tions; both provide informative monographs as well as a listing of commercial products. There is also a considerable degree of similarity in the methods which are employed to determine eligibility of products for listing in New and Nonofficial Remedies and Accepted Dental Remedies. The rules of the Council on Pharmacy and Chemistry of the American Medical Association and the provisions for acceptance of products by the Council on Dental Therapeutics of the American Dental Association both emphasize the importance of suitable names, proper labeling and advertising, and the requirement of adequate evidence for the usefulness of commercial products. Each book is revised annually to provide information of current value. For each, the conclusions of the respective councils are based upon currently available information and are subject to modification at any time that a substantial amount of new evidence becomes available.

On the other hand, there are certain dissimilarities. In New and Nonofficial Remedies, the emphasis is on newness of products, whereas Accepted Dental Remedies places considerably more emphasis upon completeness of listing of drugs useful to dentists. This is possible and appears desirable in view of the fact that the number of drugs which are useful in the practice of dentistry is considerably smaller than the number which are useful in the practice of medicine. Accepted Dental Remedies even carries some informative monographs on obsolete preparations so that the dental profession may be informed concerning products described in earlier literature. However, in these instances it is clearly indicated that the listing is intended simply to provide information and that there are no products accepted in these categories.

Further differences in the books are explainable in the differences of their intended use. Since the method of use of a particular drug by a dentist may differ from its use by a physician, it does not always follow that a drug which is suitable for inclusion in New and Nonofficial Remedies will necessarily be suitable for listing in Accepted Dental Remedies.

I would like to suggest that each of the four compendiums considered in this panel discussion serves its own particular purpose and tends to supplement the value of the others. Certainly the size and complexity of Accepted Dental Remedies would be greatly increased if official standards of composition were not available in the Pharmacopeia and the Formulary. Although the usefulness of the latter two publications might be somewhat enhanced by the suggestions presented, it is my belief that the interests of the various professions and the public will be best served by continuing their emphasis primarily on standards related to nomenclature and composition, while New and Nonofficial Remedies and Accepted Dental Remedies continue their primary emphasis on therapeutic actions and uses.

Comments on the Symposium

By LOUIS C. ZOPF, M. S.

It is generally conceded that any group of standards becomes of increasing value directly as their usefulness becomes apparent. I can subscribe to the statements which have been made in this symposium and would like to encourage the suggestions of Dr. Lloyd C. Miller and Dr. Justin L. Powers that the two official compendiums, the United States Pharmacopeia and the National Formulary, are definitely considering expanding their usefulness to the medical profession.

It is most gratifying to learn that the American Medical Association is contemplating a change in the format of New and Nonofficial Remedies by consolidating all drug standards in one section and the pharmacologic, therapeutic information in a second section.

Physicians have learned to respect the United States Pharmacopeia and the National Formulary and have also learned to understand that they are generally referred to by the abbreviations "U. S. P." and "N. F." Their understanding of these two books, however, seems to exist only as a regard for the standards for the substances listed therein and not for the knowl-

Mr. Zopf is dean of the School of Pharmacy, University of Iowa, Iowa City.

edge of the contents. They are certain that these books represent the highest standards of therapeutic requirements and are representative of considered judgment, clinical evaluation, and therapeutic merit.

It is not uncommon for a medical colleague to inquire of the pharmacist what *his* Pharmacopeia says about a specific product. The physician, while interested in the chemical and physical properties of a medicament, is primarily interested in its therapeutic use. For this reason, many of our medical colleagues find it convenient to use proprietary preparations. Commercial pharmaceutical organizations provide the physician with adequate literature to substantiate the validity of the therapeutic merits of their products.

Publicity alone is not sufficient. If we expect the medical profession to utilize the pharmacopeial drugs, we should do everything possible to assist them in the methods and possibilities of their use and application of such agents.

Textbook type of information is not what is generally desired but rather concise information relative to the therapeutic possibility of the drug, its tolerance, toxicity and its incompatibilities and contraindication if such exist. Dosage, of course, is essential but this is now supplied in both the National Formulary and the United States Pharmacopeia. If the item is an official vehicle, then that vehicle should be described as to its flexibility and ramifications of usefulness.

For example, it would be well to inform the physician about the amount of water which Hydrophilic Petrolatum will absorb; the possibility of adding water to Hydrophilic Ointment to make it available in lotion form; the many features of Polyethylene Glycol Ointment including its ready removal from the skin, its nonoleaginous nature; and the question of concentrations of medicament when used in these vehicles.

New Directions for Research in Infant Care

Further research to establish the general relationships between infant mortality and such factors as income level and and occupation is probably needless, according to Dr. Odin W. Anderson, research director of the Health Information Foundation, New York City (*The Child*, April 1953 issue). A direct and undiminished correlation between a high standard of living and low infant mortality is assumed. Where infant mortality rates go higher than 30 per 1,000 live births, an improvement in the standard of living will have a long-range effect, as it has since 1890 in various countries. But when the infant mortality rate drops to about 30, the broad economic and social factors operate with lessening effect. Then an increasing influence on the rate begins to be exercised by personal factors in the care of the baby, like adequacy of mothering and readiness—and ability—to use proved methods of infant care. Given the essentials of living, use of a bottle sterilizer can have a greater effect in some families on saving babies' lives than a $500 annual increase in income.

Infant mortality is often referred to as a sensitive index level. Where the health level is low, whether in wartime or peacetime, the infant mortality is high accordingly. Rates vary widely between countries, between areas within countries, and even between residential areas within cities. Obviously, factors other than general economic ones account for the low infant mortality rates among the foreign-born Jewish group studied in an early analysis (1911 to 1916) of infant mortality in eight cities in the United States. The Jewish group experienced the lowest infant mortality rate of all groups studied—54—and the lowest neonatal mortality rate—28. Closer examination would probably reveal a pattern of infant care of a high order embedded in the Jewish culture.

Dr. Anderson believes that other than purely medical research, further exploration could well be made of the illness of babies in relation to socioeconomic factors. Another subject for investigation, he suggests, is the effect of adverse socioeconomic conditions on the unborn baby and on the ability of the mother to bear a full-term healthy baby. Two of the many questions still unanswered concerning the relationship of socioeconomic and ethnic factors to infant deaths are, he writes: What are the environmental conditions in localities where infant mortality is still extra high by modern standards? How do traditional ways of caring for infants in various ethnic groups affect the survival of infants in these groups?

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