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CONTROL OF SPECIALTIES AND NOSTRUMS IN PRESCRIPTION STOCK.*

BY JOHN F. MCCLOSKEY.[1]

Through the past centuries and up to the present time pharmacy has been confronted with many difficult and troublesome problems. Fortunately, when these problems are carefully considered and a clear understanding of the facts obtained, a solution is usually found; and when it is applied, generally the problem disappears and does not return, at least not in the same form.

The purpose of this paper is to present a very definite problem; one that is exceedingly complex and its ramifications are unbounded. Not only is the problem perplexing, but it has assumed the rôle of a profit-consuming Hercules. It demands attention and immediate action.

The title of this paper may indicate that the author has found a complete solution for the problem, but this is not so; the task is of such magnitude that it requires more than one brain and more than one solution. Nevertheless, definite suggestions are offered, mainly to promote discussion out of which may evolve some plan for control, as well as to guide those who may wish to follow them. I believe that if the suggestions were followed they would tend to lessen the severity and complexity of the problem.

The pharmacist has considerable difficulty in the control of his inventory relative to his prescription stock, mainly because once a preparation has been successfully introduced to the medical profession there follows an unlimited number of products that are similar, or, at best, just imitations of the original. Each of these products will have a group of followers made so by the extent of the advertising or the pressure of their salesmen. Naturally, it is expected that each of them will be stocked by the pharmacist.

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We are aware that medicine has been making rapid progress in the fields of preventative medicine and therapeutics. Consequently, if these organic and synthetic compounds, as well as the new specialties, keep on increasing, with their inevitable duplication, what is the pharmacist going to do about it?

In order to make the problem more specific and concrete, let us put it in the form of questions as follows: How may the pharmacist be guided in his acceptance or rejection of a new preparation which duplicates many products now stocked? Should he attempt to stock all items for which he has had a prescription? How may he control his inventory in order to conserve both space and cash? How can he inform the prescriber of the similarity of the product without harm to himself or to others?

Sad to say, but generally true, the physician will use and will prescribe those items which strike his fancy. His fancy is obtained and his good-will secured by plenty of samples, by the striking color combinations and the neat packaging. The compounds are usually quite presentable; if liquids, they are brightly colored and clear; if solid, the color combination or scheme still prevails; be it capsules, tablets or pills, running the scale from bright greens to all the hues of the color chart, while the ointments have nothing more as sales appeal than the collapsible tubes, and ampuls, their freakish forms.

In climaxing this campaign to put over a new product, and after allowing the advertising matter to get into the hands of its readers, there comes the suave, friendly, confidence-getting salesman. Since we have a tendency to run to titles, we call them "Detail Men," "Doctor's Contact Men" or "Medical Contact Men."

The pharmacists are required, or at least expected, to stock these items which in many cases are preparations "that have seemed beneficial" or "ought to be good." Sometimes they are the mass production results of some other physician's prescription that has in certain cases been successful and which is now offered to the public to cover all cases. Generally they are the official or the accepted standard formulas with a few inocuous changes such as color, or the addition of another medicinal ingredient merely to add distinction.

The responsibility for this condition cannot be placed upon either branch of the healing art. Pharmacy as well as medicine is to blame for the results.

Some physicians claim that the results of identical prescriptions vary in color, content and form to such an extent that they are forced even against their will to use standard manufactured preparations. This should not be true in so far as the U. S. P., the N. F. or the R. B. or other standard formulas are concerned, but it may be true when we consider the extemporaneous preparations made under varied conditions.

Again, because the physician is willing to use a coined word or a trade-marked word which is easily spelled, pronounced and remembered in preference to using the official titles, or, because he is not well grounded in Materia Medica and in prescription writing, or still further because he lacks the source of the common formulas. If this be so, then it is the duty of the profession as a whole to try and remedy this condition.

Mr. Frank A. Delgado estimates that about 125 new preparations are introduced each year and that only about 13% of them are extensively advertised. This

estimate is probably of a national scope, but how about the numberless ones that are put out each year and in every large city, that never get beyond the state lines?

Study the lists of the more reputable manufacturers and observe the formula in many of their specialities, study the lists of the less known and less reliable ones, and where possible, the formulas of their specialties. It will be amazing to see the multiplicity and duplications that occur and we are bound to arrive at the conclusion that the physician and the pharmacist are being exploited and forced to take all the risks and losses that occur.

Although the problem is serious enough to warrant attention and action at the present time, we must not become too greatly alarmed. In the "Professional Pharmacy," 2nd Edition, pages 39–41, it is shown that the official drugs, per se, still lead as ingredients in physicians' prescriptions; also that the combination or mixed prescriptions, that is, those in which the official drugs are used with specialties, are growing in numbers and hold a strong place in the total. The specialties alone average about 23% of the total of 8383 prescriptions that were studied.

This same source also disclosed that the cost of the specialties has a tendency to increase the cost of the prescription far above that of the officials. Nevertheless, there has been a steady trend toward the use of prepared products and, unless checked, the saying "bottle pourer and label remover" may become true.

Therefore, if the pharmacist is to have some control over his inventory in the prescription laboratory he should bear in mind that there are but four classes of remedies, *viz:*

1. The officials.
2. The open formulas of the reputable pharmaceutical houses.
3. The nostrums, which are secret formulas.
4. The "private" formulas which may be used in many ways both for good and for evil.

With the first there is but little criticism, but it is in relation to the remaining three that the following suggestions are directed.

1. A specialty or semi-proprietary should not be accepted by the physician or the pharmacist unless there is sufficient data available to fully inform him pertaining to its therapeutic value and possible reaction when in combination with other substances.

2. Any product that tends to be substituted for an official or a recognized standard formula should be rejected.

3. A product should be rejected if the price is unreasonably high as compared to products that serve a similar purpose.

4. The cost of the pioneering work should be borne by the producer and not by the pharmacist. To insure this, the product should be distributed by reputable wholesalers under agreement to accept for full credit unopened, unsold packages. If distributed direct, it should be on a consigned basis for some return agreement.

5. Information pertaining to the company producing the product should be readily available, such data as their reputation in pharmaceutical and medical circles, their methods of distribution, their program of advertising, their qualifications to produce and the conditions which surrounded production.

6. Unusual, rare and sporadic ailments do not warrant stocking new products.

7. By agreement among themselves, the pharmacists in certain areas may distribute the load of stocking new items. Jones may have the full line of ampuls; Smith, a full line of biologicals; Davis, certain new specialties; etc. Each of them would then act as a wholesaler to one another.

8. An accurate and careful annual inventory should be made. Those products which have not shown a stock movement during the year should be removed and placed in a "morgue" or returned.

9. Every item should show date of purchase, price paid and the source of the purchase.

10. It may be wiser to refuse some prescriptions for certain specialties than to suffer a loss when the demand ceases. If more pharmacists were to do this, the physician would find that prescribing them is of little avail, due to the difficulty in securing them; this would cause a demand for the better known standard ones.

THE PHARMACIST AND PARENTERAL SOLUTIONS.*

BY SISTER CRESCENTIA WISE.[1]

The rapid development of parenteral medication has brought about numerous problems. While manufacturing pharmacists have done much to render this form of medication safer and more convenient, most pharmacists outside the manufacturing field have been slow to accept responsibility for extemporaneous preparations of parenteral solutions. Since the need for much of this medication is of an emergency nature there seems no valid reason why the trained pharmacist, in either the hospital or retail field, should consider this work to be the sole responsibility of pharmacists in the commercial field.

If local irritation is to be avoided some attention must be paid to the tonicity of the solution.

Since all fluids and secretions of the body contain dissolved substances, in definite proportions, these solutions will exert a certain definite osmotic pressure which is uniform for each fluid. (Since this paper deals with parenteral solutions only, we will confine our attention to blood and lymph, though isotonicity is of equal or greater importance in solutions intended for use in the eye or nose.) If a solution is introduced into the circulation it may contain dissolved substances in a different proportion or of a different character from those of natural body fluids, hence it will have a different osmotic pressure. When a liquid has a lower osmotic pressure than the body fluid with which it is mixed it is hypotonic; when it has a higher osmotic pressure it is hypertonic; when it has the same osmotic pressure it is isotonic. Whether any given solution is isotonic depends upon (1) the proportion of dissolved substances which it contains and (2) upon the character of those substances. Salts which dissociate freely exert a greater osmotic pressure than those which dissociate slightly or organic non-dissociating substances. Therefore the type of dissolved substance is of more importance from osmotic pressure standpoint than the amount in solution.

The practical value of this subject lies in the fact that hypotonic or hypertonic liquids when injected into the circulation in considerable amounts, may cause pain until equilibrium is established between the osmotic pressure of the fluid within the tissue cells and that of the injected fluid. When only a small amount of solution is injected into the blood stream it is quickly diluted so that the difference is not felt.

Often a hypertonic solution is desired for therapeutic purposes but as a rule an isotonic solution is more satisfactory. If given subcutaneously any solution that is not isotonic will cause temporary local irritation.

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