

## CLINICAL LABORATORY WORK A PRESCRIPTION AID.\*

BY LEE S. COY.<sup>1</sup>

Many qualified pharmacists, no doubt, have overlooked the possibilities of clinical laboratory work as a means for increasing their prescription business. Several papers could be presented on the subject of clinical laboratory work; as, for instance, "Increasing Biological Sales with the Microscope," "Combating Cut-Rate Stores with Professional Assets" and "Clinical Laboratories a Source of Income to the Pharmacist." However, in this brief paper I wish to bring out some of the possibilities of clinical laboratory work as an aid to the Prescription Department.

Our business was established about ten years ago as an upstairs Prescription Shop and branch of the State Board of Health laboratory. We do all types of laboratory work, such as blood counts, blood chemistry, Kahn test, bacteriological cultures, fecal analysis, protein tests, milk analysis, dark field examinations, urine analysis.

Blood and urine, of course, are the larger fields for laboratory tests and are, perhaps, the best sources from which we receive prescriptions, as a result of our laboratory tests. In a great many cases our laboratory reports are telephoned to the doctor and a written report mailed later. Quite frequently a prescription is dictated to us during our telephone report to the doctor, who directs his patient to come to our shop to get the prescription. By the use of phone reports of our laboratory findings, we are also given the opportunity of suggesting new prescription items and to make sales of physicians' supplies which otherwise we might not make.

A few weeks ago we received a call from a local doctor to come to the home of one of his patients and make a blood count and differential slide. The call was made promptly and within the hour our laboratory findings were telephoned to the doctor. The patient had a very low erythrocyte count and the differential slide showed a typical picture of Pernicious Anemia. In the course of the conversation the doctor asked that we send to his office a package of ampuls of Iron Arsenite and Strychnine, remarking, "that he would treat the patient with them, although he expected her to die in a few weeks." We suggested liver therapy to him and after a little explanation of its use in such cases, he prescribed an eight-ounce bottle of Liver Extract. The patient began improving and we have refilled the prescription quite regularly since the original prescription was given us. This is a splendid case illustrating the value of clinical laboratory tests as a factor in increasing prescription sales. In this case we were able to convert a 25 per cent pharmaceutical sale into a profitable prescription sale with steady repeat business. In such cases as Pernicious Anemia the original blood count is not the last we see of the patients, as they require frequent check-ups of their erythrocyte count. Here again, our Prescription Department profits, as the mode of administration is often changed to meet the whim of the patient, Liver Extract in capsules, vials and liquid form together with dilute solutions of hydrochloric acid, Acidulin and similar products being prescribed.

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\* Section on Practical Pharmacy and Dispensing, A. Ph. A., Rapid City meeting, 1929.

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Not all blood counts, of course, show Pernicious Anemia, as we find that secondary anemias are by far in the majority. Conditions of this type result from many causes and we leave it strictly up to the doctor to find the cause. It is, however, a very good field for prescriptions and we receive a great many for such items as Elixir Iron, Quinine and Strychnine, N. F., Compound Syrup of Hypophosphites, N. F., Compound Elixir of Glycerophosphates, N. F., Metatone, Spleenmarrow liquid and capsules, and cod liver oil, in all its forms. In anemic cases, due to hemorrhage, prescriptions for Thromboplastin, Hemostatic Serum, Normal Horse Serum, Fibrogen and combinations of gland products such as desiccated Ovarian, Corpus Luteum and Thyroid Extract are received.

Occasionally we find an erythrocyte count of seven or eight million and in such cases prescriptions for Phenylhydrazine hydrochloride are received. Cases of this kind require frequent blood counts in order to control the destruction of the erythrocytes and refills of prescriptions are quite regular.

Frequently the leukocyte count runs quite high, as in many acute cases, and we are able to obtain many prescriptions for Codeine, Amytal, Cibalgine, Allonal, Ipral and Neonal.

A great many of these cases go to the hospital for operations and through our contact made while doing clinical tests we are also able to send out sick room supplies, such as hot water bottles, ice bags, enamel ware and rubber sheeting.

Blood sugars are very important sources of information in treating diabetes. We do several such tests each week and numerous prescriptions are received for insulin, hypodermic syringes, hypodermic needles, Benedict's solution and dietetic foods from this type of clinical tests. Time will not allow a discussion of all the various blood tests from which the Prescription Department benefits, but a word should be said about Kahn tests for syphilis. In positive cases of this kind many prescriptions for the arsenicals, mercurials, bismuths and iodides are received by the pharmacist and they are all very profitable to the Prescription Department. A great many pharmacists have not posted themselves in this important field. The man who can do the laboratory tests will find the way open to him to make many profitable sales. Here again the telephone report allows the pharmacist to suggest lines of arsenicals and other supplies of highest therapeutic value and to steer clear of those for which the manufacturer allows only a short margin of profit or of questionable therapeutic value.

The microscope discloses a great many scenes which require the services of our Prescription Department. Every morning a number of throat cultures are examined. Nearly all of them require prescriptions such as Liquor Antisepticus, N. F., or some of the new antiseptics, such as Solution Hexylresorcinol, Metaphen and Acriflavin. Stock solutions are also supplied to the doctors, such as Mercuriochrome solutions, solutions of Silver Nitrate and Tincture of Ferric Chloride in Glycerin. Once in a while we find Diphtheria bacilli and orders are received very promptly for Diphtheria anti-toxin in such cases. Our Laboratory reports naturally are very good salesmen in such cases.

Too much cannot be said about the value of the microscope and a knowledge of Bacteriology in paving the way for biological sales. Every day we have telephone calls, both local and long distance, from doctors asking for information about the use of some biological product. Due to our laboratory service they

expect us to know what to suggest, and we try to keep posted through contact with the detail man and the medical literature. Our sales in biologicals run up to several hundred dollars a month as a result.

Vincent's Angina has been very prevalent lately and we have developed a very nice prescription business on a mouth wash of our own manufacture. When we examine smears from the gums or throat and find Vincent's organisms present we always make it a point to call the physicians' or dentists' attention to our preparation. Prescriptions at the rate of ten or fifteen a day are the result.

The whirl of the centrifuge in urine analysis bringing down sediment for examination under the microscope is another good field for prescriptions. Here the report of pus cells, blood cells, casts, bacteria and the result of chemical tests suggest many prescriptions to the doctor. Pyridium, Hexamethylamine Tetramine, Caprokol, Oil of Santalwood, Van Cott's Vaccine and F. E. Buchu, U. S. P. and many other preparations receive their call.

Summing up, clinical laboratory work:

(1) Helps us maintain a professional status. (2) Gives us close contact with the doctor and patient. (3) Increases our biological sales. (4) Allows us to suggest profitable pharmaceuticals. (5) Eliminates the merchandising of patent medicines and sundries. (6) Lowers overhead. (7) Laboratory fees are an important source of income. (8) And last but not least, gives us the opportunity to practice ethical pharmacy.

Truly we have come to believe that our microscope is as important as our mortar and pestle in maintaining our Prescription Shop.

#### ABSTRACT OF DISCUSSION.

**W. H. Glover** inquired what discount was given on biologicals. The author replied that the physicians receive 25% from list, others pay list price. He referred to a number of items and the profit to be derived.

**E. Fullerton Cook** classed the paper among the best ever presented before this Section; he inquired relative to the population of Cedar Rapids. Prof. Cook stated that the paper points the way to future pharmacy. He referred to a pharmacy in Wilmington, Del., and said that it takes men who are scientifically trained, who have the professional vision to conduct a professional pharmacy. He also made reference to a pharmacy in New York, wherein three people do the laboratory work. These pharmacists have a pharmacy in the Professional Building and have been invited to open a professional pharmacy in the Medical Center in New York City.

Prof. Cook spoke of the terms "ethical," "commercial" and "professional;" he said a commercial store could be ethical and a professional might be unethical. He is desirous of having the term "professional pharmacist" rightly applied. In his opinion there is a real and growing opportunity for the practice of professional pharmacy, because of higher educational requirements and more extended training.

**William J. Husa** referred to the location of the laboratory under discussion in the paper; at the beginning the prescription business was not encouraging, but it developed in a city and section where physicians dispense their own prescriptions. In this city is a small manufacturing house, catering to the dispensing physician. They supplied the physicians with preparations dispensed by them and with bottles, corks and labels for the prescriptions.

**A. O. Mickelsen** said that in some states the laboratory work is directed to be done by doctors of medicine. In his opinion qualified pharmacists for such work would be welcomed by physicians. He had visited a pharmacy in Denver where ampuls of special formula were prepared for physicians' practice; he asked why they did not take up biochemical work and the reply he received was, that it would be trespassing on the rights of physicians. He was glad that some pharmacists were making a success of this work.

William Gray regretted that such work was not more generally carried on by pharmacists.

Mr. Coy said that in his section it was a common practice for physicians and hospitals to employ so-called Laboratory technicians, graduates of 6-week training school, to do laboratory work. He cited the case of a former instructor of pathology in a large University school of medicine now in private practice who employed technicians with little training to do his routine work at a hospital where he had the contract to do the work. Some day a serious error will result, because the assistants have not the necessary background and training.

E. Fullerton Cook said he knew of a number of pharmacists who were employed in laboratories of physicians.

A. O. Mickelsen remarked that this kind of work should be done by trained pharmacists. On his vacation trip he called on a doctor who was making hay fever tests and had the opportunity of giving him assistance by correcting his method. In his opinion doctors will gladly cooperate with pharmacists in this kind of work.

Clyde M. Snow referred to a graduate in pharmacy of about fifteen years ago, who engaged in laboratory work and secured the active cooperation of the physicians in Joliet, and succeeded. In his opinion, physicians who understand the work, and can do it, are glad to have pharmacists, who are qualified, take over this practice; physicians have high regard for qualified professional pharmacists.

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#### THE PRESIDENT'S ADDRESS OF THE BALTIMORE MEETING IN 1898.

Henry M. Whitney, of Boston, presided at the Baltimore meeting of the AMERICAN PHARMACEUTICAL ASSOCIATION in 1898. A few lines from the closing paragraphs of his address follows:

"As sure as the sun rises in the East and gives us light, as sure as the North Star has been a guide to the mariner, so sure is it that the AMERICAN PHARMACEUTICAL ASSOCIATION has been and will continue to be the light and guiding star of the coming pharmacist. Because clouds sometimes obscure the light, or storms and contentions drive us from our course, are we like the clam to bury ourselves in the sand? There is a future for pharmacy; there is work for us to do at the present, and in the future as in the past. ••• I repeat there is a future for pharmacy; and the future may be likened to the mining industry. Mines that have been profitably worked and exhausted, as supposed, have under modern skill and science been re-opened and worked more profitably than before. So pharmacy to-day in a few places is testing and experimenting on the lines of assay, analysis, microscopy and bacteriology.

"As we of the past and present pass off the stage, the future will be nearer and nearer the ideal, and we of the past, as in the painting by Malbone, may linger for a moment while the light of the present falls upon us.

"I feel like crying aloud, 'Good Lord, deliver us from the pessimist; stir up the optimist; and as by Thy help we have made long strides and accomplished much upon the educational side, so guide and direct us in our efforts of good stewardship on the commercial side, that we may be prepared for the welcome—well done, good and faithful servants.'"

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#### THE RED CROSS AND THE CHRISTMAS SEALS.

The period of the annual roll-call is now on and extends to Thanksgiving Day. Pharmacists are always interested in this work and have the opportunity of giving publicity to this, one of the greatest services rendered to humanity. The Red Cross has a part in relieving the suffering and loss incurred by cyclones and other storms, fires, floods, wrecks and epidemics. The standard of the Red Cross is a sign of hope in the midst of confusion and sorrow; it is an organization which asks no questions as to race, creed, politics or color; its purpose is in a service which requires and should have the cooperation of every one. As stated, pharmacists will not only do their bit but carry the message to others. The purpose of the Christmas Seals, and support of the Crippled Children's Hospitals, in the service of which no questions are asked relative to creed or race, also deserve a related tribute and encouragement.

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*Readers will be interested in the succeeding article on the development of professional pharmacies.*