

If the Section on Education and Legislation deems it of sufficient importance, I would be pleased to have the Section bring this subject to the attention of the Council of the American Pharmaceutical Association.

BETTER PROFESSIONAL TRAINING FOR HOSPITAL PHARMACISTS.*

BY E. C. AUSTIN.

The object of this paper is to bring to the attention of this Section on Education and Legislation the need of better professional training for hospital pharmacists and the need of training that is more closely adapted to their requirements.

The cause for complaint against the existing pharmacy courses is: that they are either so short as to render impossible the acquirement of more than a semblance of a real scientific education, or that too large a part of the work is devoted to studies other than those appertaining to hospital pharmacy.

Pharmacy exists in the hospitals as one department of a scientific organization known as the professional staff. By no stretch of the imagination can it be regarded as the independent profession that many profess to find in the retail stores. The bacteriologist, physiologist, clinician, pharmacist, pathologist, and numerous others, as members of this organization, work interdependently at their dual task of treating the sick and advancing science.

In the process of determining just what qualifications the hospital pharmacist should possess in order to serve his hospital and his profession to the best advantage, four outstanding facts should be held in mind:

- (1) That the hospital pharmacist works with progressive and highly educated scientific men who are usually leaders in their own chosen field.
- (2) That in order to coöperate intelligently with such men he must be, in some degree, familiar with their line of work.
- (3) That his professional co-workers will not accept as a colleague any pharmacist who is not their intellectual equal or the recipient of an education that is on a par with their own.
- (4) That only a man accustomed to the habit of study and possessing a mind trained to observe and think will be able to help solve the problems of curative medicine.

It is generally conceded that there exists in the minds of medical men a well-defined lack of confidence toward the pharmacist that seriously detracts from the value of the service which he renders to the physician. To enumerate all the reasons for this would be difficult, probably impossible. However, it is safe to say, that a disinclination on the part of the men entering pharmacy, to give sufficiently of themselves to their profession, has played its full part. Their reluctance to devote any considerable amount of time or money to preparation for their professional career indicates this. But, whatever may have been the cause, the remedy lies in better service to the medical profession through the medium of better educated pharmacists.

* Read before Joint Session Section on Education and Legislation, A. Ph. A., A. C. P. F., and N. A. B. P. For discussion on related lines see Section on Practical Pharmacy and Dispensing A. Ph. A., New Orleans meeting, 1921.

As pharmacy's chief point of contact with the medical profession or, more particularly, that element of it which originates medical thought, is in the hospitals it would seem that through this channel, and with the aid of hospital pharmacists, professional pharmacy ought to make a determined and systematic effort to better its standing.

Through his association with the teachers of medicine and the staff, the interns and the medical students, the properly trained hospital pharmacist would be in a favorable position to greatly enhance the reputation of all pharmacy.

There is at present no real source from which the hospitals may obtain pharmacists who have been trained for hospital work. As a result the drug departments of a great many hospitals have deteriorated until they have become, in many instances, merely places where prescriptions and other extemporaneous preparations are put up. In many such hospitals the pharmacist is not considered a member of the professional staff. That which makes the situation more deplorable is the fact that such hospitals soon come to accept poor service or, at best, limited service from the pharmacist as a matter of course, and lose all conception of what a really proficient hospital pharmacist should be like.

It goes without saying that the profession of pharmacy, as well as the hospital, is the loser wherever this condition prevails.

In spite of a desire on the part of the hospitals to secure capable pharmacists it is difficult for a hospital executive to decide what qualifications a hospital pharmacist should have or which one of the candidates for the position has them, as there are no standards for him to go by, that are applicable to this particular line of work.

Because of this lack of qualified men and of accepted standards, it would seem to be the duty of the profession for its own future welfare and the welfare of the hospitals to provide, through its colleges, a class of properly trained hospital pharmacists; and the duty of a society of hospital pharmacists to urge, through the hospital executives and the organization of the American Hospital Association, the employment of these men by the hospitals, as openings occur.

The exact educational requirements for such a class of men should be specifically recommended only after judicious inquiry, but in a tentative way it may be said that prospective candidates for a position as hospital pharmacist should be required to complete, at the minimum, a four year college course leading to the degree of Bachelor of Science in Pharmacy. This course should be so arranged in the interest of hospital pharmacy, as to include careful instruction in those cultural subjects which produce breadth of view and refinement; in those which are basic or fundamental in the two sciences of medicine and pharmacy; and in those that are of a pharmaco-medical character, such as biochemistry, bacteriology, serology and immunology, alimentation and physiology, pharmacology and practical therapeutics.

It can be readily understood that the instruction in these subjects should be as complete as that given in the "Class A" medical schools.

The work should be so arranged that the students can acquire their practical experience in the drug department of some large teaching hospital as a part of their college work, and in lieu of the practical experience usually obtained in the retail stores.

In its essentials, a course such as the one briefly outlined here is a combined academic and professional course, such as is usually completed in five college years of eight months each. The hospital year is approximately eleven and one-half months. By utilizing the summer months to work off the requirements in practical experience it should be possible to reduce the total length of the course to four calendar years. It would seem advisable, however, to limit the credit allowed for practical experience to that amount which the requirements of the position would justify. This, in all probability, would not be more than one-fourth of the total credit hours required for the degree.

It is possible that this amount of college training may be deemed excessive by a good many pharmacists. For the benefit of these, attention is directed to the fact that the educational requirements outlined herein are equal to no more than two-thirds, at most, of those now required of the professional men with whom the hospital pharmacist works, and that they are but little more than equal to those required in the university nursing schools.

TEACHING IN THE HOSPITAL PHARMACY.*

BY CLARISSA M. ROEHR.¹

The modern hospital is built to serve mankind—to alleviate pain, to cure disease, and should not be considered a commercial enterprise. A spirit of cooperation should permeate the institution. The very nature of medical work calls for the highest the worker can give. It matters little whether the hospital is connected with a college of medicine—the same opportunities exist from a teaching viewpoint. The size of the hospital would naturally affect the amount of work. The financial phase should always be kept second to that of helpfulness.

It is the purpose of this paper to briefly outline the work in a hospital pharmacy, and to suggest the possibilities such work would show in the teaching of students.

The work is systematically divided into three sections; namely, manufacturing or laboratory, dispensing and administrative.

The laboratory of the hospital pharmacy must be spacious and well lighted. Supervision of students in the laboratory is a responsible task as the preparations are made in large quantities and are afterward used in the various wards and clinics. In the laboratory of a college such small quantities are made, often lacking in uniformity, that the work seems impractical. As medicine and pharmacy are both expensive branches, continued practical experience, even after graduation, is the only solution for complete training. It is not my intention to criticize college laboratory work but rather to suggest supplementary practice.

The average hospital could furnish full time employment to not more than two workers, and a supervising pharmacist could look after scarcely more than five students. Student workers should be compelled to show high school graduation and preferably graduation from a recognized school of pharmacy before seeking employment in a hospital pharmacy. It is a question whether a student should be encouraged to seek experience before his college course or whether the practical

* Read before Section on Practical Pharmacy and Dispensing A. Ph. A., New Orleans meeting, 1921. For discussion see Minutes of the Section, November JOURNAL.

¹ Chief Pharmacist University of California Hospital.