AVERAGE PRICES OF PRESCRIPTIONS IN BUFFALO, N. Y., AND COLUMBUS, OHIO, WITH AN ESTIMATE OF TOTAL VOLUME OF PRESCRIPTION BUSINESS IN THE UNITED STATES.*

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In this day and age of so-called "Commercial Pharmacy," students and pharmacists are constantly raising questions as to the number of prescriptions being filled by drug stores and the average price of these prescriptions.

The first of these questions, namely, the number of prescriptions has been answered by the surveys of Robert L. Swain of Baltimore, Md., and Leon Monell, one of the authors of this paper.

These surveys were made without consultation and that of Mr. Swain covers the State of Maryland for the year 1930, while the other surveys cover Buffalo for the year 1927 and New York State for the years 1929 and 1930.

The work of Mr. Swain will be reported at this meeting of the A. PH. A.³ The results of the survey in Buffalo were reported before the Section on Practical and Dispensing Pharmacy last year, in Baltimore, and was published in the JOURNAL A. PH. A. in June 1930. The New York State surveys for the years 1929 and 1930 were prepared by the Committee on Pharmaceutical Economics of the New York State Pharmaceutical Association and will appear in the proceedings of the Association but in advance of this publication, the data may be found in the *Practical Druggist, Merck's Report*, the New York Pharmacist and the Druggists Circular.

The second of these questions, as far as my information goes, namely, the average price of prescriptions in independent stores has not been determined statistically by any one.

The method used in the compilations herewith included was to secure the actual prices of an equal number of prescriptions compounded for each month of the year 1930. In this way seasonal variations are eliminated. This method, it is believed,⁴ is the one being used by the N. F. Revision Committee in their study of ingredients of prescriptions and will be followed by Mr. Swain who is contemplating making a similar study in Maryland.

In order to make this study broader in scope, Prof. Clarence M. Brown, of the College of Pharmacy of Ohio State University, was communicated with and invited to collaborate in the study herewith presented. He has secured the actual prices on 8916 prescriptions from nine stores in Columbus.

In Buffalo, the study was further amplified by going outside of the city for one store and in addition by dividing the stores into groups according to the number of new prescriptions filled. Group I consisted of stores filling less than 3000 new prescriptions per year and in these stores the actual prices of the first 80, including narcotics, in each month of 1930 were secured. Actually, in the case of one store, only 463 new prescriptions were filled during the year and all of these were included. Group II were those filling between 3000 and 10,000 new prescriptions a year and in

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³ Reported in Joint Session of Scientific Section and Section on Practical Pharmacy and Dispensing, and Conference of Pharmaceutical Law Enforcement Officials.

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these stores the actual prices of the first 150 per month were secured; and Group III included those filling more than 10,000 new prescriptions a year, and in these stores the actual prices of the first 300 per month were obtained—in all a total of 18,703 prescriptions for Buffalo and Western New York.

In addition to this data, we have listed the maximum and minimum prices of prescriptions filled by these stores; the results are as follows:

THE AVERAGE PRICE OF PRESCRIPTIONS IN DOLLARS.													
City.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
Columbus	.911	.954	.920	.966	.960	.984	.964	.958	.973	.905	.911	.927	.940
Buffalo and Western	L												
N. Y.	.960	.984	.948	.968	.1007	.993	.998	.1000	.990	.988	.971	.1012	.985
Average	.940	.970	.939	.967	.987	.991	.987	.987	.985	.962	.952	.985	.971

It will be noted that in Columbus, Ohio, the average price was the highest for the month of June, while in Buffalo the average price was the highest for the month of December. The average price for prescriptions per month in Columbus did not vary more than \$.08 and in Buffalo the variance was not more than \$.065. This information would indicate that there is no great difference in the price of prescriptions due to seasonal variation.

The stores selected in Columbus ranged in number of new prescriptions filled from seven to sixty per day. The stores selected in Buffalo ranged in number of new prescriptions filled from a little over one a day to one hundred and twenty-five per day.

The data from the Buffalo group, when segregated according to the number of prescriptions being filled, shows the average price as follows: Group I, \$.88; Group II, \$.99 and Group III, \$1.05—showing that the larger the number of prescriptions being filled the greater the average price. Is not this what one would expect? Many small stores or stores not doing a large prescription business do not carry the more expensive prescription items and apparently make no attempt to secure them. We believe, however, that such a procedure is detrimental to the best interests of pharmacy in that it shows a tendency toward subordinating the purely professional work of compounding to the commercial side. Compounding is the corner-stone of the structure of the professional status of Pharmacy and we wreck the entire edifice by neglect of this foundation.

As stated, in our method the maximum and minimum prices of prescriptions were recorded. In the case of both cities, the minimum price charged by any store was \$.15 per prescription. This occurred in one store in each city studied. The next lowest price was \$.20 occurring in two stores in Columbus and the next lowest price was \$.25 which occurred in six stores in Columbus and seven stores of Buffalo. The highest minimum price in the Buffalo stores studied was \$.40 while in Columbus it was \$.25. Is this not a sad state of affairs and the cause of some of the problems facing pharmacy to-day? Does it not take just as long to receive a prescription, compound it, number, file and deliver it for fifteen, twenty or twenty-five cents as it does for a prescription selling for one dollar and even up to five and ten dollars? Is not the liability of error in dispensing it just as great as for a higher priced prescription? Did not the patient go to the physician for diagnosis and treatment and pay him as much as though he had received a prescription which did cost one dollar or more? Is it just, that even the simplest prescription should be compounded at a price no more than the price of a glass of soda water or a sundae? We believe that some of our problems of supporting professional pharmacy would be overcome if we had a minimum fee or a compounding fee of say \$.50, then pharmacists would not need to worry so much about side-lines.

When we examine the maximum price paid for a prescription, we find that the highest price was \$18.00 in a Columbus store. The next highest prices were \$12.00 and \$11.00, both in Buffalo or Western New York stores. (Incidently, the highest individual prices were in the stores compounding the largest number of prescriptions.)

The highest average price per prescription was \$1.18. This occurred in a store in Western New York which had the largest prescription business of the stores surveyed, namely, about 200 per day. The highest average price per prescription in Columbus was \$1.06 which occurred in the store filling the second largest number of prescriptions of the stores surveyed in Columbus.



Average Price of Prescriptions.

With a knowledge of the number of prescriptions filled in the country and the average price of prescriptions, it is possible to calculate the volume of business in the United States per year. In order to calculate this, it will be necessary to refer to the studies mentioned earlier in this paper.

Mr. Swain, in his report on the number of prescriptions filled in Maryland, states that there were two prescriptions per person per year filled in Maryland for the year 1930.

By using the figures in the report of the Committee on Pharmaceutical Economics of the New York Pharmaceutical Association concerning the number of prescriptions filled per store and the number of practicing drug stores in the state, as furnished by the secretary of the New York State Board of Pharmacy, it is shown that there were 2.25 prescriptions filled per person in the State of New York by using the census figures for the population of New York. Using these figures as a basis of calculation, an average of 2.2 prescriptions per person per year is secured for the two states. Continuing calculations in a similar manner—but using the U. S. Department of Commerce Census figures for the population of the United States as 122,775,046—there were compounded during the year 1930, about 270,105,000 prescriptions. When the average price of \$.971 per prescription is calculated for the country, it shows a total volume of \$262,272,053.

This study was begun early in the spring of the present year and the figures do not harmonize with the figures reported in the June 4th issue of the N. A. R. D.Journal. The article quotes Wroe Alderson, chief business specialist of the U. S. Department of Commerce, as saying before the American Pharmaceutical Manufacturers' Association at French Lick Springs that "the number of prescriptions filled annually is between 120,000,000 and 180,000,000 at a cost of \$90,000,000 to \$135,000,000 to the consuming public."

It is evident to the most casual reader of this paper that a great discrepancy exists between the report of Mr. Alderson and the figures derived from the study made in Columbus and Buffalo. From the above quoted article, we could not ascertain the source of the data upon which Mr. Alderson based his calculations as to the total volume of prescription business in the U. S., but it is assumed to have come from the St. Louis Drug Survey. It is therefore apparent that a more extensive study of this subject is necessary and should be undertaken.

NATIONAL DRUG STORE MERCHANDISING SURVEY.

AN ADDRESS DELIVERED BEFORE THE AMERICAN PHARMACEUTICAL ASSOCIATION AT MIAMI, FLORIDA, JULY 30, 1931.

BY THOMAS W. DELAHANTY.*

It is always a source of pleasure when a member of the Bureau of Foreign and Domestic Commerce has occasion to address a professional body. The functions of our Bureau are concerned with the promotion of trade at home and abroad. We are in no sense regulatory—our interest is solely constructive and promotional. This is the type of service accorded to your industry through the Chemical Division of the Bureau to which group your industry is arbitrarily assigned.

In the foreign field we facilitate the obtaining of raw materials for the pharmacist and have assisted in finding an annual market abroad for over 20 million dollars worth of medicinals and pharmaceuticals.

Among our domestic activities may be cited our stimulation of firms to carry on scientific and commercial research and our work with trade associations and groups, in the field of market survey, simplification and standardization. Then there are trade surveys of commercial areas, as to buying power, marketing methods, distribution and other factors which have been valuable guides to industry and the retailer. Finally there are surveys of the type of the "National Drug Store Merchandising Survey."

The Government cannot attempt to solve the distribution and merchandising problem of every branch of industry; all we can hope to do is to select a few representative branches and work out a procedure which may with modifications and variations be applied to all. In selecting such it is preferable to choose those branches wherein a high degree of coöperation is available.

The trade associations in the pharmaceutical field—manufacturers, wholesalers, retailers and related scientific groups were engaged in work which would tie in with such a study and prevailed upon the Bureau to conduct a "National Drug

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