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Without Prescription

New American Remedy.

Without Prescription

a study of the role of Self Medication

Office of Health Economics

162 Regent Street London W1

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For previous papers see page 32.

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A previous advertisement by The Carbolic Smoke Ball Co. offered to pay £100 to any one who contracted influenza after using their carbolic smoke ball for a fortnight. A Mrs Carlill contracted influenza after using the smoke ball for a fortnight and successfully sued the company for £100.
(*Carlill v. Carbolic Smoke Ball Co.*) 1 QB 1893.

Without Prescription

INTRODUCTION

THE total expenditure on medicines in the United Kingdom in 1966 was £267 million. Of this £188 million was for medicines prescribed on the National Health Service. The other £79 million was spent by the public mainly for medicines bought without a doctor's prescription. Thus self treatment still forms an important aspect of medical care, although in terms of cost it accounts for less than half per cent of total consumer expenditure.[1] (Fig. 1).

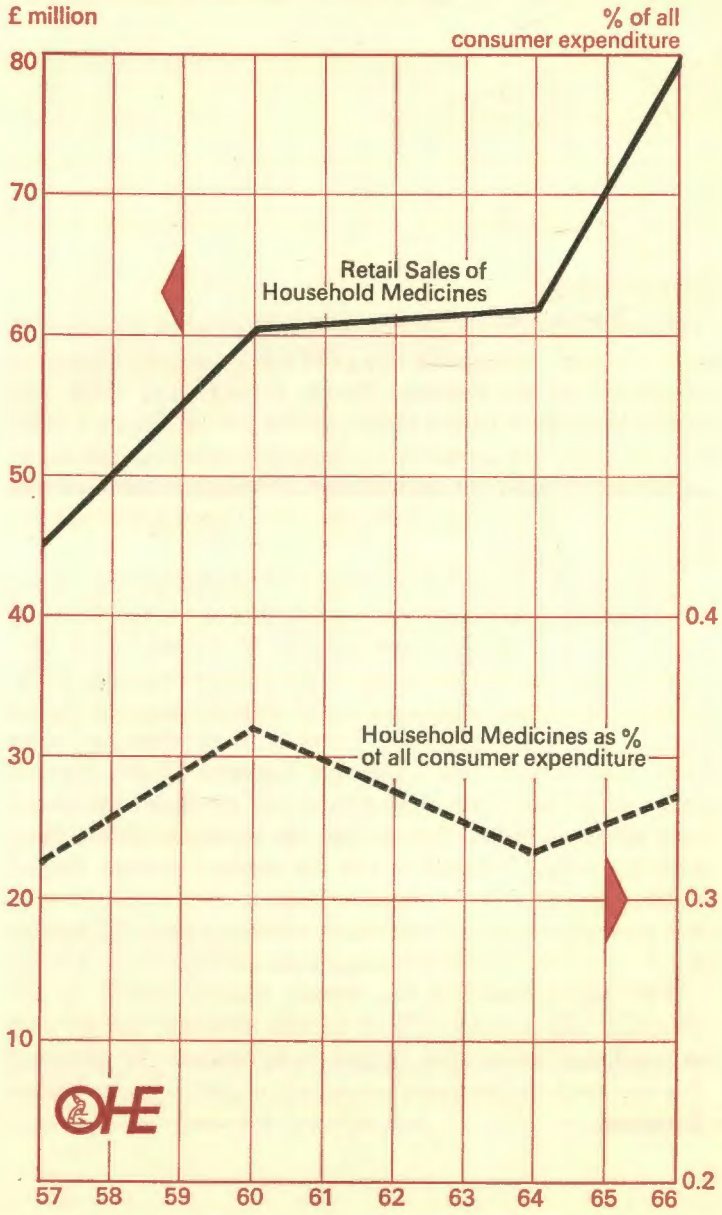
The extent of private purchases of medicines may seem surprising in a situation where medicines are available to all either free or at nominal cost under the National Health Service. Indeed the manufacturers of proprietary remedies themselves believed that their sales would dwindle once the Health Service had been established. However, even when medicines have been entirely free under the National Health Service, many people still have preferred to pay for their own household remedies rather than to visit the doctor to obtain them without charge. Whereas it was the original concept that all sickness should come within the scope of the Health Service, it is now acknowledged that much treatment must fall outside it.

This paper considers the human reasons leading to self treatment, the common type of diseases involved, and the ways in which they are treated. It goes on to consider the impact of this approach on the overall standards of health in the United Kingdom.

FIGURE 1

Household Expenditure on Medicine UK 1957 to 1966.

Sources: Derived from Family Expenditure Survey,
Annual Abstract of Statistics,
National Income & Expenditure. Various years.



A subjective measurement of ill health is the normal starting point in assessing its prevalence. A study in Bermondsey and Southwark during 1966 indicated that about only one third of the population believed their health to have been perfect during the previous fourteen days.[2] The rest were equally divided between those who felt their health was good and those who felt it had been no more than fair or poor. Women more frequently reported poor health than men and there was also, as might be expected, a decline with increasing age in the favourable assessment of health. (Table A).

TABLE A

Self assessment of state of health.

Source: Wadsworth, M. E. J., Butterfield, W. J. H. and Blaney, R. (1968) In press.

Self Assessment	*21–30*		*31–40*		*41–50*		*51–60*		*61–70*		*70+*		*All ages*	
	m. %	*f.* %	*m.* %	*f.* %	*m.* %	*f.* %	*m.* %	*f.* %	*m.* %	*f.* %	*m.* %	*f.* %	*m.* %	*f.* %
Perfect	50	51	39	41	40	33	29	35	26	28	30	19	36	34
Good	33	28	39	31	37	34	39	30	35	34	23	41	36	33
Fair	13	17	19	19	19	24	19	23	27	26	25	25	19	23
Poor	3	4	2	8	4	9	13	10	12	10	20	14	8	9
Unknown	1	0	1	1	0	0	0	2	0	2	2	1	1	1
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100

When probed in relation to specific ailments, those interviewed could recall an even greater degree of deviation from complete well being. 95 per cent reported some health complaints over the last fourteen days. The greatest percentages of complaints were related to the respiratory system (26 per cent), mental problems (21 per cent), bones and organs of movement (15 per cent), and the digestive system (11 per cent). (Table B). The Survey of Sickness undertaken by the Government in 1951 indicated rather lower figures perhaps due to differences in method. 75 per cent of women and 67 per cent of men interviewed reported that they had been suffering from some symptom during the previous month.[3]

FIGURE 2

Relative proportion of illness: (a) seen in hospital; (b) seen by the general practitioner; (c) not seen by any of the medical services.

Source: Horder, J. and Horder, E. (1954). *The Practitioner*, 173.

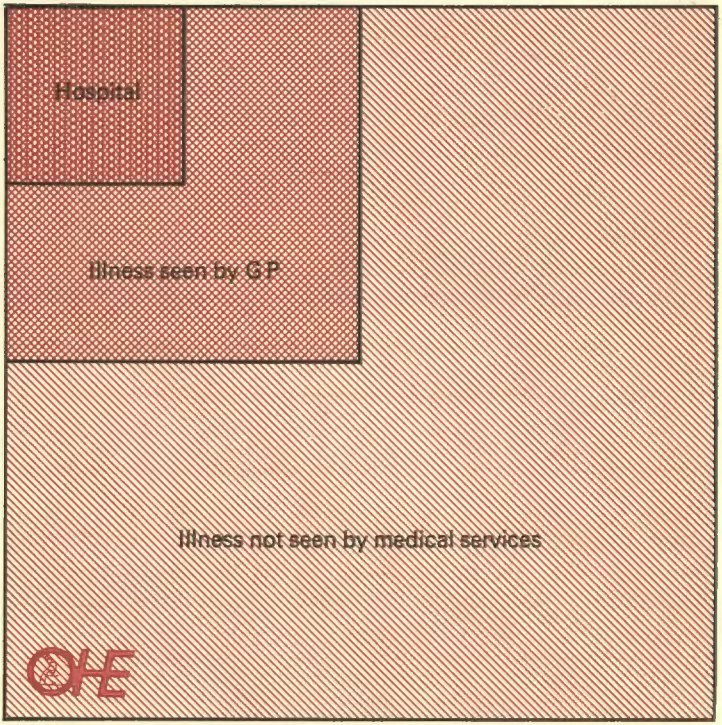


TABLE B

Nature of complaint and extent of self treatment. Bermondsey and Southwark.

Source: Wadsworth, M. E. J., Butterfield, W. J. H. and Blaney, R. (1968) In press.

Disease Category	*Proportion of population suffering from disease in this category* %	*Proportion of Sufferers who had never taken these complaints to the Doctor* %
Respiratory system	26	63
Mental, psychoneurotic and personality	21	80
Bones and organs of movement	15	61
Digestive system	11	78
Nervous system and sense organs	8	59
Skin and Cellular Tissue	5	73
Circulatory system	4	58
Accidents	3	78
Other	6	47

Much of this ill health does not reach the medical profession. In Peckham in the 1930s, less than a third of those conscious of symptoms were in fact receiving medical attention.[4] Less than a quarter of those complaining of some illness in the Survey of Sickness had attended a doctor for treatment of this complaint. A study by Horder and Horder[5] of an urban general practice found that only one third of illnesses reached any medical agency; this figure was also established by the Bermondsey and Southwark Study[2] (1967) (Table B). All these studies confirm a pattern in which the individual has a central role in matters of his own health, calling on professional advice only in certain instances and often at a late stage.

The concept that only a small proportion of morbidity reaches the medical profession has been illustrated diagrammatically by Horder and Horder (Fig. 2). It was quantified

by White, Williams and Greenberg, on the basis of data collected both in the United States and Britain, who estimated the selective process as follows—for an adult population of 1000 patients, 750 were likely to report one or more illnesses per month, 250 would be likely to consult their GP, and nine patients would be likely to be admitted to hospital.[6]

What is regarded as ill health varies from community to community and individual to individual. 'The demand for medical care in modern society depends not only on economic factors, but prevailing concepts of health and disease, and on what we think is expected of us in our various roles by our fellows, the family, at work and in all our social relations. To the individual the sensation of pain or stress is in part compounded of his perception of it, and perception depends on a host of factors.'[7]

It is a personal decision as to whether one is suffering from a symptom, and if so whether it is significant, and whether to undertake treatment, either by oneself or under the guidance of a professional. 'Symptoms may be differently perceived, evaluated and acted (or not acted) upon by different kinds of people. Whether by reason of early experience with illness, differential training in respect of symptoms, or whatever, some persons will make light of symptoms, shrug them off and avoid seeking medical care. Others will respond to the slightest twinges of pain or discomfort by quickly seeking such medical care as is available.'[8] Variations in response to symptoms are more likely to occur with illnesses of doubtful severity than at the extremes of trivial and of very severe symptoms. Thus most people would treat themselves for a transient sore throat. On the other hand most would call in the doctor for a severe case of bronchitis. Behavioural variations would be more likely to occur over a heavy and persistent cold.

The general type of complaints treated by the individual rather than the doctor has been indicated by several studies. It includes worry, nervousness and headaches, respiratory complaints and 'tummy troubles'.[9] (Tables B and C). Some of these complaints are also the ailments regarded by doctors as suitable for self medication.[10] (Table D). Others might well be early symptoms of serious disease and for many years both doctors and the proprietary industry have urged individuals with these symptoms to consult their general practitioner.

TABLE C

Proportion of adult reported illnesses for which a general practitioner had been consulted, by selected disease categories.

Source: Brotherston, J. H. F. (1958) in *Recent Studies in Epidemiology*, ed. Pemberton, J. and Willard, H. Oxford.

Diseases experienced for which less than half had consulted their Doctor	*Diseases experienced for which one-half to two-thirds had consulted their Doctor*	*Diseases experienced for which over two-thirds had consulted their Doctor*
Worry, Depression, Undue Irritability	Obesity	Tuberculosis
Refractive Errors, Eye-strain	Nerves	Anaemia
Colds	Blood Pressure	Mental, Psychoneurosis, Personality Disorders
	Varicose Veins	Ear Diseases and Symptoms
Diarrhoea, Vomiting, Gastro-Enteritis	Piles	Heart Diseases and Troubles
Cough	Catarrh	Tonsilitis, Sore Throat
Constipation	Disorders of Menstruation	Bronchitis
Corns, Callositics	Dermatitis, Eczema, Pruritis, Itches	Asthma
Bunions, Flat Foot, Other Foot Troubles	Rheumatism	Ulcers of Stomach, Duodenum
Dizziness, Tiredness, Palpitations		Diseases and Symptoms Referable to Urinary System
Headaches		
Sleeplessness	Accidents	Menopausal Symptoms
Breathlessness	Vague Aches and Pains	Other Diseases of Womb and Female Genital Organs
Backache		Boils, Cellulitis and other Diseases of the Skin
Swollen Ankles, Swollen Glands, etc.		Arthritis
Pains in Chest, Nose Bleeds		Synovitis, Slipped Disc and Other Diseases of Bone
Indigestion, Heartburn		
Painful and Swollen Limbs and Joints		

FIGURE 3

Proportion taking any type of medicine and proportion taking prescribed medicines, by sex and age.

Source: Jefferys, M., Brotherston, J. M. F. and Cartwright, A. (1960) *Brit. J. Prev. Soc. Med.* 14.

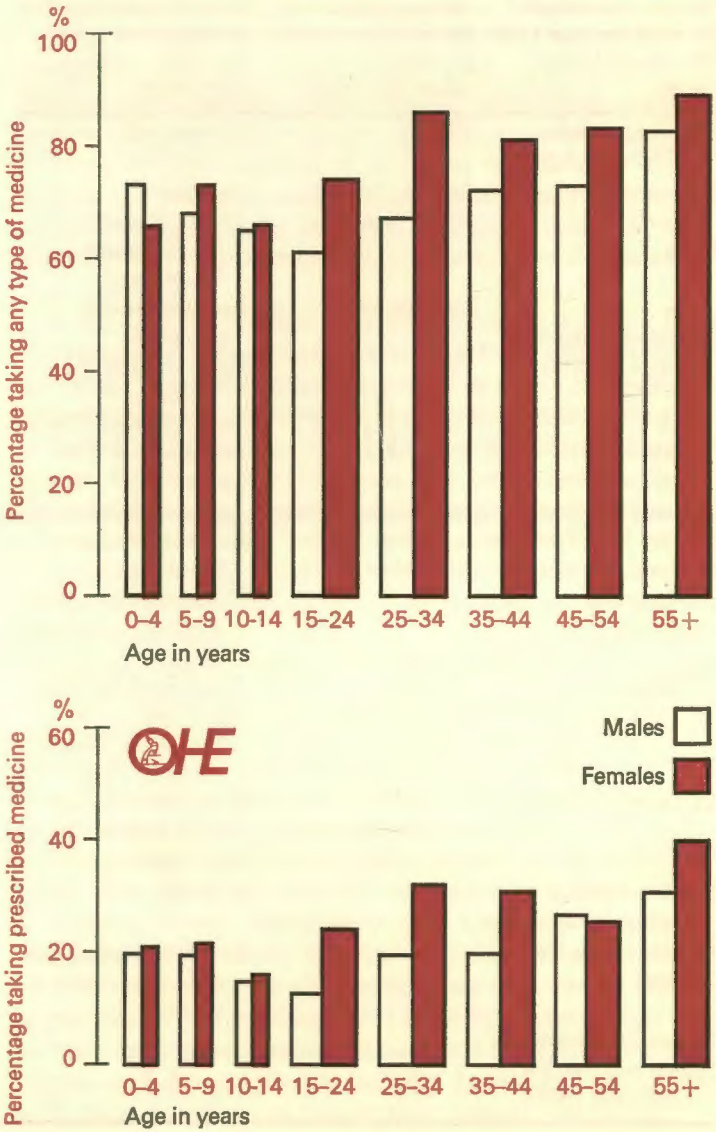


TABLE D

Ailments doctors believe suitable for self medication.

(Q. 'For which minor ailments do you consider that patients should medicate themselves, using products obtained from the chemist but without advice from their GP?')

Source: Market Investigations Ltd. (1966). Private Communication.

Ailment	% *of doctors mentioning specific ailment*
Coughs, Colds, Sore Throats	99
Minor ailments	37
Headaches	23
Aches and pains/Rheumatism	21
Constipation	20
Gastric disorders	19
Influenza	8

Jefferys, Brotherston and Cartwright (1960) in their study of a post-war housing estate in South West Hertfordshire examined the extent of medication amongst the population.[11] They found that about one quarter of the individuals in the sample had taken prescribed medicine during the four weeks between the two interviews. The proportion of individuals who had taken or used some medicine which they had obtained without a doctor's prescription was very much greater; it amounted to about two out of every three individuals (Fig. 3). Four out of ten adults had taken some form of aspirin or pain-relieving powder without prescription; the corresponding proportion of children was two out of ten. A quarter of the children had been given laxatives during this time but apparently none were prescribed. Other medicines which were fairly frequently given to children without prescription were throat and cough medicines or sweets. Adults took laxatives rather less frequently than the children but they took more health salts and indigestion remedies.

Wadsworth, Butterfield and Blaney in their study of Bermondsey and Southwark also found that a wide range of preparations were in use. Of the medicines, analgesics were taken by the greatest proportion of respondents (38 per cent), followed by skin preparations, lower respiratory preparations and antacids. (Table E). For every medicine prescribed by the doctor, two others were purchased without prescription by the

FIGURE 4

Drugs taken in previous two days, Adults. 3 selected countries.

Source: Logan, R. F. L. Private Communication.

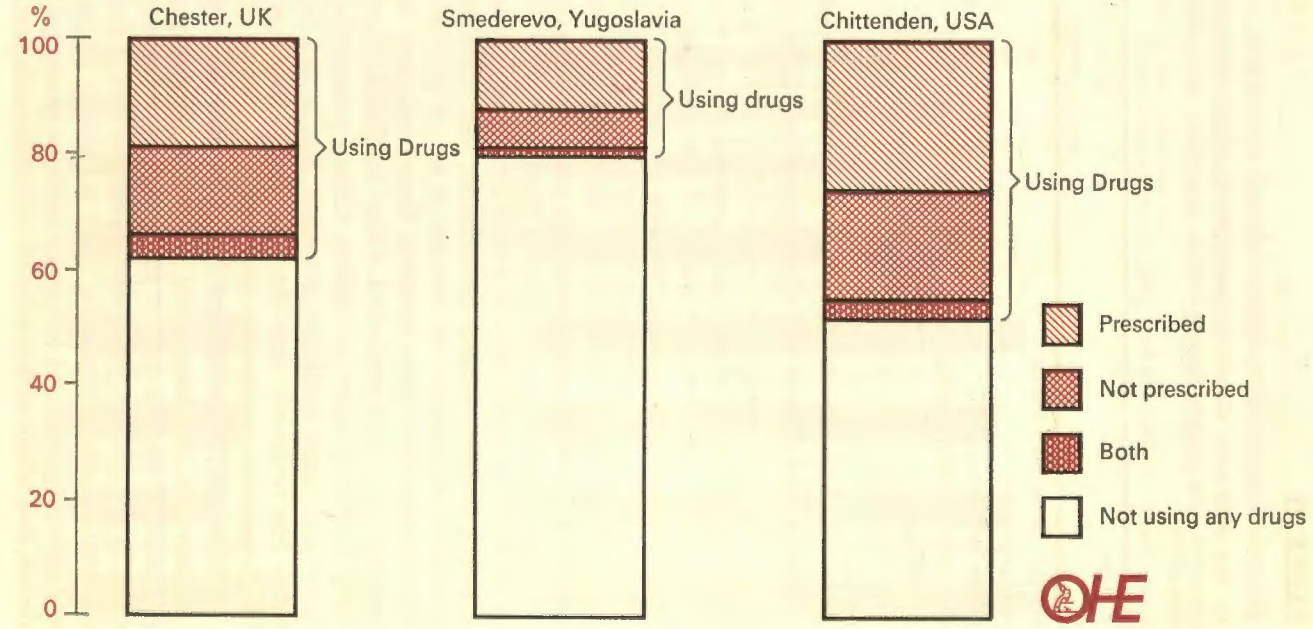


TABLE E

Medicines taken in previous fortnight and percentage taken without a doctor's prescription.
Bermondsey and Southwark.

Source: Wadsworth, M. E. J., Butterfield, W. J. H. and Blaney, R. (1968) In press.

Type of medicine	*% of population taking it*	*% not prescribed*
Analgesics	38	87
Skin medicines	20	77
Appliances	15	50
Lower respiratory medicines	13	58
Antacids	12	89
Counter irritants	11	76
Tonics and Vitamin preparations	11	57
Salts	11	96
Laxatives and Purgatives	9	69
Upper respiratory medicines	5	68
Ear and Eye medicines	4	47
Sedatives	4	9
Antibiotics	3	5
Heart, urinary and kidney medicines	3	0

TABLE F

Medicines doctors believe suitable for self medication.

(Q. 'What types of medicine, if any, do you regard as suitable for self medication?')
Source: Market Investigations Ltd. (1965). Private Communication.

Medicine	*Proportion of doctors mentioning specified medicine*
Aspirin	50
Indigestion remedies	30
Cough medicine	27
Laxatives	27
Analgesics	25

respondent or some other lay person. 96 per cent of salts taken, 89 per cent of antacids, 87 per cent of analgesics and 76 per cent of counter-irritants were not prescribed by the doctor. Conversely, nearly all the sedatives and antibiotics were prescribed by the doctor (as most have to be by law). Again there is a good correlation between these medicines and the types of medicine which doctors feel are suitable for self medication.[10] (Table F).

TABLE G

Public Abuses of the Health Service, Survey of Doctors.

(Q. 'In your experience do patients abuse the National Health Service? [If yes] What would you say are the main abuses?')

Source: OHE research (1967).

Abuse	% *doctors mentioning*
Calling at surgery for trivialities	53
Calling doctor to home when fit to go to surgery	24
Getting trivialities on prescription	18
Trying to get off work when fit	16
Calling doctor unnecessarily late in day	10

A recent international collaborative study has drawn some interesting comparisons. The use of medicines both prescribed and purchased independently varies considerably between countries.[12] Thus 38 per cent of adults in Chester had used a medicine in the last two days compared with 19 per cent in Smederevo, Yugoslavia and 48 per cent in Chittenden, Vermont, USA (Fig. 4).

THE ROLE OF SELF MEDICATION

The fact that two out of every three ailments suffered by the population are probably not taken to the doctor might seem, at first sight, to be an alarming state of affairs. It is, however, impossible for the whole area of personal medication ever to come under the influence of the doctor. If everyone visited the GP every time a minor ailment occurred, the system would collapse under the additional work load. In view of this, research was undertaken by OHE to throw further light on the role and practice of self medication. This showed that doctors believe one major public abuse of the National Health Service is that too many minor ailments are taken to them (Table G) and, that, amongst other things, the public should be educated to know when to visit the doctor. (Table H).

There are cases where self treatment is obviously sensible. A nettle rash, splinters, some minor burns, or a small cut, provided it heals quickly, can all be readily dealt with by most people if any treatment at all is felt to be necessary. These

TABLE H

Solutions to public abuses of Health Service, Survey of Doctors.

(Q. 'What if anything do you think can be done about these [patient abuses]?')
Source: OHE research (1967).

Solution	% *doctors mentioning*
Make token charge for doctors visit	32
Educate public on when to visit doctor	22
Bring back prescription fees	17
Doctors should be firmer with patients	10
Make sickness benefits less attractive	5
Charge for prescriptions for sleeping pills, cough mixture, etc.	5

TABLE I

Action taken when have a cold, Survey of Public.

(Q. 'What, if anything, do you do if you feel a cold coming on?')
Source: OHE research (1967).

Action	% *taking it*
Take tablets, powders	58
Ignore it	25
Take hot drinks	15
Go to bed	15
Take spirits	7
Stay home in warm	5

are the results of small accidents but minor virus infections or stomach upsets can be regarded in the same way. Another OHE study showed that only one person in a hundred goes to their General Practitioner when they have a cold. Most people turn to proprietary medicines, take home remedies or just ignore the condition. (Table I).

People also have personal rules for remaining healthy and resisting the onset of disease. These rules, which may of course be more believed than acted upon, involve fresh air, cleanliness, exercise, diet and regular bowel action. (Table J).

Thus it is possible to identify a 'logical' process in medical care. In order to remain healthy each individual develops a

TABLE J

Rules for Health regarded as very important or quite important, Survey of Public.

(Q. 'I have here a series of rules which are sometimes mentioned as being important for keeping healthy. Will you tell me whether you think each of these is very important, quite important, possibly important, important?')
Source: OHE research (1967).

		SEX		*AGE*			
	All %	*Men* %	*Women* %	*16–24* %	*25–34* %	*35–44* %	*45–64* %
Do not burn the candle at both ends	77	73	82	63	71	79	86
Take plenty of exercise	89	87	90	87	90	89	89
Stay away from work if off colour	39	35	43	38	35	36	42
Eat a varied diet	85	80	89	78	87	85	87
Have baths regularly	93	91	96	94	95	95	93
Make sure your bowels open regularly	96	94	97	96	94	96	96
Have a good hobby so as to relax from work	80	80	79	79	79	80	81
Sleep with the bedroom window open	80	77	84	71	81	81	84
Don't go out immediately after a bath	46	43	49	43	40	43	52

set of personal rules. When he suspects signs of ill health he takes preventive and remedial action, mainly with the help of proprietary products. In most cases the General Practitioner is brought in only when the onset of severe symptoms is very rapid or after a period of time when noticeable symptoms remain or increase in severity.

In trying to assess the economic load required for medical care and the best use of skills and productivity, we need to know the absolute significance of personal treatment upon health, as well as its relative position vis-à-vis other medical procedures. Does it result in the continuance of even extension of minor disease over a long period of time, and does it lead to

the development of serious complications which could otherwise be avoided? The key issue must concern the early diagnosis of serious disease. In genuinely minor ailments the individual benefits by making his own life as comfortable as possible, for example, when he has a cold. The problem emerges if self-medication leads to an irretrievable delay in bringing something more serious to the attention of the doctor. This presents a paradoxical situation to the doctor. A recent study among the medical profession which indicated that, on the one hand 74 per cent believed that home medication saved unnecessary work for doctors and 25 per cent that it gave patients confidence, whilst on the other hand, 57 per cent believed that serious conditions might be overlooked and 21 per cent that the patients lack of knowledge or their improper use of medicines might cause harm.[10]

However, it may well be that the paradox is based on false premises and can be relatively easily resolved. The study of a post-war housing estate by Jefferys, Brotherston and Cartwright indicated that on the whole 'self medication was not an alternative to GP consultation. Among those reporting a similar number of illnesses, those who took two or more self-prescribed medicines had higher GP consultation rates than those who took none or only one self-prescribed medicine. The majority of those who took medicines prescribed by the GP supplemented them with self-prescribed medicines.'[11] This view was supported by Kessel and Shepherd (1965) in a study of a middle class dormitory suburb of London.[13] However, the first results of a study by Logan and others have not confirmed this view.[12]

Mechanic has demonstrated that 'persons who reported high "stress" as measured by frequency of loneliness and nervousness were significantly more likely to use medical facilities than persons with lower stress.' Not only did high stress respondents use the Health Service more frequently, but it was found that they had a greater positive response to using medical facilities in various hypothetical situations which were put to them.[8]

Kessel and Shepherd have shown that 3 per cent of patients continuously registered in one General Practice during the first ten years of the National Health Service did not attend at all during that period.[13] These people were 'more often

men than women, they were as frequently old as young adults, they did not obtain medical care elsewhere, nor did they employ paramedical services or self medication more than recent attenders. The tendency was the other way; these resources were not used as alternatives to going to the doctor; non-attenders did not take a more limited view of the doctor's role but they were rather more critical of his services; they were not neglectful of their health and they rated lower for emotional disturbances than recent attenders; though they had possibly had less serious illness in the past, they had the same amount of recent trivial ailments but had managed these in most instances without going to the doctor; indeed it is doubtful if they accorded such conditions the status of illnesses. This attitude was reflected in their opinions about their health. They took a far more favourable view of this, past, present, and future, and worried less about it. They considered themselves healthy.'

It appears from these studies that people who self medicate tend equally to be the people who visit the doctor frequently. In consequence, the view that self treatment leads to delay in dealing with serious disease seems likely to be untrue. It seems that in most instances self treatment becomes complementary, rather than competitive, with professional medical care.

A case for the extension of self treatment has recently been argued by Cargill: 'We have, in fact, reached a compromise by which patients are allowed (indeed are sometimes encouraged and exhorted) to treat 'minor ailments' but are given no systematic instruction about which ailments really are minor, forbidden to buy the more efficacious drugs, and likely to be censured if they make a hash of things by mistaking a serious ailment for a minor one, especially if a child suffers harm as a result. Surely the time has come to adopt a more reasonable attitude to self treatment. We know that it goes on, and we know that the medical services would break down on the day it stopped. Why not give some authoritative instruction on how to carry it out and allow people to buy the necessary drugs themselves? Treatment could be on a strictly symptomatic basis. Instruction would be in the press, on television, and in very simple pamphlets issued with the drugs. I suggest that oxytetracycline tablets and syrup should be sold freely,

with a short simple instruction book. Oxytetracycline is preferred to other broad-spectrum antibiotics, because it is now the cheapest.

'Instructions might take the following form: "This drug can be taken for ear-ache, sore throat, cough with spit, yellow discharge from the nose, or painful redness of the skin. But consult your doctor if (1) the patient seems gravely ill; (2) the illness is not considerably improved by the morning after treatment has begun; (3) the illness is not quite cured after about three days; or (4) similar trouble occurs within three months. Treatment should be continued for four days, even if cure seems complete before then." There would be a note about expectant mothers, a dosage chart, and some detail about the various symptoms. Patients would be told, for instance, that a sore throat is not worth treating with this drug unless it causes pain on swallowing one's own saliva, and/or is accompanied by fever.'[14]

Without going as far as this, it can at least be recognised that self treatment is going to continue and should therefore be studied as an important aspect of medical care. In consequence, it should be made as effective as possible. People must be encouraged to select the most efficient remedy available for a particular ailment and they should be quite clear as to when they should visit the doctor. Many are already fairly sensible about this. They tend to visit the doctor if a complaint becomes worse or if it lasts longer than expected[15] (Table K). Similarly Cartwright has also shown that people can distinguish between the serious and the trivial.[16] (Table L).

It may well be there is even room for a 'front line' of medical auxiliaries who could sift patients with apparently minor symptoms of disease, passing those whose conditions gave rise for concern, and those with a recurrent or persistent symptom to the doctor, but dealing with the other cases themselves. This would have the advantage of reducing the doctor's general work-load and give him greater time to deal with more serious cases. By removing the General Practitioner to the 'second line' he would also be able to care for larger numbers of patients, thus seeing more cases of each type of serious disease. This in turn would improve his expertise in these areas.

TABLE K

Circumstances that would prompt a visit to the doctor for an ailment usually self treated.

(Q. 'Do you think there would be any circumstances when you would go to the doctor about any of these ailments? [if yes] What circumstances?')
Source: National Opinion Polls Ltd. (1965). Private Communication.

Circumstance	*Male* %	*Female* %	*Total* %
If need a medical certificate	18	9	13
If it became worse/more serious	43	47	45
If pain continued	14	13	14
If pain became worse	14	19	17
If I was running a temperature	14	17	16
If lasted longer than expected/didn't clear	30	31	31
If I kept having the complaint	12	13	13
Others	4	4	4
Would not visit doctor under any circumstances	22	18	20

TABLE L

Consultation about selected conditions.

Source: Cartwright, A. (1967). *Patients and their Doctors.* London.

Condition	*Percentage who thought they would consult their GP about condition*
A constant feeling of depression for about three weeks	54
Difficulty in sleeping at nights for about a week	45
Feeling tired for about four weeks for no particular reason	64
Dandruff	8
Loss of voice for three or four days	48
Boil on neck	41
A heavy cold with a sore throat, temperature and running nose for two days	49
Unusual bleeding or discharge (Women only)	96

Why, at present, do individuals choose to seek medical aid, to undertake self treatment, or to completely ignore symptoms of disease? Several theories have been advanced, and there is both qualitative and quantitative evidence on the subject.

Cargill suggested that scarcity is one of many factors dampening down demand for medical service. 'Medical care has to be rationed because there could never be enough doctors in the world for every person to have medical advice on each occasion that their patients suspect there may be something wrong with them. This rationing may be done strictly by price so that people with money get all the care they want and people without it get just enough to stop them starting a revolution. Or there may be a system like ours in which everyone is supposed to get all he wants but in which the amount and quality of service are subject to many influences, where those who shout loudest often get most. Within any of these systems many people ration themselves by applying their own treatment or ignoring the ailments which they judge to be minor.'[14]

In broader terms Rosenstock has indicated three basic criteria which lead to the modification of behaviour:

(1) The individual must be aware that there is a problem
(2) He must feel that it has serious consequences for him
(3) He must feel that there is some possible solution to the problem.[17]

Mechanic has made a similar study specifically in relation to ill health: 'A given illness may be regarded as having certain dimensions or characteristics more or less perceptible to the sick person and possibly to others in his social environment.' He suggests four dimensions which are of particular importance:

1. The frequency with which the illness occurs in a given population.
2. The familiarity of the symptoms to the individual or family concerned.
3. The relative predictability of the outcome of the illness.
4. The amount of threat and loss that is likely to result from the illness.

'The first two dimensions refer to the problem of illness recognition, the last two to the problem of illness danger.

When a particular symptomatology is both easily recognisable and relatively devoid of probable danger, it is routine illness. When a given symptomatology occurs less frequently in the population, it is more difficult to identify, and when this mystery then casts a shadow of danger, there is likely to be a greater sense of concern. The common cold, for example, as its name suggests, is both easily recognisable and relatively devoid of danger—at least initially. Hepatitis, on the other hand, is less often encountered by most persons and is more likely (and accurately) to be perceived as potentially dangerous.'[8]

Recently, the Office of Health Economics held a series of group discussions with members of the public in different parts of the country. The purpose of this qualitative work was to look in depth at the day to day influences which determined individuals' motivations. It confirmed that most people classify ill health into two categories; minor ailments and serious complaints. Minor ailments, which are usually dealt with by self treatment, are those types of ailments which produce symptoms so marginal that it is believed they will quickly disappear and that the best thing to do is to ignore them. Alternatively, symptoms may occur which are readily recognisable because they have been experienced by the individuals themselves previously or have been seen amongst their friends and family. Consequently, they know how to deal with them or are aware that in due course they will disappear. This understanding of the symptoms and the course an illness is likely to take is very important.

There was also the suggestion that illness, especially in its trivial form, may lead to a sense of guilt over the individual's inability to control his own physical functions. People feel they ought to be able to control minor symptoms of disease which present themselves as an irritant.

Many people said they did not visit the doctor for a 'repeat order'. Initially, the patient has visited the doctor over some symptom and a drug is prescribed. When the tablets run out or the illness reoccurs at a later stage, if it is possible to get a repeat order from the chemist without a prescription, the patient will often prefer to do this. Time is important to most people. The thought of a long spell in a crowded waiting-room inhibits many people from making a visit to their doctor.

However, the OHE research found that it was not only the individual's view on his ability to cope with an illness which influenced his decision whether or not to go to the doctor. The attitude of the doctor, either experienced or imagined, has a significant influence upon him. People often believe that an illness is so minor that they are wasting the doctor's time if they visit him. Others feel the doctor would be cross with them for drawing his attention to something so trivial and distracting his attention from those more seriously ill. He may be regarded as unsympathetic and come to be almost the refuge of the last resort.

In other instances it was acknowledged that the individual may still prefer to treat himself even if an ailment is recognised as more serious. It may be believed that the doctor cannot really help. Thus, many people regard rheumatism as a fairly serious illness, but one which it is believed the doctor cannot effectively treat, and so they just live with it. Alternatively, a disease may be regarded as fairly serious but one which although ever present does not produce too severe symptoms at any given time; many people see anaemia in this light.

Two other major issues emerged from the OHE qualitative research. Firstly there were personal issues which significantly influenced the individual's behaviour. Many people are inhibited from visiting the doctor by their belief in what will be the repercussions of this visit. People often have a fear of being laid off work and losing pay. Alternatively, housewives fear visiting the GP because there is no possibility of anyone looking after the children if they were told to go home to bed. Cartwright has indicated that when the head of the household is off sick and in hospital, nearly half had their normal income completely cut off.[18] As might be expected, the strain was greater the longer the time spent away from work and the proportion saying it was a serious financial strain increased from 17 per cent among those away from work for less than a month to 61 per cent among those away for more than six months.

Secondly, for some people, fear appears to be a major irrational factor influencing the decision whether or not to visit the doctor. Some see every minor symptom as the first sign of incurable disease, especially cancer. However, they do not necessarily respond by immediately going to the doctor. For some people these very fears hold them back, and they

try as best they can to ignore or alleviate the symptom themselves. Such an attitude often occurs amongst parents with a young family where there is a feeling that life cannot go on without them. Couples with young children have substantial financial commitments which could not be met if the husband died or was away from work for a long period. Children could not be cared for without their mother. Others of any age who believe they do not have long to live sometimes prefer not to have their own diagnosis confirmed or to engage in what they believe will be a painful and futile medical battle. Instead they prefer to put to different use the time they feel is left to them.

Some of these issues have been quantified. Brotherston has indicated that in 31 per cent of cases the reasons given for not consulting a GP in the case of illness over the last year or more was that the ailment was not felt to be serious enough.[9] In another 14 per cent of cases, doctors were not consulted because it was believed that there was no cure for the ailment or because people were too embarrassed or too frightened to seek advice. One in ten ailments were not medically treated because of the inconvenience of visiting the doctor.

Similar findings were obtained in a National Opinion Poll study in 1965 which examined why individuals treated themselves rather than going to the doctor.[15] (Table M). This latter study also demonstrated the overall pattern of reactions to an illness that does not suddenly present itself with great severity. One third went to the doctor immediately, but over half waited to see how the complaint developed or began treatment themselves. There was little variation with age. (Table N).

POLICY FOR THE FUTURE

'Self medication is part of the routine of living . . . Most people resort to occasional self medication. We all need to be able to relieve headaches, ease sore throats, counteract hangovers, disinfect boils or soothe insect bites without seeing a doctor.'[19] This statement made in a recent bulletin of the Consumer Association reflects an increasing recognition that self treatment plays a substantial and useful role in the overall pattern of medical care in this country. Self medication received explicit Government recognition in the 1967 White Paper on *Forthcoming Legislation on the Safety, Quality and Description of Drugs and Medicines.*

TABLE M

Reasons for not visiting the doctor.

(Q. 'Why did you treat this ailment yourself instead of going to the doctor?')
Source: National Opinion Polls Ltd. (1965). Private Communication.

Reason	*Proportion mentioning*
Complaint not serious enough	30
Don't like to bother doctor unless serious	24
No worse than had before	14
Too much bother to go to doctor	9
Doctor's remedies don't help/doctor cannot do more than I can	7
Was not running a temperature	2
Still have doctor's prescription for this	1

TABLE N

Reactions to onset of illness.

(Q. 'Did you go to the doctor as soon as your illness started or did you wait a while?')
Source: National Opinion Polls Ltd. (1965). Private Communication.

Reaction		*SEX*		*AGE*			
	All %	*Male* %	*Female* %	*18–34* %	*35–44* %	*45–54* %	*55–64* %
Went to doctor as soon as started	33	35	31	30	30	33	41
Waited for a while	26	24	28	26	25	28	24
Treated self	25	25	25	24	28	26	22
Other answers	12	11	12	16	12	9	8
No answer	4	5	4	4	5	4	5
	100	100	100	100	100	100	100

Nevertheless, self medication should only be applied in cases where it can be safe and effective. It has been shown that the decision to undertake self treatment, go to the doctor, or ignore symptoms of disease is usually a personal one. It may also be influenced by the variation in the level of pain thresholds for different individuals: those who feel most pain are more likely to seek medical treatment.

Because of these personal, and in medical terms often

irrelevant, bases for decisions concerning the type of medical care to be sought, it is important that people should be better educated to take the action most appropriate for each particular occasion. They must be made aware of the various symptoms of disease, be able to distinguish as far as possible between the trivial and the serious, and above all be taught to seek advice whenever in doubt.

There are many ways of promoting this situation. In the past, the medical profession has been hostile to self medication. In consequence, doctors have perhaps been unwilling to help the public to distinguish between serious and minor illness, tacitly assuming that all episodes of ill health should be brought to them. With the growing realisation that there are areas of medicine where self treatment can be effective and safe, a more constructive attitude may help to educate the public to take an increasingly sensible attitude both to ailments and to different proprietary products. Such developments in self medication were envisaged in the recent report of the *Royal Commission on Medical Education.*[20] 'When adequate arrangements for health education and prophylaxis have been established, the typical patient of the future—who will be better educated and better informed about health dangers—can be expected to take more responsibility for the management of trivial and self-limiting complaints, provided he is given the necessary encouragement and guidance by the medical profession: help in this respect may well be given in the course of normal schooling and in adult education.'

It is also important to maintain a high standard amongst the proprietary medicines on the market. The growth of the pharmaceutical industry and the virtual disappearance of the backroom manufacturer, together with strict voluntary and legal controls, has helped to ensure that products sold are both pure and safe. It is more difficult to ensure that all the products sold represent the most up-to-date knowledge of pharmaceutical and medical science. Many individuals persist in using the old, long established remedies representing level of knowledge and forms of treatment now discredited. Old habits die hard and new innovations are only cautiously accepted.

Advertising is sometimes criticised as having an adverse influence on public attitudes to the treatment of their own ailments. However, without advertising new medicines would

not become known to the public. This does occur in some countries which have imposed severe restrictions on pharmaceutical advertising to the public. These people tend to continue using traditional and perhaps ineffective remedies, unaware that more modern specifics are available to them. In this country the majority of the manufacturers of advertised medicine belong to the Proprietary Association of Great Britain (PAGB). These companies are required to submit all advertisements for inspection by the Association before publication. This is to ensure that advertisements are in accord with the voluntary Codes of Standards supported by the industry. These Codes are generally aimed at limiting the offer of products to conditions thought suitable for self medication and ensuring that statements in advertisements are medically correct. This is done by prohibiting all reference to a variety of serious conditions, insisting where necessary that medical evidence is submitted to support statements in advertising, and giving detailed guidance on matters such as references to doctors and hospitals, the use of testimonials, and the offer of samples. Nevertheless it is true that the very small firm using only local advertising may occasionally avoid this disciplinary machinery. However, the 1968 Medicines Bill includes measures which provide statutory control over advertising. Both the pharmaceutical industry and the government are concerned to ensure that the public are not misled by unjustified claims for proprietary medicines.

A problem still arises however, because on occasions it is difficult to establish the validity of particular advertising claims. Frequently doctors of considerable seniority and experience differ regarding the value and efficacy of products. On the one hand it is accepted that the 'placebo' effect, stimulated by advertising, is often a valuable phenomenon which yields real benefits beyond the purely scientific action of the medicine. Yet a more sceptical point of view is that all medicine is potentially harmful and to be avoided if at all possible, and certainly if the benefits are in the slightest doubt.

The pharmacist can play a substantial role, actively recommending well formulated and effective home remedies, and also advising his customers when to seek qualified medical advice. If he developed this role, the pharmacist would improve his professional status. The 1968 Medicines Bill

proposes to establish defined ranges of medicine that are suitable for self medication by the public which will be available from non-pharmaceutical establishments. These must include many effective medicines, so that if the pharmacist is to be able to offer superior treatment he must also be prepared to recommend and be allowed to sell more potent preparations, including some more generally used on a doctor's prescription.

Apart from the advice that may be given by a pharmacist, detailed and precise labelling of products used for self medication is essential. Properly labelled products serve as a permanent guide to the user and so play a positive role in the process of health education. Over the years companies in membership of PAGB have recognised the value of informative labelling by agreeing through that organisation to the adoption of clear cut instructions and cautionary statements regarding usage on labels.

Some aspects of medical care and treatment will always remain the responsibility of the individual. In the future, by encouraging the use of more effective medicines and by enhancing knowledge, the promotion of self medication should become a more valuable aid to health.

1. *Family Expenditure Survey for 1965* (1966), HMSO.
2. Private Communication from Wadsworth, M. E. J., Butterfield, W. J. H. and Blaney, R.
3. Logan, W. P. D. & Brooke, E. H. (1957) *The Survey of Sickness 1943–51*, London.
4. Pearce, G. H. and Crocker, L. H. (1943) *The Peckham Experiment*. London.
5. Horder, J. and Horder, E. (1954) *The Practitioner* 173.
6. White, K. L., Williams, T. F. and Greenberg, B. C. (1961) *New. Eng. J. Med.* 265.
7. Titmuss, R. M. (1958) *Essays on the Welfare State*. London.
8. Mechanic, D. (1962) *J. Chron. Dis.* 15.
9. Brotherston, J. H. F. (1958) in *Recent Studies in Epidemiology*, ed. Pemberton, J. and Willare, H. Oxford.
10. Private Communication from Market Investigations Ltd.
11. Jefferys, M., Brotherston, H. J. F. and Cartwright, A. (1960) *Brit. J. Prev. Soc. Med.* 14.
12. Private Communication from R. F. L. Logan.
13. Kessel, N. and Shepherd, M. (1965) *Medical Care* 3.
14. Cargill, D. (1967) *The Lancet* 1.
15. Private Communication from National Opinion Polls Ltd.
16. Cartwright, A. (1967) *Patients and their Doctors*. London.
17. Rosenstock, I. M. (1960) *Am. J. Pub. Hlth.*, 50, 295.
18. Cartwright, A. (1964) *Human Relations and Hospital Care*. London.
19. *Which* (1967), 335.
20. *Report of the Royal Commission on Medical Education* (1968). London.

The results given in Tables D, F to K, M and N are based on the following samples:

Table D:	National Clustered Random Sample of 200 General Practitioners.
Table F:	National Clustered Random Sample of 200 General Practitioners.
Tables G and H:	National Random Sample of 500 General Practitioners.
Tables I and J:	National Quota Sample of 2000 adults.
Tables K, M and N:	National Systematic Probability Sample of 2000 Adults.

Office of Health Economics

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