

## REQUIREMENTS FOR ENTRANCE TO PHARMACY COURSE.\*

BY H. C. CHRISTENSEN.<sup>1</sup>

The source of the data used in this paper has been a file of questionnaires sent out to the colleges of pharmacy in conjunction with the N. A. B. P. Statistical Study. The preliminary report of the findings will be read at the General Session of the A. Ph. A. However, as a great deal of valuable material had to be omitted from the general report, I have culled the information with regard to college entrance standards and made it the basis of this paper.

Under the old system of retail apprenticeship, the would-be pharmacist had to hold his job by satisfying his employer for at least four years to gain admission to the board examination—or he had to find several employers. In this way, some of the unfit were sifted out; those who did not like the work or were not adapted to it often drifted away.

Now the system is different. We find the eager young high school graduate immediately matriculating in the college of pharmacy, usually without any experience in a retail pharmacy. Sometimes he is lucky enough to get a job during the summer vacation to apply some of his new-found knowledge. If not, he has his degree before he starts his year of practice; by that time, he has too much money invested in his education to turn back. There are, of course, other related activities outside of retail pharmacy in which his degree might be of help, but the greatest field for practice is still the retail store. Without it, we would need very few colleges of pharmacy.

Under this new system, then, the responsibility for selecting those who enter the profession rests to a great extent with the colleges of pharmacy. Most of those who graduate eventually pass the board examination somewhere. Therefore, the requirements for entrance to the pharmacy course become of paramount importance.

There are difficulties to be overcome here. In many instances, the college of pharmacy is a part of a state university, supported by taxpayers' funds, and that school *must accept* any student who is a resident of the state and presents the proper high school credits. Here, then, the process of elimination can only proceed by a consistent flunking out of those found unfit, preferably during the first year or two before the student has made too great an investment in pharmacy education.

Let us examine the replies on the questionnaires to the question: *What are your requirements for admission in addition to high school graduation, if any?*

- 34—None
- 5—Additional age requirement, varying from 16 to 18 years
- 5—Recommendation from high school principal (or pharmacist)
- 3—State education department certificate
- 3—Emphasize character in some way
- 3—Orientation or aptitude tests
- 1—30 hours prescribed college credit
- 3—Some check on high school grades
- 57—Replies—six duplications—51 schools answering

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<sup>1</sup> Secretary, N. A. B. P.

Now let us take the next question: *Do you require retail drug store experience, orientation tests, etc.?*

- 1—Retail drug store experience
- 14—Orientation and placement tests
- 2—Freshman course in orientation offered
- 1—Coöperative course which provides experience offered
- 1—Physical examination and character
- 1—Aptitude judged by dean
- 28—No
- 48—Replies

A few comments might be made here. The one school offering a coöperative course providing retail experience is not a member college of the American Association of Colleges of Pharmacy. The one school which requires retail drug store experience is an independent member school but is not affiliated with any university. The schools offering the orientation and placement tests are for the most part affiliated with state universities; these tests are usually in English, there are some IQ tests and an occasional report of a placement test in Chemistry. These have little bearing on aptitude for pharmacy, however.

In order to get only the best type of student, some colleges and universities, more often those *not* supported by tax funds, have made it a rule to accept only those high school students who have upper grade ratings. The line of demarcation varies all the way from the upper third of the high school graduating class to the upper four-fifths. In some cases it is a general average of 80% and 2.0.

In answer to the question, *Do you select only high school students of upper grade rating?* Only twelve schools answered in the affirmative.

- 3—Yes
- 2—Upper third
- 1—Upper half
- 2—Upper two-thirds
- 1—Upper four-fifths some schools; upper two-fifths on others
- 1—Upper three-fourths
- 1—Average of M or C
- 1—2.0 average
- 24—No upper grade rule
- 4—Such students preferred
- 2—Accept students on record and recommendations
- 2—State law admits all graduates of accredited high schools
- 4—Those not recommended are on probation
- 1—Interview with dean
- 2—Ability to carry work
- 51—Replies

There are some who feel that pharmacy should make some rule with regard to the acceptance of only upper grade or "recommended" high school students; that we have far too many non-recommended students in our pharmacy colleges. On the other hand, the records of one university show that a slightly higher percentage of the non-recommended group graduated from the college of pharmacy than the recommended group. Pharmacy requires a degree of manipulative skill and I

know from experience that quite often the student who makes lower grades in college (and high school) is more skillful with his hands than the brilliant student and therefore eventually makes a good pharmacist. While we do not want to get into the position of accepting *too many* of these non-recommended students that cannot qualify for entrance to other professional and scientific schools, who choose pharmacy because it is easy to get in, I believe that I would be against closing the doors completely to all non-recommended students. When they have a desire to make pharmacy their life work, we should at least give them a chance on probation.

The solution of these problems lies perhaps not so much in the question of rules and regulations for entrance as perhaps in intelligent supervision by the faculty and close contact with the student body. Those lacking in aptitude should be told so frankly and not held over for three or four years simply because the college is fighting for its own economic existence. I realize that the four-year course coupled with the economic depression has been a hard blow to the colleges, as it has seriously cut the enrollment, but it has been the salvation of pharmacy. Anything which is of benefit to pharmacy will eventually be of benefit to the colleges. The sensible thing to do is to take the long point of view and not look at such matters short-sightedly.

Just what do I mean by "intelligent supervision by the faculty and close contact with the student body?" Perhaps I can best answer this with some of the statistics which the National Association Boards of Pharmacy compiled this year in its study.

We made a very careful analysis of drop percentages using the class that matriculated in 1932 and graduated in 1936 as a basis. We found that for the country as a whole 51% of the students graduated and 49% dropped out.

Now let us compare this with other professions. The North Central Association advises that in Liberal Arts approximately 50% of the students who enroll in the four-year curriculum have left the institution by the end of the first *two years*. In schools of engineering, about 35% of the students who enter graduate, 65% drop out. Using these figures for comparison, Pharmacy certainly has a drop percentage that is considerably lower.

We went even further in our analysis and attempted to classify the reasons for dropping out. Out of the total of 49% that had dropped out, we found that 21% of total enrollment had done so because of poor scholarship, 15% had left because of financial difficulties, 3% because of illness and 10% for other reasons, such as transfers, death, marriage, accidents, other professions, taking board examination, etc.

We found that in four colleges of pharmacy not a single student had been dropped because of poor scholarship during the entire four-year period. Certainly something must be wrong here. Two of the schools, it is only fair to say, are not members of the American Association Colleges of Pharmacy but the other two schools are.

We find that the average drop percentage on the basis of failure is 21%, as given above. Four schools did not drop a single student on scholarship; five more schools dropped out 10% or less on account of failure; eleven more schools dropped between 10 and 20%. It certainly seems to me that these schools are not making an earnest attempt to discourage the unfit. Is it any wonder that the number of graduates failing in the board examination is high?

If we look at the other side, we find a college that flunked 55% for poor scholarship. Is it any wonder that the board in the state in which this college is located has few failures in its examinations?

Unless all the colleges coöperate in doing their part in this sifting-out process, we may find it necessary to increase the requirements for entrance to the pharmacy course. However, I believe that when the American Council on Pharmaceutical Education gets to functioning we shall be able to check up more closely on the work the colleges are doing and this body will be in a position to call attention to these weaknesses directly to the college concerned.

This leads to the next question: *What consideration is given to the character of the student or his fitness for practice?*

- 13—Recommendations from high school principals or pharmacists
- 8—Vague answers that cannot be classified
- 5—Evidence of unfitness would eliminate student
- 6—Judgment would rest on contact with student and his attitude
- 5—Discouragement of the unfit
- 3—No consideration
- 2—How can character be determined in advance

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Two replies which show sincerity ask questions: "How is this (character) to be determined in a Freshman?" "We would like to have some suitable test or guide to follow in judging the student. Do you know of any?" The only answer I can give is, "I don't know."

Little can be done at the time of entrance other than to carefully investigate the past record of the applicant, his character, standing, etc. Skillful questioning of all entering students by the dean may sometimes prove helpful in determining motives, etc.

The next step must be careful observation of the student in his contacts with the faculty and observation of his attitude AND the moral courage on the part of the faculty to flunk out the unfit.

I have been particularly glad to note the stress which Dean R. C. Wilson of the University of Georgia has placed on character of students this year as president of the American Association Colleges of Pharmacy. For years, I have been harping on the idea that the colleges do not stress pharmaceutical ethics sufficiently—not just one little course in the subject but almost daily mention of its application in every course. Recently when I cited this to a prominent dean, he smiled and said, "I wonder if you really *know* modern youth?" Perhaps this is a problem of the age in which we are living and not one peculiar to pharmacy alone.

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#### ELECTED OFFICERS OF THE A. PH. A.

Dr. Willis G. Gregory was chosen *Honorary President* of the A. Ph. A.; E. F. Kelly was reelected *Secretary* and C. W. Holton was reelected *Treasurer* of the ASSOCIATION.

Robert C. Wilson, of Athens, Ga., was elected *Chairman* of the House of Delegates; and Andrew F. Ludwig, of Baltimore, was elected *Vice-Chairman*.

New York was chosen for the 1937 meeting of the AMERICAN PHARMACEUTICAL ASSOCIATION.