UNITED STATES FOOD AND DRUG ADMINISTRATION AND THE PHARMACEUTICAL INDUSTRY

BY

JOSEPH GARLAND, M.D.

Editor of the "New England Journal of Medicine"

An increased awareness of the mechanisms by which the American public is protected in respect to the drugs it swallows, inhales, applies, or receives by injection has resulted from the increased importance of the drug industry and its phenomenal expansion in recent years. Any *laissez faire* attitude that might have existed regarding health and disease and what should be done about them was a war casualty. Thousands of bright young men are now working feverishly at private and Government expense to save and prolong human life, and many new and truly vital drugs in a number of important categories have resulted from these efforts. Of the 700 or so new items that were marketed last year by 232 manufacturers, however, it is hard to believe that more than a very few can be as epoch-making as their producers would have the consumer believe.

Statistics, for what they are worth, seem to prove the expansile nature of the business. Between 1947 and 1959, a period during which the gross national product increased 103%, the ethical or prescription drug sales increased more than 304%. In dollars—also an expanding commodity—the consumer spent \$250m. of these for ethical drugs in 1939 and \$2,000m. in 1959. The products purchased were the output of some 1,200 to 1,300 firms, of which only 28 produced 87% of the pharmaceutical agents marketed. Even the most ethical companies, unfortunately, are to some degree the victims of the excessive competition that such a number has forced upon the industry. The salutary effect of competition on prices has presumably been offset by the cost of producing and promoting so many new items, many of them quite unnecessary to the practice of medicine and the eventual salvation of mankind.

Researchwise, available figures indicate that \$144m. was contributed from private sources for investigative activities in 1957; the figure is expected to go to \$500m. by 1970, by which time Government support will reach at least \$1,000m. annually—a sum that seems to be, and probably is, fantastic. But we are living in a fantastic era.

The pharmaceutical industry, to refute the allegation of monopolistic practices, issued last year a 35-page pamphlet entitled *The Better Life*, which pointed out the impressive improvements in health and the treatment of disease of the last few years. The pamphlet showed the spectacular drop in the incidence of various infectious conditions, the fall in infant death-rate, the decline in mental-hospital population, all, in part at least, attributable to new and remarkable drugs. It cited the industry's great and increasing expenditures for research from \$30m. in 1948 to \$170m. in 1958.

Kefauver Inquiry

One of the penalties of size, unfortunately, is the excellent target that it presents, and the drug business could not avoid filling the sights last year of the Senate Subcommittee on Antitrust and Monopoly, under the

chairmanship of Senator Estes Kefauver, of Tennessee, one of the upper chamber's top-drawer investigators. The Subcommittee sought primarily to pin on to the industry, and make it stick there, the accusation of unwarrantably high prices and price-fixing, but during the course of the spring and summer, almost up to the time of the national political conventions, when Congress has other matters to occupy its attention, the inquiry spread over almost every aspect of drug production, promotion, and marketing.

As *Science* suggested in a brief comment published in its issue of June 17, 1960, the Kefauver investigation was "more an exposé than a restrained inquiry," but it amounted to a sort of shock treatment of potential value to the doctors, the public, and the industry. For it showed up some of the seamier aspects of big business—even one that is dedicated to lofty idealism—the risks that are inherent in the profit motive, and the venality to which man is so susceptible.

A conviction that the ethics of the pharmaceutical industry as a whole could be improved should not be taken as a blanket indictment of it. Nevertheless it is a widely held belief that excessive competition has led to an unnecessary expansion in the number of new products marketed each year; in the production of drugs, and especially combinations of drugs, the real value of which cannot be demonstrated; and in their overenthusiastic promotion. This has been responsible in some instances to misleading information and in one case at least to a deplorable conflict of interests on the part of an important Government official. For the sorry situation was presented of a public servant with a financial interest in the promotion of products on which he had to pass judgment, of "interlocking financial ties of drug houses, advertising agencies with drug accounts, journals dependent on drug ads, and laboratories which test drugs."

Such revelations, resulting from the investigations of the Kefauver Committee last year, brought into the public eye and aroused considerable interest in the mechanisms by which the public is protected, or is supposed to be protected, against these particular hazards.

No fewer than four federal agencies at present compose the cumbersome and poorly co-ordinated piece of machinery that is expected to control the advertising and promotion of drugs. The Federal Communications Commission exercises a degree of influence over radio and television promotion; the Post Office Department is responsible for keeping fraudulent advertising out of the mails; advertising in newspapers and magazines is the responsibility of the Federal Trade Commission; and labelling and the dissemination of information to pharmacists and physicians, as well as the control of drug production, is in the hands of the Food and Drug Administration. In addition the Council on Drugs and Chemistry, now the Council on Drugs of the American Medical Association, at one time tested all new remedies and published the results in the *Journal of the American Medical Association*, but this function has been practically abandoned, partly as a result, according to *Saturday Review*, of harassment by drug-company lawyers. The Food and Drug Administration, therefore, remains the chief agency for the monitoring of this vital industry—not to exercise an unwarranted dictatorship over it, but to protect the public health, with which the business is so intimately concerned.

A Glance into History

Because of the present and growing importance of the Food and Drug Administration and the publicity that it received when it celebrated its Golden Jubilee in 1956, a glance into its history will be of interest. This goes back to 1883, when that indomitable reformer, Dr. Harvey W. Wiley, was appointed chief chemist to the Department of Agriculture and embarked on a crusade for pure-food legislation. The need became apparent when the use of harmful preservatives and food adulteration, the rich harvests of the patent-medicine vendors, misleading branding, and the low standards of quality of many "ethical" medicines were revealed. What control existed was in the hands of the State Governments.

Reform by legislation takes time, and it was not until 1906 that the "Pure Food and Drugs Act," to which "Cosmetics" was later added, was passed by Congress, and was administered by Dr. Wiley until 1912. The investigative and law-enforcement functions of the Act were carried on under different organizational titles until the present name of Food and Drug Administration was provided by the Agricultural Appropriation Act of 1931. The F.D.A. was transferred from the Department of Agriculture to the Federal Security Agency in 1940, this agency becoming the Department of Health, Education and Welfare in 1953, under a Secretary with Cabinet status.

Functions of the F.D.A.

Among the functions of the Administration are the enforcement of the original Federal Food and Drugs Act, the Tea Act, the Caustic Poison Act, the Import Milk Act, and the Filled Milk Act. Its activities are "directed mainly toward promoting purity, standard potency, and truthful and informative labelling of the essential commodities covered by the provisions of these five Acts." These functions are prescribed by law, any regulations that may be imposed by the Administration on its own initiative being covered by the authority legally invested in it.

The administrative, technical, and service staff headquarters of the F.D.A. are in Washington, and it has in addition 18 district territories with chemists, inspectors, and testing laboratories. It inspects factories for raw materials used, sanitary conditions, and controls exercised in "compounding, processing, packaging, and labelling products destined for interstate shipment." Interstate commerce and the control of imports are two important factors from which the regulatory authority of the Federal Government stems. Violators are reported to the Department of Justice, but on the kindlier side the Administration also stands ready to help constructively with advice when it is sought.

By its own admission the Food and Drug Administration has been unable to discharge its duties thoroughly and effectively—it has been able to inspect each of the 1,200-odd factories only about once in five and a half years—because both funds and necessary extensions of authority have been withheld. In 1953, for instance, Congress not only reduced its appropriation but denied its request for a comprehensive factory-inspection law that would permit it to make reasonable investigations, including a look at a company's formula files.

It is hoped that the inadequacies brought to light by the Kefauver inquiry will have a salutary effect. Under

its own regulation, made effective in February, 1961, the Administration now requires that literature promoting the sale of prescription drugs must include information pertaining to "relevant hazards and conditions in which the drug should not be used."

Proposed New Measures

In July, 1960, Commissioner Larrick of F.D.A. asked for stronger regulations, especially one requiring that a new drug be barred from the market until factory inspection had confirmed the manufacturer's statement regarding the reliability of manufacturing methods, facilities, and controls. This was the request denied by Congress in 1953. Arthur S. Flemming, then Secretary of Health, Education and Welfare, went further in requesting the National Academy of Sciences to investigate the whole matter of the control of production and distribution of drugs. A committee of eight was appointed, which brought in the following recommendations "to be acted on promptly."

These provided that the F.D.A. be given statutory authority to require proof of effectiveness as well as safety of all new drugs, "to require manufacturers of new drugs to maintain records and submit reports of clinical experience and other relevant data," and to apply certification procedures to all antimicrobial agents used in prophylaxis and treatment of infectious diseases.

They endorsed the Commission's proposals "to clarify and strengthen existing inspection authority, and to require that all drugs be manufactured and packaged under adequate controls," as well as endorsing proposed amendments to present labelling requirements published by the Commissioner in the Federal Register for July 22, 1960.

They further recommended the co-ordinating of supervision of labelling, promoting, and advertising, now divided among several agencies of the Government; the maintenance of research programmes on methodology and standardization of drug testing, and the establishment of an advisory organization of scientific and technical experts.

Not least, they recommended that funds be made available for these expanded activities. It is hoped that the present Congress will take early action on the proposed measures.

TEATS

BY

ROSEMARY GRAHAM, M.B., B.S.

Medical Officer, London County Council

It is surprising how little guidance on the use of teats for artificial feeding of infants is offered to the medical student or even doctors and nurses whose special interests lie in the field of child care. Many paediatric textbooks deal fully with artificial milks but make slight reference to the necessary equipment for giving a bottle-feed. The result is that the practical difficulties facing a young inexperienced mother whose baby is not managing to suck successfully from a bottle may present as big a problem to her medical adviser. Hunger, vomiting, colic, and excessive crying can all be caused by faulty feeding technique and the use of