Advertising medicines sixty years ago

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'You can tell the ideals of a nation by its advertisements'

(Norman Douglas 1868–1952. 'South Wind', 1917, Chapter 7)

It is probably true that people receive the advertising they deserve. Even though we often prefer to deny it, advertisements in medical journals must influence and reflect our habits in some way or other, for otherwise the advertisers would not spend such large sums of money on their preparation and publication. Even partial glimpses of excavated advertisements from the days of the ancient Roman and Greek empires can tell us almost as much about the life of those times as do the surviving more formal written records. For example, 'In Pompeii and similar places, advertising by means of signs and inscriptions was quite common . . . This advertisement was discovered painted on a Pompeii wall: "There will be a dedication or formal opening of certain baths. Those attending are promised slaughter of wild beasts, athletic games, perfumed sprinkling, and awnings to keep off the sun"' (Sutphen, 1968). Was the 'perfumed sprinkling' devised and provided by predecessors of the cosmetic and pharmaceutical industry of today?

The advertisements of some of our predecessors were the subject of just as much criticism as are some of our own today. Daniel Defoe was scathing in his strictures on some London physicians at the time of the Plague in 1665. He wrote 'It is incredible and scarce to be imagined how the posts of houses and corners of streets were plastered over with the Doctors' Bills and papers of ignorant fellows quacking and tampering with Physick, and inviting the People to come to them for Remedies; which was generally set off with such flourishes as these, viz., Infallible preventative Pills against the Plague, Never-Failing Preservatives against the Infection, Sovereign Cordials against the Corruption of the Air, Exact Regulations for the Conduct of the Body in case of an Infection' (Dukes, 1963).

What then, do the advertisements in the early issues of the *Postgraduate Medical Journal* show of our colleagues 60 years ago? For some reason, the first

year's issues of the *Journal* carried few or no commercial advertisements. However, for several years the *Journal* had a predecessor, the *Bulletin of the Fellowship of Medicine and Post-Graduate Medical Association*, published from offices in No. 1 Wimpole Street, London W1 (by kind permission of the Royal Society of Medicine), which cost sixpence an issue and was 'registered at the General Post Office as a Newspaper'.

The *Bulletins* of the early twenties carried advertisements of several different kinds. For example, the University Examination Postal Institution of Red Lion Square was already providing help to aspirants for higher degrees, and was able to claim, among others, 240 M.D.s (Lond.) between 1901–1920, including six Gold Medallists between 1913–1919. On another page, professional men requiring accommodation in London were invited to join the Connaught Club, under new management at Marble Arch, where prices were 'inclusive of valeting and the use of well-distributed bathrooms'.

US advertisements

Most interest lies, however, in the advertisements for pharmaceutical products. Surprisingly, there were some from United States companies. Valentine's Meat-Juice Company, from Richmond, Virginia, advertised its product on several occasions, 'for quieting the irritable stomach and aiding the tired digestive organs'. More subtle was the advertisement from New York for Fellows' syrup of the Hypophosphites which cleverly exploited the association of its name with the Fellowship and even employed an impressive yet restrained crest as a background to its advertisement (Figure 2). Fellows' syrup of the Hypophosphites, it will be seen, supplied the 'indispensable mineral salts required by the system together with the two potent dynamic agents, strychnine and quinine'. It contained, in fact, the hypophosphites of potassium, manganese, calcium, iron, quinine and strychnine. Claims were made in different issues of the *Bulletin* that it

'accelerates convalescence and restores strength and vigor'; that 'in the treatment of tuberculosis, it is indispensable to increase the tone of the system, and the functioning ability of the organs of circulation, assimilation and elimination'. The syrup had been, it was claimed 'The standard tonic for over half a century', but the truth, of course, was different, for the Edinburgh book of *Materia Medica* of 1880 (Moinet, 1880) had already clearly pointed out that although 'the hypophosphites are supposed to exercise all the beneficial effects of phosphorus without producing any of the untoward consequences of that elementary substance . . . it is extremely doubtful if they produce any of the effects of free phosphorus'. Within a few years of the advertisement, the 1934 *British Pharmaceutical Codex* was to state quite unequivocally that 'there is no pharmacological evidence to show that they behave differently from other inorganic salts, and any benefit derived is ascribed to the iron or calcium with which the acid may be combined'. However, before we judge too harshly any reader of the *Bulletin* who succumbed to the Fellows' syrup advertisement, let us remember that specific antituberculous chemotherapy was still thirty years away.

'Specific remedies rather than simple palliatives'

The first two decades of this century saw the introduction of drugs which the late J.H. Burn (then the young Director of the Pharmacological Laboratories of the Pharmaceutical Society of Great Britain) claimed to represent 'the discovery of specific remedies as opposed to simple palliatives' (Burn, 1932). It is difficult for us, 60 years later, to appreciate how exciting these discoveries must have been. Unfortunately, however, some of these early specific treatments carried unacceptable hazards.

The *Bulletin* of November, 1920 carried an advertisement (Figure 3) promoting a powerful eliminator of uric acid, phenyl cinchoninic acid (Agotan) which we know as cincophen. This powerful analgesic/uricosuric agent was first introduced into medical practice in 1908 and was widely used in treatment of gout and rheumatoid arthritis. Fifteen years later Worster-Drought (1923) first described severe jaundice in a patient treated with cincophen, but even though this was followed by other reports of liver toxicity, and warnings of this effect were published in standard reference books (for example *Extra Pharmacopoeia*, 1928), the drug could still be purchased by the public without prescription, and at an inquest in Birmingham in 1934 several doctors denied that they had ever heard of cincophen causing jaundice (Wade & Beeley, 1976). Once again, however, before we judge them harshly, we must remember that the sources of drug information freely available to us (*Drugs and*

Therapeutics Bulletin, *Adverse Drug Reactions Bulletin*, *Prescribers' Journal*, *British National Formulary*, *Current Problems*) were not available then, nor are prescribing doctors today necessarily any more aware of contemporary drug toxicity despite all this information.

Organotherapy

Among the 'specific remedies' which so excited J.H. Burn were the hormones which had been discovered in the early years of this century. Parke, Davis & Co., a British pharmaceutical company which supported the *Bulletin* consistently over several years, advertised a variety of hormone therapies. They were all, of course, fairly crude extracts derived from the particular animal endocrine glands, and included pituitary gland tablets, either anterior, posterior or both, suprarenal gland tablets, thyroid gland tablets, pineal gland tablets, thymus gland capsules, mammary substance tablets and orchic substance tablets. One of the advertisements cautiously admits that 'while the therapeutic indications of some of them are well-established, the sphere of others is not yet clearly defined, and these are supplied without recommendation being implied'. It is interesting to follow the monographs for different organ extracts through consecutive editions of reference books such as the *Extra Pharmacopoeia* from 1920 to 1928. Orchic substance from the testes was asserted 'to reanimate sexual power' in 1920 and 1925, but the 19th edition in 1928 adds the terse statement by J.H. Burn 'Testicular extract is inactive'. Similarly, under Mammary Gland tablets, after earlier claims for usefulness, the 19th edition states 'Mammary extract is inactive - J.H. Burn,' and in yet another monograph 'Thymus extract is inactive - J.H. Burn'. Already, the trained experimental pharmacologist was applying his newly developed biological tests to these various materials, distinguishing those with potential therapeutic activity from those which were valueless (Burn, 1932).

Colloids

Another popular group of preparations advertised in the *Bulletin* were colloidal forms of elements, an area in which Crookes Laboratories were particularly active. The basis for their use seems to have been twofold. Firstly, it was believed that since the body tissues and vital functions are almost entirely of a colloidal nature, they are therefore more likely to respond to treatment with colloidal substances (*British Pharmaceutical Codex*, 1934). The weakness of this hypothesis had already been exposed by Sir W.M. Bayliss who was quoted in the *Extra Pharmacopoeia* in

Figure 1 Harry Furniss. Pictorial advertisement published in *The Album*, 4 March 1895, reproducing the original published in *Punch*, 26 April 1884. (by courtesy of the Board of Trustees of the Victoria and Albert Museum).

1924 (18th edition) – ‘The fact that colloids are in the same physical state as some of the body constituents is of no significance. Many substances in the body, e.g., sugar, calcium and, above all, oxygen, are not in colloidal form. No good evidence has been produced that the chemical or pharmacological action of colloids differs from that of bodies in true solution, otherwise than in the matter of gradual slow effect’. The second basis for their use was ‘the fact that the smaller size of colloidal particles, in comparison with finely powdered substances, confers on them a greater surface area and therefore a greater activity’ (*British Pharmaceutical Codex*, 1934).

Two colloidal preparations are particularly interesting. Colossal selenium was advertised by Crookes Laboratories ‘for use in cases of inoperable carcinoma, etc’. A reference was given in the advertisement to a paper by Watson-Williams (1919) in which he reviewed previous reports by other authors of improvement in patients with inoperable cancer following intramuscular injections of selenium, and added 24 cases of his own. He claimed that in 19 cases he obtained beneficial results with reduction or disappearance of pain and tenderness, healing of ulcerated surfaces, reduction in size of tumour and metastases and improved patient well-being. He admitted,

Figure 2 Advertisement in the *Bulletin of the Fellowship of Medicine and Post-Graduate Medical Association*, Saturday 30th October, 1920.

however, that it was too early 'to pronounce finally on the value of this agent'. Perhaps the final verdict was to be given a few years later when Gillett and Wakely concluded that 'large doses spell disaster. Temporary improvement only can be expected' (*Extra Pharmacopoeia*, 1928).

Striking claims were also made for Collosol manganese, 'of proved value in septic conditions of the blood'. The advertisement referred to 'testimonials' published in the *British Medical Journal*, led by Sir Malcolm Morris, K.C.V.O. (1918) who described patients with carbuncle and impetigo who responded

dramatically to intramuscular injections of colloidal manganese. This paper was followed by a series of shorter letters and notes which appeared to confirm these claims in single or small groups of patients. A note of caution appeared, however, just five months after Morris's letter, from Dr James Gairdner (1918) Medical Officer of Health in Crieff, who pointed out that manganese was included among the poisonous metals in the new edition of 'Nomenclature of Diseases', and that, in his view, manganese, when injected or inhaled, was cumulative, with similar symptoms to lead, zinc and arsenic. The then manager of Crookes

Figure 3 Advertisement in the *Bulletin of the Fellowship of Medicine and Post-Graduate Medical Association*, 13th November, 1920.

Immunisation against Hay Fever

THE DEPARTMENT FOR THERAPEUTIC INOCULATION, ST. MARY'S HOSPITAL,
LONDON, W., prepares for supply to the Medical Profession, through the
agency of Messrs. Parke, Davis & Co.,

"POLLACCINE"

(Pollen Vaccine for Hay Fever)

to be administered subcutaneously for the production of immunity
to pollen toxin, both as a prophylactic and curative of hay fever.

A Hay Fever Reaction Outfit

is also supplied, which affords a means of determining

- (a) whether a patient is susceptible to pollen toxin.
- (b) the degree of such susceptibility.
- (c) the dosage of "Pollaccine" suited to any case.

New season Pollen Toxin and "Pollaccine," suitable for use up to the end
of 1921, are now supplied.

N.B. In very severe cases, prophylactic treatment should be commenced in the early winter; in milder
ones, later in the winter or even in spring may suffice.

Further particulars will be supplied on request by

PARKE, DAVIS & CO. 50-54, BEAK ST., LONDON, W.I.

Telegraphic and Cable Address: "CASCARA, LONDON." Telephone: REGENT 3260 (six lines).

Figure 4 Advertisement in the *Bulletin of the Fellowship of Medicine and Post-Graduate Medical Association*, 11th December, 1920.

Laboratories responded to this with claims for its apparent safety in short-term tests, but it was already clear that a problem existed, and dose recommendations in the next *Extra Pharmacopoeia* of 1924 emphasized the importance of careful observation of patients before giving large or repeated doses, and it was inevitable that manganese would eventually take its place alongside other heavy metals with respect to its toxicity. This episode was one of many which demonstrated the importance of long- as well as short-term toxicity and safety testing in animals and man.

Vaccines

A glance at the advertisements from Parke, Davis &

Co. for their bacterial vaccines 'prepared in the Department for Therapeutic Inoculation, St Mary's Hospital, London, W. Director: Sir A. E. Wright, K.B.E., C.B., M.D., F.R.S. etc.', reminds us of the enormous contribution that the unit at St Mary's Hospital was making in this field of therapeutics at that time. A close and fruitful link had been developed between the company and the unit, no doubt to their mutual advantage, and this must represent one of the earliest examples of such collaboration between industry and academic research departments. One advertisement (Figure 4) described 'a hay fever reaction outfit' which provided diagnostic help to determine patient susceptibility to a 'pollen toxin' and a vaccine ('Pollaccine') which was claimed to be 'suited to any case'. There was a wide variety of bacterial vaccines

promoted in the advertisements, including those against actinomycosis, streptococci, staphylococci, typhoid and paratyphoid, Bordet's bacilli (whooping cough), diphtheria, gonococcus, pneumococcus, tubercle and melitensis. Advertisements for anti-catarrh vaccine, anti-influenza vaccine and mixed vaccine for colds are a reminder that the non-bacterial viral nature of these conditions had not yet been recognized.

Warning by advertisements

The recognition by the pharmaceutical industry of its responsibilities to warn prescribers of the dangers of its products did not have to await the setting up of the Committee on Safety of Medicines or the Food and Drug Administration. Some companies have a long record of such a responsible attitude. Parke, Davis & Co. took a full page advertisement in the *Bulletin* of August 7th, 1920 to draw attention to contraindications to the use of its product Pituitrin in obstetrics. After quoting from a number of obstetric authorities, the advertisement says 'While the use of Pituitrin in obstetrics furnishes the most dramatic evidence of the great potency of this product of internal secretion . . . we have never concealed or minimised the fact that in certain conditions . . . its employment is attended with danger'.

Brand versus generic prescribing

One of the ways by which the pharmaceutical industry is trying to overcome the problem of increased generic prescribing is by advising the doctor to specify the

manufacturer's name after writing the approved drug name. This is not a new ploy! In October, 1920, Parke, Davis & Co. put a full-page advertisement in the *Bulletin* for Syrup Cocillana Compound. It is of interest in several ways. Firstly, it emphasizes the importance, not only of bronchodilatation, but also of reducing mucosal hyperaemia, dislodging indurated mucus and relieving dyspnoea, in patients with asthma and bronchitis. More controversial is its claim that 'regular action of the bowels . . . is particularly desirable in catarrhal conditions of the respiratory tract'. This syrup contained, of course, a mixture of several drugs, including diamorphine, cascara and menthol, together with some emetic-type expectorants such as cocillana and squill, and mild sedatives and antispasmodics such as wild lettuce and euphorbia pilulifera. At the foot of the advertisement is the instruction to prescribers 'Please specify "P., D. & Co."'!

Conclusion

The products have changed beyond recognition over 60 years, and most of today's advertisements are in glossy colour produced by highly-skilled professional agencies.

Some advertisements today have little useful informational content when compared with some published 60 years ago, which surely reflects poorly on the decision making processes of many prescribing doctors. On the other hand, we have many sources of impartial information on drugs and medicines available to us. Future medical historians will, no doubt, comment on the extent to which our prescribing practice is influenced by one rather than the other.

References

- British Pharmaceutical Codex* (1934) Pharmaceutical Society of Great Britain.
- BURN, J.H. (1932). In *Recent Advances in Materia Medica*. Churchill: London.
- DUKES, M.N.G. (1963). In *Patent Medicines and Autotherapy in Society*. Pasmans: The Hague.
- Extra Pharmacopoeia* (1920) 17th ed. Pharmaceutical Society of Great Britain.
- Extra Pharmacopoeia* (1924) 18th ed. Pharmaceutical Society of Great Britain.
- Extra Pharmacopoeia* (1928) 19th ed. Pharmaceutical Society of Great Britain.
- GAIRDNER, J. (1918). Manganese a poison. *British Medical Journal*, 2, 364.
- MOINET, F.W. (1880). In *Note-book of Materia Medica*, 4th ed. Scoresby-Jackson, R.E. (ed). Machlachlan and Stewart: Edinburgh.
- MORRIS, M. (1918). The treatment of furunculosis and other deep-seated coccogenic infections by collosol manganese. *British Medical Journal*, 1, 446.
- SUTPHEN, D. (1968). *The Mad Old Ads*. W.H. Allen: London.
- WADE, O.L. & BEELEY, L. (1976) *Adverse reaction to drugs*, 2nd ed. Heinemann Medical Books: London.
- WATSON-WILLIAMS, E. (1919). Preliminary note on the treatment of inoperable carcinoma with selenium. *British Medical Journal*, 2, 463.
- WORSTER-DROUGHT, C. (1923). Atophan poisoning. *British Medical Journal*, 1, 148.