Research Laboratory, Battle Creek, Mich.
US Atomic Energy Commission, Reports Analysis Tech Infor Svc, Oak Ridge, Tenn.
US Public Health Svc, Occupational Health Res & Tag, Facility, Cincinnati, Ohio

OTHER AGENCIES

Abbott Laboratories, Science Information Services, N. Chicago, Illinois
American Machine Foundry Co, New York, N. Y.
Arctic Health Research Center Library, Anchorage, Alaska
Central Medical Library, 11-42, The Boeing Co, Seattle, Washington
Chief, Bioscience Section, Aerospace Division, The Boeing Co, Seattle, Washington
Document Control Desk, The Bioscience Co, Boston, Mass.
General Electric Co, Advanced Electric Center Library, Ithaca, N. Y.
General Electric Co, Tempo Library, Santa Barbara, Calif.

OTHER AGENCIES Cont.

DISTRIBUTION

IBM Research Center, Engr Science Dept 475, Yorktown Heights, N. Y.
ITT Federal Laboratories, Human Factors Group, Nutley, N. J.
Kings County Hospital, Department of Anesthesiology Library, Brooklyn, N. Y.
Lafayette Clinic 951 E. Lafayette Street, Detroit, Michigan
Mayo Clinic, Director of Biophysics Division, Rochester, Minn.
McDonnell Aircraft Corp, St. Louis, Mo.
Psychological Abstracts, Washington, D. C.
Rand Corporation Library, Santa Monica, California
Rheon Califone Corporation, Los Angeles, Calif.
Space Technical Laboratories, Subcommittee on Noise, Los Angeles, Calif.
The Boeing Company Library, Military Aircraft Systems Division, Wichita, Kan.
The John Crerar Library, Chicago, Illinois
The Lovelace Foundation, Dept of Aerospace Med & Biomechanics, Albuquerque, N. Mex.
The Research Analysis Corp Library, McLean, Va.
Yerkes Laboratories of Primate Biology, Orange Park, Fla.

MEDICAL COLLEGE/SCHOOL LIBRARIES AND DEPTS

Albany Medical College Library, Albany, N. Y.
Bowman Gray School of Medicine, Library, Winston-Salem, N. C.
Brown University, Library Documents Division, Providence, R. I.
College of Medical Evangelists, Vernier Redcliff Memorial Library, Long Linda, Calif.
College of Physicians of Philadelphia, Library, Philadelphia, Pa.
Columbia Univ, Dept of Psychology, New York, N. Y.
Columbia Univ, Medical Library, New York, N. Y.
Cornell Univ, Central Serial Record Department, Ithaca, N. Y.
Cornell Univ, Medical Library, New York, N. Y.
Creighton Univ, Medical Pharmacy Library, Omaha, Neb.
Dartmouth College, Dana Biomedical Library, Hanover N. H.
George Washington Univ, Office of Human Resources Research, Alexandria, Va.
Harvard Univ, Medical Library, Boston, Mass.
Indiana Univ, Medical Center Library, Indianapolis, Ind.
Indiana Univ, School of Medicine Library, Bloomington, Ind.
Jefferson Medical College, Library, Philadelphia, Pa.
Johns Hopkins Univ, Welch Medical Library, Baltimore, Md.
Kansas State Univ, Department of Psychology, Manhattan, Kan.
Long Linda Univ, White Memorial Medical Library, Los Angeles, Calif.

MEDICAL COLLEGE /SCHOOL LIBRARIES AND DEPTS Cont.

DISTRIBUTION

Marquette Univ. Medical-Dental Library, Milwaukee, Wis.
Medical College of Virginia, Tompkins-McCaw Library, Richmond, Va.
New York Academy of Medicine Library, New York, N. Y.
New York Univ. College of Medicine, Research Division, New York, N. Y.
New York Univ. College of Engr. Research Division, New York, N. Y.
New York Univ. Medical Center Library, New York, N. Y.
Northwestern Univ. Department of Psychology, Evanston, Ill.
Northwestern Univ. Medical School Library, Chicago, Ill.
Ohio State Univ. Chemical Abstracts Service, Columbus, Ohio
Ohio State Univ. Engr Experiment Station, Systems Research Group, Columbus, Ohio.
Ohio State Univ. Psycholinguistics Laboratory, Columbus, Ohio.
Ohio State Univ. Research Center, Aviation Psychology Laboratory, Columbus, Ohio.
Ohio State Univ. School of Optometry, Columbus, Ohio.
Ohio State Univ. Topex Library, Columbus, Ohio
Purdue Univ. Department of Psychology, Lafayette, Ind.
Rush Medical College Library, Chicago, Ill.
St. Louis Univ. Medical School Library, St. Louis, Mo.
Stanford Univ. Lane Medical Library, Palo Alto, Calif.
State Univ of Iowa, College of Medicine Library, Iowa City, Iowa.
State Univ of Iowa, Univ Hosp. Dept of Otolaryng & Maxillofacial Surg, Iowa City, Iowa.
State Univ of New York, Anesthesiology Department, Brooklyn, N. Y.
State Univ of New York, Medical Library, Downtown Medical Center, Brooklyn, N. Y.
Texas Medical Center Library, Jesse H. Jones Library Bldg, Houston, Tex.
Tufts Univ. Human Engineering Information Analysis Service, Medford, Mass.
Tulane Univ. School of Medicine Library, New Orleans, La.
Vanderbilt Univ. Hospital Library, Nashville, Tenn.
Univ of Alabama, Medical Center Library, Birmingham, Ala.
Univ of Arkansas, Medical Center Library, Little Rock, Ark.
Univ of Buffalo, Department of Psychology, Buffalo, N. Y.
Univ of Buffalo, Health Sciences Library, Buffalo, N. Y.
Univ of California, Biomedical Library, Los Angeles, Calif.
Univ of Chicago, Radiation Laboratory, Chicago, Ill.
Univ of Cincinnati, College of Medicine, Kettering Lab, Cincinnati, Ohio
Univ of Florida, College of Medicine, Gainesville, Fla.
Univ of Georgia, Department of Psychology, Athens, Ga.

Best Available Copy

MEDICAL COLLEGE/SCHOOL LIBRARIES AND DEPTS Cont.

DISTRIBUTION

Univ of Illinois, Aeromedical Laboratory, Chicago, Ill.
Univ of Illinois, Aviation Psychology Laboratory, Savoy, Ill.
Univ of Illinois, Documents Division Library, Urbana, Ill.
Univ of Illinois, Speech and Hearing Clinic, Champaign, Ill.
Univ of Illinois, Training Research Laboratory, Urbana, Ill.
Univ of Kansas, Clendenen Medical Library, Kansas City, Kan.
Univ of Kentucky, Psychology Department, Lexington, Ky.
Univ of Louisville, Medical Library, Louisville, Ky.
Univ of Maryland, Health Sciences Library, Baltimore, Md.
Univ of Miami, School of Medicine, Department of Ophthalmology, Miami, Fla.
Univ of Miami, School of Medicine, Department of Psychology, Coral Gables, Fla.
Univ of Michigan, General Library of Serials & Documents, Ann Arbor, Mich.
Univ of Minnesota, Serials Division Library, Minneapolis, Minn.
Univ of Mississippi, Medical Center, Rowland Medical Library, Jackson, Miss.
Univ of Missouri, Medical Library, Columbia, Mo.
Univ of Nebraska, College of Medicine Library, Omaha, Neb.
Univ of North Carolina, Div of Health Affairs, Memorial Hosp Library, Chapel Hill, Va.
Univ of Oklahoma, Medical Center Library, Oklahoma City, Okla.
Univ of Oregon, Medical School Library, Portland, Ore.
Univ of Oregon, Department of Dermatology, Portland, Ore.
Univ of Pittsburgh, Department of Psychology and Radiology, Pittsburgh, Pa.
Univ of Pittsburgh, Folk Library, Pittsburgh, Pa.
Univ of Rochester, Atomic Energy Project, Rochester, N. Y.
Univ of Rochester, Department of Psychology, Rochester, N. Y.
Univ of Rochester, School of Medicine & Dentistry, Rochester, N. Y.
Univ of Rochester, Strong Memorial Hospital, Rochester, N. Y.
Univ of Southern California, School of Medicine Library, Los Angeles, Calif.
Univ of Southern California, Serials Library, Los Angeles, Calif.
Univ of South Dakota, Medical Library, Vermillion, S. D.
Univ of Tennessee, Measey Memorial Library, Memphis, Tenn.
Univ of Texas, The Radiobiology Laboratory, Austin, Tex.
Univ of Texas, Medical Branch Library, Galveston, Tex.
Univ of Texas, Speech & Hearing Clinic, Austin, Tex.
Univ of Utah, Library of Medical Sciences, Salt Lake City, Utah.
Univ of Vermont, College of Medicine Library, Burlington, Vt.
Univ of Virginia, School of Medicine, Biostatistics, Charlottesville, Va.

MEDICAL COLLEGE/SCHOOL LIBRARIES AND DEPTS Cont.

DISTRIBUTION

Univ of Virginia, Medical Library, Univ Hospital, Charlottesville, Va.
Univ of Virginia, Psychology Department, Charlottesville, Va.
Univ of Washington, Health Sciences Library, Seattle, Wash.
Univ of Wisconsin, Medical School Library, Madison, Wis.
Univ of Wisconsin, Psychology Studies Division, Madison, Wis.
Wayne State Univ, Medical Library, Detroit, Mich.
West Virginia Univ, Medical Center Library, Morgantown, W. Va.
Yale Univ, School of Medicine, Otolitic Research Laboratory, New Haven, Conn.
Xavier Univ, Department of Psychology, Cincinnati, Ohio

FOREIGN

Accessions Dept, Nat'l Lending Library for Sci & Tech, Boston SPA, Yorkshire, England
American Embassy, The Foreign Svc of America, Attn: Asst Med Attache, London, England
British Army Medical Liaison Officer, British Embassy, Washington, D. C.
British Navy Staff Officer, Benjamin Franklin Sta, Attn: F. P. Ellis, Washington, D. C.
Canadian Liaison Officer, Office of the Surgeon General, Washington, D. C.
Chester Beatty Res Inst, Royal Cancer Hosp, Attn: Peter Alexander, London, England
Commander P. H. Bannel, Med En Chef De La Marine, Paris, France
Defence Research Member, Canadian Joint Staff, Washington, D. C.
Dr. Hugo Arevalo, Hospital Militar Central, Asuncion, Paraguay.
Dr. R. W. Brimblecomb, Cdn Defence Expt, Est, Porton Down, Salisbury, Wilts, England.
Dr. Martti J. Kervonen, Dir Physiol Dept, The Inst of Occup Health, Helsinki, Finland
Dr. Jan Versell, Dept of Histology, Karolinska Inst, Stockholm, Sweden
Dr. G. H. Wyndham, Dir Appl Physiol Lab, TUL & O.F.S. Chamber of Mines, Johannesburg, S. Africa
Eichia Negashino Esta Info Svc, The Nat'l Inst of Animal Health, Tokyo Japan
Escuela de Salud Militar, V. Edu Smater, Attn: Eusebio G. C. Ribeiro, Asuncion, Paraguay
German Military Attache, Federal Ministry of Defense, Washington, D. C.
Inst of Clinical Exper Surgery, Attn: Dr. Linka, Prague, Erc, Czechoslovakia
Inst of Exper Med & Surg, Attn: Dr. Hans Selje, Dir Univ of Montreal, Montreal, Canada
Inst of Physiology, Univ of Pisa, Attn: Giuseppe Moruzzi, Pisa, Italy
Laboratory of General Pathology Therapy, Attn: Prof Zdenek N. Bacq, Liege, Belgium
Medical Sciences Library, University of Alberta, Edmonton, Alberta, Canada
Oxford Univ, Department of Human Anatomy, Attn: Dr. A. R. Lind, Oxford, England
Prof D. Benatti, Dir Inst de Ciencias Fisiologicas, Montevideo, Uruguay
Prof R. W. Ditchburn, J. J. Thompson Physiol Lab, Berke Univ, Berke, England
Prof D. M. MacKay, Univ of N. Staffordshire, Keele, Staffordshire, England
Prof J. A. F. Stevenson, Faculty of Med, Univ of Western Ont, London, Ont, Canada
Royal Air Force Inst of Aviation Med Attn: Dr. G. H. Byford, Farnborough, England
Royal Air Force Inst of Aviation Med, Attn: Lt. J. C. Guignard, Farnborough, England
Royal Society of Medicine Library, London England
Univ of Western Ontario Med School, Attn: Dr. Alice C. Burton, London, Ont, Canada

AD	Accession No.	UNCLASSIFIED	AD	Accession No.	UNCLASSIFIED
US Army Medical Research Lab, Ft. Knox, Ky. A METHOD FOR EVALUATING PREMEDICATION EFFICACY IN DENTAL PATIENTS - W. O. Evans, K. Tannenbaum, B. Turk, and E. E. Alling Report No. 608, 13 Jul 64, 9 pp & 1 - DA Project No. 3A012501A907, Unclassified Report A method of testing for the efficacy of dental premedication in children, using a double blind condition for obtaining ratings of manageability by dentists and of emotionality by psychologists, was investigated. Film and sound recordings made during a standard dental procedure on apprehensive children were used for judgments. Variables of the study were degrees of "emotionality" and "manage- ability" on the first and second visits; and, the effects of premedication with chloral hydrate and methamprone. The technique yielded a reliable, valid, and sensitive index.	1. Pediatric Dentistry 2. Dental Pre- medication 3. Clinical Drug Testing	US Army Medical Research Lab, Ft. Knox, Ky. A METHOD FOR EVALUATING PREMEDICATION EFFICACY IN DENTAL PATIENTS - W. O. Evans, K. Tannenbaum, B. Turk, and E. E. Alling Report No. 608, 13 Jul 64, 9 pp & 1 - DA Project No. 3A012501A807, Unclassified Report A method of testing for the efficacy of dental premedication in children, using a double blind condition for obtaining ratings of manageability by dentists and of emotionality by psychologists, was investigated. Film and sound recordings made during a standard dental procedure on apprehensive children were used for judgments. Variables of the study were degrees of "emotionality" and "manage- ability" on the first and second visits; and, the effects of premedication with chloral hydrate and methamprone. The technique yielded a reliable, valid, and sensitive index.	1. Pediatric Dentistry 2. Dental Pre- medication 3. Clinical Drug Testing		

DEPARTMENT OF THE ARMY

Commanding Officer

US Army Medical Research Lab
Fort Knox, Ky., 40121

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
DEPARTMENT OF THE ARMY

DEFENSE DOCUMENTATION CENTER HQS
Cameron Station
Alexandria, Virginia 22314

Best Available Copy