

offers an interesting field and one which is steadily growing in importance to the health of our nation.

In conclusion, while recognizing the importance of developing skill in laboratory technique, we believe that too much emphasis cannot be laid upon the importance of reference reading and habitual contact with current literature.

As a necessary stimulus to that end we have found it very effective to prepare lists of questions on each subject covered in the laboratory outline which the student is required to answer in writing and hand in to the instructor. Such written reports not only serve to direct the student in his reading but also supply the instructor with another check upon the diligence and comprehension of each student.

MINIMUM STANDARDS FOR A HOSPITAL PHARMACY.*

BY EDWARD SPEASE¹ AND ROBERT M. PORTER.²

It goes without saying that any one person who attempts to outline these standards will be governed entirely by his own experiences and observations. It is our belief that the necessity for pharmaceutical service in hospitals is now so generally accepted that it is unnecessary to discuss it in this paper.

It would appear that the thing most needed at the present time is the development of a set of principles which can govern those whose duty it is to inspect and approve hospitals. Hospitals are of so many different types and serve such a variety of purposes that, if we should make the attempt to set forth a detailed list of standards, equipment and procedures, we should only provoke endless and futile discussions and so it would seem wise to leave the details which in time will become necessary to be decided in a more orderly manner.

We might offer as a suggested method that a committee chosen from each of the existing hospital associations with the inspecting organization's representative as arbiter would very quickly settle all details.

We have already submitted five principles to Dr. MacEachern of the American College of Surgeons and receiving no adverse criticism of them we shall again present them here with some explanation of them attached.

PRINCIPLE NO. 1.

Every hospital must have pharmaceutical service.

- (a) The full time of a graduate registered pharmacist, or
- (b) Pharmaceutical service from an approved adjacent pharmacy.

Under the heading (a) there will be some opposition to the use of the word, "graduate." We have given this subject much thought and inasmuch as these are principles to guide an inspecting officer and are not statute law it would seem to us wise to retain this word. No organization working for the good of hospitals would insist upon the removal of a pharmacist because he or she is not a college graduate if the service can be satisfactory, but if due consideration is to be given to the safety of the patient and if necessary service and coöperation is to be offered to the physician, it appears that all replacements and all new pharmacists added should be graduates of recognized colleges of pharmacy.

Under the heading (b) there are no standards for an approved pharmacy but as the AMERICAN PHARMACEUTICAL ASSOCIATION is now considering such standards it would appear that their

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steps will be hastened if they should observe that hospitals and medical associations may find it necessary to have such standards promulgated.

It may be of interest to mention that the New York pharmacy laws now prescribe a minimum list of equipment for a registered pharmacy. If this list be chosen as a working basis only, a few items would have to be added for pharmaceutical service to small hospitals.

PRINCIPLE NO. 2.

A pharmacy committee shall be appointed, the members of which shall be chosen from the several divisions of the medical staff, for the purpose of determining the policy of operation of the pharmacy, addition to and deletion from the drugs used, such other matters of a pharmaceutical nature as from time to time are necessary, and supervision of purchase and issuance of drugs, chemicals, pharmaceutical preparations, biologicals and professional supplies within the hospital. This committee shall meet at regular intervals. The Pharmacist shall be a member of it and serve as its secretary, and a transcript of its proceedings shall be kept and a copy forwarded by the secretary to the proper governing body of the hospital.

For clarity of discussion we are listing, briefly, what Principle No. 2 contains:

- (a) Establishment of a Pharmacy Committee and its duties.
- (b) Supervision by this committee of the purchase and issuance of drugs, chemicals, pharmaceutical preparations, biologicals and professional supplies.

(a) The establishment of a Pharmacy Committee, which, in our Hospitals, is composed of the Associate Professors of Medicine, Surgery, Pediatrics, Gynecology and Obstetrics, a Clinical Instructor in Medicine, the Dean of the School of Pharmacy and the Chief Pharmacist, has been the most important step taken to insure proper pharmaceutical service. In many hospitals the Committee may not need to be so large but surely both medicine and surgery as well as pharmacy should be represented and also any other department that is particularly accentuated by that hospital. What we are seeking to avoid is the appointment of one medical man to supervise the pharmacy. Our service requires the knowledge of men who represent or are thoroughly conversant with all the main services of the hospital and are men of the type and standing who can carry back decisions to staff members and have these decisions respected. These committee members can also call upon staff and visiting members for information upon and support for projects being considered by the committee. It might not be amiss for this committee to have a voice in the approval of the qualifications of the pharmacist. We, as a committee, do not issue orders, but rather we work on the policy of "ask the man who uses it" and then when our report goes to the administration for an executive order it is often merely a matter of form. This is particularly and peculiarly true of professional supplies. In this field, to which little systematized study has been given, such a committee will work wonders in terms of both satisfaction and economy.

(b) Supervision by the Committee of all purchase and issuance of pharmaceutical and professional supplies items does not mean the act of purchase. This may be left to a clerk or administrative officer but the committee, through its pharmacist, should be clothed with authority not only for obtaining proper items but also for rejecting improper ones. All new items should receive committee approval, not necessarily for trial, but before they become items of stock.

PRINCIPLE NO. 3.

An adequate pharmaceutical reference library must be maintained by the hospital.

(a) United States Pharmacopoeia, National Formulary, New and Nonofficial Remedies, United States Dispensatory, reference works on Inorganic, Organic and Quantitative Chemistry, Pharmacology, Toxicology, Bacteriology and a medical dictionary.

(b) The *Journal of the American Medical Association*, the JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION, the YEAR BOOK of the AMERICAN PHARMACEUTICAL ASSOCIATION, the federal regulations relative to the dispensing

of alcohol and narcotics and a copy of the state and municipal pharmacy laws and sanitary code.

Here the attempt has been made to list a bare minimum of reference works. The good pharmacist must be familiar with these reference works and indeed his field of reading must be far wider if he is to furnish adequate service to physicians, nursing service and administration.

PRINCIPLE NO. 4.

Every hospital must use drugs, chemicals and pharmaceutical preparations of at least United States Pharmacopœia, National Formulary and New and Non-official Remedies quality in the treatment of patients.

Comment upon this section should be unnecessary but the inclusion of it is very necessary for the good of the patient. Price is the least important factor in judging the fitness of these things.

PRINCIPLE NO. 5.

The routine preparation of injectible medication and supervision of sterilization of all preparations he himself prepares, the routine manufacture of pharmaceuticals, the dispensing of drugs, chemicals and pharmaceutical preparations, the filling and labeling of all drug containers issued to nursing units from which medication is to be administered, a semi-monthly inspection of all pharmaceutical supplies on nursing units, the maintenance of an approved stock of antidotes in the emergency suite, the dispensing of all narcotic drugs and a perpetual inventory of them, specifications for purchase of all drugs, chemicals and pharmaceutical preparations used in the treatment of patients, specifications for purchase and storage of biologicals and all operations wherein a special knowledge of pharmacy, including a ready knowledge of weights and measures in all systems, is necessary, must be done by the pharmacist or under his immediate supervision.

In commenting upon this principle we shall divide it into its several topics.

(a) Preparation of injectible medication and its subsequent sterilization. This is a true function of the pharmacy and of the pharmacist. This work is now in the hands of cheap labor, technicians, nurses, pharmacists and physicians. Sterilization in hospitals is being given careful study in many places now. Nothing has been definitely settled nor have definite standards been worked out, though much has been accomplished. The whole subject is of such vast importance that we firmly believe it should be under the supervision of one person who is particularly fitted to understand its ramifications and who is scientifically trained so that he knows what he is doing and for whom it is a major duty and responsibility and not an incidental one.

(b) The routine manufacture of pharmaceuticals.

(c) The dispensing of drugs, chemicals and pharmaceutical preparations.

(d) The filling and labeling of all drug containers from which medication is to be administered.

(b), (c) and (d) certainly go to the pharmacist without question, yet there are many questions upon these subjects which come up regularly for committee judgment. In this connection let us point out the dangers involved in nurse and lay dispensing of drugs to personnel and to patients upon their discharge from the hospital. An entire chapter could be written upon these dangerous practices.

(e) Inspection of drug supplies on nursing units is not alone a check upon the nurse. That phase of it is a small part of the importance of the inspection. Our nursing service welcomes this inspection and the placing of the responsibility for drugs upon the pharmacist where it belongs, and even sends a nursing instructor along with the pharmacist upon these inspection trips.

The following items of this principle are so self evident that prolonged discussion of them seems unnecessary.

PRINCIPLE NO. 6.

This has been left blank for a perfectly self-evident purpose, that is, inability at present to state it in definite, clear and concise language, though we believe it

will be easy to make a brief statement that will serve as a basis for future elaboration. This principle should cover the "ethical and commercial aspect of the pharmacy" and the things it should deal in, other than those mentioned and hinted at in the first five principles. It should decide who may purchase from the pharmacy, upon what basis and what charges are to be made.

In drafting this principle the whole question of employee purchases, staff purchases and direct sales to the public must come up for consideration. We believe that if we could have the benefit of your discussion upon this very troublesome list of subjects we could at least outline something that would serve as a beginning. May we venture to assert that we believe you all will be opposed to direct sales to the public by a hospital pharmacy. If you agree on this point then the others may be tentatively settled by requiring a set and stated policy by each hospital so that an inspecting officer may see clearly what is being done and judge for himself whether it constitutes ethical practice. This will result finally in the setting forth of a sound Principle No. 6 under which all can work.

Before closing we wish to add what we in the University Hospitals of Cleveland call our Drug Policy. We soon learned that our committee could not function properly without such a policy and it may serve a useful purpose to each of you.

DRUG POLICY.

Pharmacopœia.

The pharmacy shall stock, or be prepared to supply preparations of the United States Pharmacopœia, National Formulary and New and Nonofficial Remedies. Where New and Nonofficial Remedies lists several articles "having similar composition or action," a selection of such preparations, chosen by the Pharmacy Committee and approved by the Medical Council, shall be carried. This is necessary because of the expense involved in carrying a large stock of infrequently used items. A selection shall also be made where New and Nonofficial Remedies lists identical products of several manufacturers.

Preparations carried by the pharmacy, excluding such sera and expensive preparations as may be determined from time to time by the Administration and Pharmacy Committee shall be included in room charge to patients. The Pharmacy shall procure other drugs or preparations for hospital patients on request of the visiting physician. Such special orders, however, are to be charged to the patient.

The Pharmacy Committee shall provide a book known as "The Hospital Formulary" and revise it from time to time. It is to be considered as supplementary to the United States Pharmacopœia, National Formulary and New and Nonofficial Remedies. It is to contain those preparations of drugs and chemicals, sizes of tablets, ampuls, suppositories, etc., which are kept by the pharmacy and may be called for under distinctive titles, and which are ready to be dispensed either to Out-Patient or Hospital Departments. Its purpose may be said to be one of convenience in ordering and prescribing.

No new drug or preparation is to be carried by the pharmacy until it has been recommended by the Pharmacy Committee and approved by the Medical Council.

PROPRIETARY PREPARATIONS NOT IN THE NEW AND NONOFFICIAL REMEDIES OR OF A PARTICULAR MANUFACTURER.

Any drug or preparation, not carried by the pharmacy, which is requested by a visiting physician for a private patient will be procured from an outside pharmacy in the amount ordered by the physician and charged to the patient.

DRUGS FOR RESEARCH.

The above regulations are not intended to hamper the controlled study of any drug or proprietary article. The pharmacy will, therefore, supply a specified amount of any preparation for a member of the teaching staff after the approval of the head of his service. When this supply is exhausted more will not be supplied, nor will it be added to the pharmacy stock until a report showing its value has been given to the Pharmacy Committee.

The authors expressed thanks for the privilege of presenting this paper and regret that they could not be present for discussion of it, and their appreciation of the kindness of Dr. T. C. Daniels for his willingness to read it to the Clinical Congress of the American College of Surgeons.

THE CONFERENCE OF PHARMACEUTICAL LAW ENFORCEMENT OFFICIALS

MINUTES OF THE CONFERENCE OF PHARMACEUTICAL LAW ENFORCEMENT OFFICIALS.

Multnomah Hotel, Portland, Oregon.

August 8, 1935.

The Seventh Annual Meeting of the Conference of Pharmaceutical Law Enforcement Officials was convened by Chairman R. L. Swain, at 9:30 A.M. in the Club Room, with the following present:

A. L. I. Winne	Virginia	F. V. McCullough	Indiana
L. L. Walton	Pennsylvania	F. L. Christenson	Idaho
C. L. O'Connell	Pennsylvania	John Culley	California
Roy Cook	W. Virginia	W. M. Fulton	California
G. L. Hayman	W. Virginia	F. E. Mortensen	California
C. T. Gilbert	Connecticut	Edna E. Gleason	California
R. C. Schultz	Wyoming	W. B. Rutherford	California
E. F. Hart	Washington	Roy S. Warnack	California
P. H. Brady	Washington	Arthur Baker	Colorado
R. L. Parrish	Oregon	W. J. Bishop	Colorado
Alfred Wiehmark	Oregon	E. J. Prochaskz	Minnesota
A. F. Peterson	Montana	R. L. Swain	Maryland
Hugo Schaefer	New York	F. H. King	Ohio
Fred Schaefer	New York	M. N. Ford	Ohio
R. S. Lehman	New York		

Chairman Swain had no prepared address, however, he reviewed the work of the Conference in the past, in detail. Chairman Swain then called upon the Secretary and Treasurer, for his report.

REPORT OF SECRETARY AND TREASURER.

On June 26, 1934, we sent out 300 copies, by first class mail, of reprints of the 1933 meeting of the Conference.

Since the last annual meeting of the Conference, the Secretary, on September 7, 1934, distributed by first class mail, 315 copies of a compilation by Chairman Swain on the subject of "Temporary Absence."

On December 14, 1934, we also sent out 300 copies, as first class mail, of the reprints for the 1934 meeting of the Conference.

At the end of our last annual meeting, we had on hand \$280.67, with no outstanding bills. Following our last annual meeting, Chairman F. C. A. Schaefer and his finance committee, made another appeal for finances from state boards and individual members interested in the Conference. From that appeal he secured \$99.00, as follows:

John Seiden, Montana.....	\$2.00	V. C. Piakowski, Michigan.....	3.00
H. A. Stype, Ohio.....	1.00	C. H. Ganger, New York.....	2.00
Colorado Board.....	5.00	F. S. Houch, New York.....	3.00
H. R. Rudy, Maryland.....	1.00	J. Leon Lascoff, New York.....	2.00
Leon Marr, Maine.....	2.00	Geo. C. Dieckman, New York.....	2.00