A STUDY OF THE POTENTIAL ROLE OF THE COMMUNITY PHARMACIST IN HEALTH PROMOTION

by

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Summary

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This thesis explores the role of the Community Pharmacist "the Chemist" in health promotion programmes. Both pharmacy and Health Education are in dynamic situations and this study examines their potential interface. The hypotheses are that Pharmacists are competent to offer health promotion advice and screening procedures, and that the public readily accepts these services.

Pharmacy practice has changed considerably and Pharmacists have become relatively "de-skilled" in the traditional role of dispensing and compounding medicines. The Pharmaceutical Society urges them to change their practice and to come "out front" to offer advice on the effective and safe use of medicines, and the public have been encouraged to seek such advice in a campaign mounted by the National Pharmaceutical Association. This thesis explores the ways in which this role may be extended to health promotion.

Human behaviour as a cause of disease is examined as are the strategies of health promotion. Public visibility of health education could be improved by its being associated with a profession which has ready access to the public. The accessible position of community pharmacies, the graduate status of pharmacists and their high standing in the community are examined; all these suggest that pharmacists are well placed to offer advice on better health.

Two projects are reported. One involved 25 pharmacies and explored a number of health education subjects including the detection of hypertension, for which pharmacists measured blood pressure. The second involved 110 pharmacies in an anti-smoking campaign, in which some pharmacists measured carbon-monoxide levels in exhaled breath. The uptake confirmed wide acceptance of such facilities and supported the hypotheses. The thesis concludes with a series of recommendations for change in the training and practice of pharmacists to reflect contemporary practice and meet the changing needs of society.

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CHAPTER ONE

INTRODUCTION

1. SELF HELP IS BETTER THAN CURE

Health education is a burgeoning industry. This was succinctly expressed recently in the columns of The Times by a visitor to New York who observed that there was now less danger from mugging in Central Park than injury from the massed joggers. And in Great Britain, too, a walk in an urban street in the early morning or after work is given heightened interest by the necessity of avoiding joggers, all of whom are dressed in ever smarter attire the manufacture of which must provide much employment. Our same walker will observe advertisements for marathons, aerobic classes and those for cigarettes will add that they can "Seriously damage your health." Better health will seem to be supplied in so called health food shops whose products carry the subliminal message that merely by eating them, good health will ensue. The increase in the number of such establishments is matched by the number of supermarkets that advertise the nutritional excellence of their products which "contain no added sugar or salt" and for bakery products from which "nothing is taken out".

Should the walker decide to have dinner in a restaurant[1] he will discover that in many he is not allowed to smoke at the table; nor may he in public places such as theatres and cinemas, although in the latter he will be allowed to indulge the habit in segregated areas, a sort of health apartheid.

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1. Except where the context excludes the possibility, all references to "his" should be taken to include "her".

A visit to the reference room of the local library and examination of "situations vacant" columns would reveal that this growth of awareness of better health is reflected in a plethora of posts for health education officers, health education research workers and employment in activist groups who concentrate on one aspect of health.[2.]

Contrast this situation with that of 20 years ago. Who then would have come home from work, and then run for five or ten miles before returning to eat a health conscious meal? Who would have thought it out of the ordinary to go to the theatre in anything other than a haze of smoke and coughing? Had ill health been the outcome of this way of life there would have been widespread belief that a visit to the doctor or hospital care would have resulted in cure. People now know that there is no "Pill for every ill," and are made conscious by recent campaigns not to expect medication every time they visit "the doctor" and of the huge costs of prescribing.

The message that "we can help ourselves" has been received by some

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2. The "professionalisation" of health education officers is shown by the formation of the Society of Health Education Officers in 1983. This was a merger of the Guild of Health Education Officers and the Scottish Association of Health Education Officers, which groups had existed for 10 or 20 years. The Society of Health Education Officers has a membership of 400 which is 75% of those working in the United Kingdom.

but not all, and many have adapted their lives accordingly. In this, as in many other aspects of health care, interest and awareness is inversely related to social class. More people in lower socio-economic groups continue to smoke (General Household Survey 1980)[3] to take less exercise and to eat inappropriate food (Acheson and Hagard, 1985 :78). O'Looney, 1984 : 89-94 shows this situation is widely known and accepted by the public and George Orwell noted in The Road to Wigan Pier that if your economic status is such that the only affordable pleasures are beer, cigarettes and sugar, then it is those you will obtain. The dissemination of the ideas of better health - whose success can as yet be measured only in the falling rate of increase of mortality from ischaemic heart disease and lung cancer[4] - can only be helpful although behaviour is only one of the causes for poor health (Blane, 1985 : 422-44).

People are better informed largely because of the mass media and especially television, which can reach huge audiences and

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3. This showed that while 56% of men in social class six (unskilled manual workers) continued to smoke only 22% of those in class one (professional and high managerial workers) did so. For women the figures are 42% in social class six and 20% in social class one.

4. For IHD the percentage increase in death rates fell from 16% in 1960-70 to 10% in 1970-80. For lung cancer, the percentage increase in the same period fell from 23% to 7%. Acheson AND HAGARD. 1985 :71

produces educational programmes of a high standard. Ian Kennedy's Reith lectures of 1972 (subsequently published as The Unmasking of Medicine - (1972) and programmes such as Horizon have propounded the philosophy of self help. With the discovery of antimicrobial agents it was understandable that people should believe that medicine could solve all their health problems. But 40 years later they continue to have many chronic illnesses most of which are caused by the behaviour patterns of an affluent society. The anti-health message continues to be promoted by massive advertising (£100 million was spent on smoking advertisements in 1981) by Government and EEC action (subsidies on high fat dairy foods) and by journalism which equates excellence with cost. An example of this was the Sunday Times which featured in its colour supplements in May and June 1985 a series of articles purporting to be "regional cooking", whose menus would have been unrecognisable to people living as recently as 40 years ago. All had large amounts of saturated fat, alcohol and sugar - a correspondent suggested that each menu should carry a public health warning! Society, which is expected to believe that a "regional soup" of Scotland is composed of avocadoes, limes and double cream is also persuaded that such meals cannot be consumed without the accompaniment of copious quantities of alcohol.

It is against this background that the health promotion message must be conducted - using publicity and political action (such as that which achieved a ban on smoking in the London Underground in 1984), - as well as attempts to change individual behaviour.

Health educators are concerned to engage the hearts and minds of those who have not yet been persuaded that one of the most significant effects they can have on their life chances is their own efforts. And this health message, on a small budget (the amount spent on all anti-smoking campaigns in 1981 was £1,5 million) must compete against the advertising campaigns conducted by rich cigarette and alcohol manufacturers, the dairy industry and the whole farming lobby.

One important way of improving the impact of health education would be to increase the numbers, visibility and accessibility to the public of those health professionals prepared to promote the message of better health, and to encourage them to offer advice opportunistically, eg anti-smoking advice when consulted for respiratory disorders.

This thesis examines the ways in which one of those groups - community pharmacists - may be encouraged to develop a role as disseminators of the messages of health promotion. The thesis examines public response to such initiatives by measuring the use made of health care advice and services. A study of pharmacy is of particular interest since the place of pharmacists in the medical division of labour is anomalous - they claim professional status, yet in hospitals work in bureaucratic organisations ; they claim independence in community practice and yet are paid by the state for dispensing activities. They have no monopoly of control and supply of medicines (i.e.those that are classified as "General Sales List" may be sold in supermarkets and prescribed

medicines may be dispensed by doctors in rural areas). However unlike any other health group, except for opticians, they may prescribe "over the counter" and this gives them independence of action and the ability to develop a role as advisors on health care which is the focus of this study.

The pharmacist's dual role of professional person and small businessman is a source of tension and yet may be a potentially fertile ground on which to develop the role of health educator. If the pharmacist is a good salesman that same selling technique may be used to promote the concept of better health. The education and training which pharmacists have received makes them well qualified to understand the concepts of health promotion and the changing nature of the practice of community pharmacy makes it likely that many will welcome this development of their role. The situation of pharmacies, in every shopping centre and high street, would appear to be ideal for the purpose of disseminating information. If unlimited money were available to purchase health promotion shops in which promotional and educational material were freely available, then there would be no better sites than these.

2. Pharmacy and Health Education

The author's career as a pharmacist has been largely in the hospital service , but includes a three year period in community practice. This has provided insight into the role of the pharmacist in each sector, and the author's present employment as a principal pharmacist responsible for the inservice training of

pharmacists in hospitals has increased awareness of the disparity in professional development between pharmacists in hospital and community practice. In the hospital service specialisation is such that one can make a career in drug information, quality control of medicines and other areas. hospital pharmacists are increasingly involved in the decisions about drug therapy - the initial prescribing, monitoring of side effects and patient counselling. This is partly due to the changes in formulation which have resulted in their traditional dispensing role being redundant, and the greater potency of medicines which necessitate closer monitoring. One of their strengths in developing these roles is that they work in hospitals alongside other members of a clinical team and are "on the spot" when clinical decisions which involve drug therapy are made.

The professional development of community pharmacists is "narrower" than that of their hospital colleagues. They are rarely asked, because of their isolated geographical situation, for advice on the initiation of therapy or to monitor its progress, but they have the opportunity to counsel each patient with prescribed medicines. They may also advise on appropriate treatment for minor illness although the latest Consumers Association Report (1985 : 351-354) suggests that such advice is not always volunteered. A survey was carried out in which 400 visits were made by 'patients' to pharmacies, to examine the advice offered. It was found that two thirds of enquiries about mild symptoms were dealt with by counter assistants, and on each

occasion a medicine was sold. For more serious symptoms, 'patients' requested to speak to pharmacists, who were nearly always readily available. Most pharmacists realised the potential seriousness of two of the alleged symptoms - headache and "indigestion" of long duration - and recommended seeing a doctor and most 'patients' were sold something. The Consumers Association regretted both that more 'patients' were not firmly "told" to see a doctor and that products were sold to them. It might be argued, however, that patients do not expect to be "told" what to do by pharmacists - they have sought only advice. From personal experience, it might be added that a refusal to sell to a patient often results in the person moving down the counter to purchase something - in other words, the decision to obtain instant relief has been reached before the consultation with the pharmacist.

Several studies (Eg Whitfield, 1968 : 434-8, Phelan & Jepson 1980, : 584-8, Consumer Council, 1973) have quantified the advice given by pharmacists for minor symptoms and others have examined the appropriateness and safety of that advice, and found them to be of a high order. (Elliott-Binns, 1973 : 255-264, Edwards J, 1975 : 238-40)

The development of this advisory role, both with prescribed medicines and minor complaints, is crucial if pharmacists are to keep abreast of the changing circumstances facing the profession which are discussed in Chapter Three below. These include the dispensing of more potent medicines, better informed customers who seek information on the potential dangers of therapy and the

potential increase in sales of medicines no longer obtainable on prescription, following recent legislation. It would seem but a short step for pharmacists to incorporate into their role the dispensation of advice on health promotion - for example to promote the usefulness of dietary fibre as well as selling laxatives - and support this with appropriate written and audio visual material.

There have been a number of studies of the advisory role of the pharmacist (as suggested above) but this advice-giving has always been as a response to symptoms described by the patient and has usually been coupled with selling an appropriate product, i.e. the advice has been reactive. An extension into proactive advice, i.e. determining the needs of people and providing them before specific requests are made (and without tangible results being envisaged such as sales of a particular product) has only rarely been investigated.[5] The West of Scotland branch of the Pharmaceutical Society of Great Britain mounted an anti-smoking project (Sneader, 1982 : 105) and their results were encouraging both with regard to the enthusiasm of the pharmacists and the willingness of the public to accept help.

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5. Sharpe (1977 : 280-2) proposed blood pressure measurement as a possible activity, and while Pilkington (1979 : 187-92) noted the public would welcome health education advice from the pharmacist Astill (N.P.A. in P.J. 1984 : 70-74) recognised that they do not expect such help and hence it must be clearly offered.

Another study (Edwards, 1981 : 674-6) assessed a blood pressure measuring service offered in the pharmacy and this too suggested that such a role development for the pharmacist would be beneficial for him and would meet a determined health need in the community.[6] Harris (1982 : 42-6) examined the determinants of the potential for health education advice in the pharmacy and suggested the best medium term strategy for realising the potential for such advice would be to mount a few campaigns of demonstrable success. This was effected by the Family Planning Association (Pauncefort 1985) in 734 pharmacies. Pharmacists were found competent to manage the role of advisor and, if the study had been fully developed on a national basis, two million leaflets would have been distributed and 500,000 enquiries answered. Their report urges that greater use should regularly be made of the pharmacist in health education campaigns.[7]

The author's awareness of this potential role development for community pharmacists has been heightened by membership of the West Midland Regional Advisory Group on Health Promotion, which looks at all aspects of health promotion and the ways in which they can

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6. The Protocol used in this thesis is based on that designed by Clive Edwards (see Appendix 2).

7. This has been put into practice (February 1986) by a national campaign, supported by the Pharmaceutical Society, the National Pharmaceutical Association and the Family Planning Association. Every pharmacy will be given health education material in a series of subject areas.

be activated. It was set up in 1979, to advise regional and district health authorities on relevant matters in the field of health promotion and to review the progress of health promotion across the region. It identifies health promotion issues where regional resources can be advantageously deployed and has an annual budget of £150,000 to support such enterprises. Multidisciplinary membership ensures that all health care professionals are made aware of the need to highlight the importance of health promotion and ensures its place in the NHS planning procedures. Most members of the Group are district officers (general managers,district administrators, health education officers) and there is also one dental representative and one from pharmacy.

The Regional Advisory Group works through a series of action groups, for example primary care, alcoholism, anti-smoking and one, a pharmacy action group, is composed mostly of community pharmacists. This group is chaired by the regional pharmaceutical officer with the expert help of a specialist in community medicine and two health education officers. At the inception of this group all were actively interested in promoting the role of the community pharmacist in health education but no clear plans were formulated. The author designed and wrote the submission for what became the small scale project described in Chapter 5 of this study and submitted it to the regional advisory group for research funding. The results form part of the empirical work of this thesis. The success of this study was such that further funding was made available to mount a large

scale anti-smoking project which together formed the empirical work (described in Chapter Five and Six). All the written material produced is the author's unless otherwise attributed, although several of the letters shown in appendices appear under other signatures (for example that of the chairman of the Regional Advisory Group). The intention was to give heightened authority and to encourage pharmacists to take part.

The arrangement of the Chapters of this thesis is as follows:

Chapter Two begins with a discussion of the development of professions in England and continues with a sociological examination of professions using trait analysis, functional analysis and an examination of the power relationship. This is followed by a brief account of the rise of pharmacy and the important developments in its recent history. An assessment is made of the professional role of pharmacists using the methods with which other professions have been analysed.

Chapter Three examines the role of the pharmacist in community practice, contractual arrangements with the NHS and the dual responsibility of the "professional" who is also a small businessman. The changes which have occurred in the recent past are explored and present day pharmacy practice is given heightened awareness by a small ethnographic study.

Chapter Four explores human behaviour as a cause of disease, the particular behaviours of greatest concern and determines the ways in which health promotion can work to eradicate some of the diseases of an affluent society.

Chapter Five describes the empirical work and is an account of a small scale study conducted in 25 pharmacies, as part of which customers had their blood pressure measured.

Chapter Six discusses the large scale project, an anti-smoking campaign in which pharmacists measured carbon monoxide levels in exhaled breath and counselled customers on ways of stopping smoking.

Chapter Seven, the conclusion, evaluates both the work which was undertaken and considers the organisation of future health promotion campaigns in pharmacies. Finally, recommendations are made for changes in pharmacy practice and education, to ensure pharmacists continue to meet the needs of the society they serve.

C H A P T E R T W O

THE PROFESSION OF PHARMACY

The first part of this chapter considers the development and role of the professions, from the central three of medicine, the law and the church in 18th century England to their full flowering in the Victorian era. The recent tendency to take a critical look at the professions' own evaluation of their role in society is examined. In the next section the three main types of sociological analysis of the professions are outlined. These analyses are then used to examine briefly the role of the pharmacist in contemporary society.

This is followed by a brief history of the practice of pharmacy in England from medieval times to the present day (including the numerous battles with the apothecaries) and the division which came between pharmacists and apothecaries with the founding of the Pharmaceutical Society. The most important developments for pharmacy from the Victorian Age to the present day are briefly outlined. Next, the professions four main segments are discussed. Community pharmacy is dealt with only briefly since this is the focus of Chapter Three. The chapter concludes with a discussion of the professional status of pharmacy in which some of the issues introduced in section Two, the sociological analysis of the professions, are drawn upon.

1. The Development of Professional Classes in England

In the 18th century, English society still drew most of its wealth directly from the land, and the possession of land was the route to the most important political, legal and social positions. The estate was there to support a family and to enable it to take its due place in society (Reader, 1966 : 4).

Connection with a landed family gave access both to private fortunes and to patronage which in turn offered access to the revenues of church and state. This patronage was part of life and continued so until the middle of the 19th century. Without it the range of occupations open to a young man of the upper classes was, before the industrial age, narrow - trade was beneath him, manufacturing was in its infancy, and so were science and technology. The occupations for which his education and upbringing most suited him were those of government or war, and next best were the "liberal professions" - divinity, physic and law. In this context "liberal" meant those with a liberal education (i.e. that of a gentleman) based firmly on the classics. To study Greek and Latin literature, along with mathematics, was not unreasonable when the general body of knowledge was fairly small, unchanging and manageable by a well trained mind. Against the prestige of liberal education, professional education scarcely existed. There was no organised body of knowledge which was taught for entry into the church, law or medicine and written examinations were unknown. The Church of England dominated the universities and was an essential

constituent of the state, co-terminous with the civil power. The clergyman might be poor but he was accepted everywhere as a gentleman - unlike doctors who were divided in three orders - physicians, surgeons, and apothecaries, of whom only the first were generally accepted as gentlemen.

The Royal College of Physicians accepted as Fellows only graduates of Oxford or Cambridge (neither of which gave any medical education). The policy was to take a first degree, study medicine elsewhere and return to receive a medical degree, without any further examination. Hence only members of the Church of England could become Fellows of the College.

The third liberal profession, the law, was also divided into an "upper" (the Bar) and a"lower" branch (attorneys and solicitors). Only the Bar had a claim to superior social standing, derived from the fundamental importance of the law in the constitution. The Inns of Court were supposed to be the places of legal education, but the intending barrister could learn law in other settings such as at university. Some barristers made fortunes, but many more did not and a more secure income was attained by attorneys in the "lower" branch. These liberal professions of the 18th century were the nucleus around which the professional classes of the 19th century were to form. Each had a classical education and broad, ill defined occupations which would develop into specialised areas of work. Two already had lower branches whose members were restive to remove such distinctions, since many did not come from "landed" backgrounds.

In the second half of the 19th century, the growing power of the urban middle class created conditions especially favourable for the development of "these occupations which by common consent are called professions" (Carr-Saunders & Wilson, 1933 : 3).

The Industrial Revolution created an enormous increasein the population of towns and cities and the consequent sense of rootlessness of people who for centuries had lived in rural communities, with the disciplines of church, landlord and feudal system which that imposed, was seen to be a great social danger. In the latter years of the 19th century, Durkheim (1957) suggested that this "anomie" might be alleviated by giving professional groups a stabilising function in the economic order, a view echoed by others who agreed that "the family, the church and the universities, certain associations and intellectuals, and above all the great professions stand like rocks agains which the waves (raised by these forces of instability) beat in vain." (Carr Saunders, 1933 : 497) The burgeoning middle class wanted to make wills, buy and sell property, they needed medical services to combat the diseases caused by overcrowding and quickly created a demand for "professional services." In such a situation unqualified and unscrupulous operators offered their services and there was every incentive for professionals to group together to form learned societies, to seek to set standards of practice, and to press the Goverment to grant professional recognition to those of "their own kind" and so to reduce charlatanism.

The first definitive study of this growth of professions from their core of "the true professions of divinity, law and physic" was undertaken by Carr Saunders and Wilson (1933 : 491) who observed that the development of a profession arose from a group of people who have a "specialised intellectual technique" coming together to form an association which organised formal education and set standards of competence and ethical behaviour for that discipline. Thus the competence of that group was subsequently acquired by an intellectual training - originally in a professional school but often taken over by a university - followed by a period of practical training. After this the professional might use the "special technique."

It was in the interest of the profession to seek from the state a monopoly of practice and that of the state to grant it if the special competence of the group was such as to be deemed "vital" and Carr Saunders and Wilson quoted as examples medicine, the law and pharmacy. Such monopolies when granted, usually made the professional society the "licensing body" of the group and it was required to keep a register of those who by examination were judged competent practitioners, monitor the technical and ethical standards of its members and punish or expel those who transgressed its standards.

The professional society then acted as an arm of the state in safeguarding the public from charlatans. The price that the state paid for such monitoring was that a "closed shop" existed in these areas of practice and each professional society

jealously guarded its sphere of monopoly. In Victorian England this price was worth paying in order to produce some order in a changing world. By allowing the professional societies to guarantee the standards of education and understanding among its members the state was protected from the effects of practice of unqualified people while the secondary effect was that many careers were created for the sons of the growing numbers of middle-class people.

This benevolent view of the professions and the need for a close relationship between the state and the profession lasted for many years - up to the 1960s - and in this period under the guise of "protecting the public" boundaries were placed around the traditional practice of each profession and both traditional and new specialist areas of practice were quickly subsumed under the hegemony of the dominant profession. For example, the Companies Act guaranteed employment to chartered accountants and the practice of midwifery was transformed into a medical specialist area. Greater consumer awareness in recent years has meant that the professions, and their relationship with the state, have been looked at more critically. What to the professions is a monopoly of practice for the good of society is, to anyone else, a closed shop, with consequent economic implications which are not in the interests of society.

The concept that the beneficial effects of professional associations (creating valuable human skills and reducing uncertainty) necessarily demand restrictions on competition was discounted by Lees (1966 : 22) who argued that the only

guaranteed gain was in the creation of monopoly practice for the professionals. The Monopolies Commission report on professional services was discussed in The Times (29th October 1970) whose corespondent noted that a number of the restrictive practices carried on by professional groups and justified on the basis of community welfare looked in fact "like arrangements for making life easier for practitioners at the expense, one way or another, of their clients." It is argued that the consumer interest is best served by ease of access to any offered service:

> "There must be enough of the professionals in question. They must be geographically well distributed. They must offer a wide range of skills. Cost must not be prohibitive. There must not be psychological barriers inhibiting the consumer from approaching the professional." (Slayton 1978.)

The problem is thatprofessional education makes such access more difficult, by the professional body determining the number of new entrants and setting the educational standards and length of training. High educational standards and limits on entry create greater prestige and rewards for the professionals and greater social distance between them and the consumer. High status professionals are also likely to be selective in where they wish to practice and are likely to choose more pleasant parts of the country, thus again denying access to consumers who have no such choice. A ban on advertising means the consumer has no means of comparing the cost of the service offered and the code of ethics appears rather as restrictive practice.

The average citizen needs professional help when he is in stressful situations, as when he is ill or involved in litigation or when spending large sums of money, and a society which is increasingly consumption-oriented expects to know the efficiency and cost of the services offered. The concept that professions deal with subjects so complicated that only they can understand is, it has been suggested, "all part of the flummery of a divided society" (Hattersley, 1984). Demarcation disputes which have all but been eliminated in the shipbuilding trade are alive and well in the practice of law and medicine! (It was noteworthy that during the prolonged legal debates on restrictive practices on Clydebank the case both for and against the union could be argued in court only by barristers although, as in many legal situations, the solicitors were in full possession of the facts. This particular legal restrictive practice was not felt worthy of discussion.)

The present government is antipathetic to all restrictive practices and the professions have not escaped their scrutiny, or its results. The restrictive practice giving solicitors the monopoly of the conveyancing of property, and that of opticians on the selling of spectacles have both been abolished. In the health service, the Griffiths report (1983 : 500) proposed the establishment of a general manager in each health region and district. This was accepted by the government so that traditional management of the NHS, which was by consensus decision from a team comprising a doctor, a nurse and an

administrator, has been abandoned. The general manager is now reponsible for all management and financial decisions and the role of medicine in decision making will be constrained within its ability to manage clinical budgets.

2. Trends in the Sociological Analysis of the Professions

The attainment of professional status, with the prize of monopoly of practice, is a goal which increasing numbers of occupations have sought to achieve and sociologists have concurrently attempted to comprehend both the ways in which they do so (professionalisation) and the inherent beliefs, values, and work ethic of those who have such recognition (professionalism). Such analyses may be divided into three broad groups;-

Trait analysis - The essential elements of professionalism are determined and aspiring groups are measured against the standard.

Functionalist analysis - The particular properties of professional behaviour are examined.

Analysis of the power perspective - The power a group has at its disposal is assessed as a measure of its effectiveness.

TRAIT ANALYSIS

This approach examines what society expects of those people who claim or are believed to have professional status, and the degree to which aspiring groups measure up to this expectation. The extension of this work on the concept of professionalisation was defined by Vollmer & Mills (1966 : VII-VIII) as the "dynamic

process whereby many occupations can be observed to change crucial characteristics in the direction of a profession." The inherent problem in analysing the professions by the traits they display is that no two lists of relevant "professional traits" agree. Further, some occupations generally recognised as professions do not possess certain of the characteristics (barristers for example do not necessarily receive a university training) while others who do comply with many of the characteristics are not generally accepted as professions.

The search for these "crucial characteristics" abounds in the literature - collated by Millerson (1964 : 15) into a list of 23 elements which have been proposed in the definition of "professions." No single item is accepted by <u>all</u> the authors who have attempted variously to define or abstract the essential elements of the "true profession" and in the case of nine of the 23 elements there is but one advocate (Johnson, 1972 : 23).
The most frequently mentioned traits are:

skill based on theoretical knowledge
the provision of education and training
testing the competence of members
organisation
adherence to a professional code of conduct
altruistic service

There are obvious dangers in evaluating professionalism by this counting of traits. Much of the literature on professions derives from historians, accountants, lawyers etc and their group

membership possibly determines the choice of items and bias (Millerson, 1964 : 15). Thus the "necessary characteristics" are presented with their own occupations in mind! Further, unless there is a clear definition of the relationship between the elements, tautology ensues. For example Greenwood (1957 : 44) in a very influential article proposed a model of an "ideal" profession to have five components;

A base of systematic theory

Authority recognised by the clientele of the professional group.

Broader community sanction and approval of this authority.

A code of ethics regulating relationships of professionals with clients and colleagues.

A professional culture sustained by formal professional associations.

The problem is that this characterisation is tautologous - the base of systematic theory is the source of professional authority, and the recognition by the client of this authority is in turn the basis for broader community sanction. In other words, they are not separate elements but depend upon the first. Further, the existence of a code of ethics may well be in the realm of pious hopes and public relations, rather than an indication that practitioners actually adhere to them. While such a code may well become the framework within which the professionals practice, it can also be seen as self justification for a monopolistic role.

A natural history of professionalisation (the steps through which

an occupation must go to become a profession) was proposed by Willensky (1964 : 142-6), as follows:

Full time activity at the task

Establishment of university training.

National professional association

Redefinition of the core task, so as to give the "dirty work" over to subordinates.

Conflict between the old timers and the new men who seek to upgrade the job.

Competition between the new occupation and neighbouring ones.

Political agitation in order to gain legal protection.

Code of ethics.

This sequence is however,time bound and culture specific. Many of these processes are going on simultaneously and the historical order differs between British and American professions (in the former, professional associations were usually formed before university training) and also for individual professions. Such a list also implies that having reached the desired state, effort to keep this status is no longer required; in reality re-definition of the preferred task, conflict among generations and segments within the profession and boundary encroachment by outsiders never cease.[1]

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1. For an illustration of this process in the solicitors branch of the legal profession, see Podmore (1980).

An example of this continuing ferment and change may be found in the profession of law, which has recently lost a significant battle in no longer having the monopoly of the conveyancing of property, whilst that of medicine has been presented with the possibility of limited prescribing for doctors.[2.]

Another criticism of the trait approach has been made by Goode (1969 : 194-200) who suggested that such lists do not separate the core "generating" traits from the "derivative" ones; he proposed for the former "a basic body of abstract knowledge and an ideal of service." His definition of "abstract knowledge" echoes that of Greenwood but he added to this that the profession itself should provide new research for the knowledge base, that it should be arbiter in any dispute over its technical skills, and that the knowledge should be great enough for the society to view the profession as having a "kind of mystery" not given to the ordinary man to acquire. However hard the professions try to retain this mystery it is hard to justify, in an era of consumer awareness when both in the media and by legislation the average

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2. From the inception of the national health service medical practioners have jealously guarded their freedom to prescribe. One generic drug may be marketed under different brand names, but the pharmacist has been requested to dispense the brand prescribed by the GP.The advent of a limited prescribing list means only a small range of preparations is allowable for minor conditions and one generic drug is now dispensed for all brand names in certain categories, thus curtailing doctors freedom.

person is increasingly better informed and when the gulf between his former ignorance and the professional's knowledge narrows all the time. Indeed, the explosion of new knowledge in science and technology argues that the average person has a greater sense of mystery about nuclear physics or computer data banks than he does about the practice of medicine.

The "ideal of service" or "collective orientation" Goode defined as ;-

> The practitioner decides upon the clients needs and the occupation will be classified as less professional if the client imposes his own judgement.
> the profession demands real sacrifice as an ideal, and from time to time fact e.g. the lawyer defending the unpopular client.
> the society believes that the profession not only accepts those ideals but also follows them to some extent.
> the professional community sets up a system of rewards and punishments such that "virtue pays" i.e. in general, the practitioner who lives by the service ideal must be more successful than the practitioners who does not. (Goode, 1969 : 278)

These are undoubtedly ideals of service which any professional body would claim as its own, but may not be an accurate reflection of reality. The facts of bureaucratic medicine in Britain are that three out of four patients who visit the doctor are given

prescriptions although studies have shown doctors believe that one third of all consultations were for trivial or unnecessary reasons (Cartwright, 1981 : 13), and none would argue that 75% of consultations result in a need for drug therapy. Deputising services are widespread, and while transgressions of the code of ethics are certainly punished, it is hard to see the "reward for virtue" when all practitioners are paid by capitation fees. The only exceptions to this are the merit awards paid to some top hospital consultants every year, but they are chosen usually for the prestige of the research and none reach the Cinderella services such as geriatric medicine.

The ideal of "service" which, with a sound knowledge base, historically gave medicine a monopoly of practice has also given current practitioners a high level of income and social position. This must be a factor in career decisions for subsequent entrants to any career where a monopoly of practice is obtained. Thus the monopoly has created for the profession both prestige and economic success and this in turn means that it becomes attractive to people who seek these ends in their chosen career.

The trait approach proposed "ideal" features of professions , and any deviations from these characteristics are seen as lessening the possibility of an occupation being accepted as a profession. One consequence of this has been that attempts to formulate a list of the essential "traits" have led to analyses of occupations which have not quite fulfilled the criteria. This has produced a literature the so-called "semi professions" which

seeks, usually by "trait analysis", to determine the reasons why aspiring professions do not achieve their objectives. Semi professions are defined by Etzioni (1969 : xiii) as having, relative to established professions:-

A shorter training (less than five years)

Central values other than life or privacy.

The task of communicating knowledge , rather than creating it.

Less autonomy of action.

More control by its own profession and less subject to individual discretion.

Toren (1969 : 144) defines occupations as being semi professions if they do not possess any one of Greenwood's (1957) traits, while Carr-Saunders, quoted in Toren suggests they replace theoretical study by the acquisition of a technical skill. Etzioni (1969 : vii) warns that attempts to achieve professional status may split an occupation by separating those who aspire to professional status from those who do not. This ignores the dangers indicated by Johnson (1972 : 24) that analysts often argue from a position of self-interest and the power variable, which may be crucial is ignored. (See below). Further, Johnson argued that trait models are not definitions of professions at all, but specify the characteristics of a peculiar institutionalised form of occupational control. There is thus confusion between the essential characteristics of an occupation and the characteristics of its control.

The trait theory was rejected by Everett Hughes (1958) who addressed himself to the more fundamental question "what are the circumstances in which people in an occupation attempt to turn it into a profession, and themselves into professional people?" He suggested that the key to understanding a profession is to realise what sets it apart from other occupations. This separation is based on its claim that it knows more about some matters than do other people, that is able to do something so much better than anyone else, that the members should enjoy a monopoly and that they are so devoted to giving good service that a taker must trust them and leave to them not only the exclusive right to deem who is qualified to give such services but also the sole right to discipline any of their members who fail to warrant such trust. Such an approach avoids the dangers of analysis by traits alone but requires a close study of -

what is being claimed

the consequences of such claims and the conditions under which they are likely to be successful.

The sources of power available to the group making the claim.

Definition of whether such pressure is class or status orientated.

This line of approach concentrates upon determining circumstances under which occupational groups make an avowal of professionalism and leaves to others the task of judging how close they come to living up to professional ideals. This espousal of the ideology

of the "professional model" - called professionalism is defined by Freidson (1968 : 114) as;-

> a commitment to professional ideals of knowledge and science.
> a commitment to concrete life career in the profession and to concrete historical locational institutions,
> a commitment to the character of professional work and a special pride based on a conception of the special nature of the work.

It is often claimed by groups who have not and will not achieve professional status and it becomes apparent that in such situations, it is essential to examine where the occupational power lies. The trait approach is useful for the analysis of a group claiming professional status since it provides an excellent framework for comparison with other groups. While this approach is not very useful as the sole measure of the "success" or "failure" of groups aspiring to professional status, the trait approach increases the perception of how groups change as they seek such status.

Functionalist Analysis

The second theoretical approach to the study of professions is the functionalist one, of which Talcott Parsons and Bernard Barber are the chief exponents. "A sociological definition of the professions should limit itself, as far as possible, to the "differentia specifica" of professional behaviour" (Barber 1963 :

671). He adds that professional behaviour may be defined as having four essential attributes.

A high degree of generalised and systematic knowledge.

Primary orientation to the community interest rather than to individual self interest.

High degree of self control of behaviour through codes of ethics internalised in the process of work socialisation and through voluntary associations organised and operated by the work specialists themselves.

A system of rewards (monetary and honorary) which are symbols of work achievement and thus ends in themselves, not means to an end of individual self interest.

In the functionalist analysis, the "knowledge" is seen to provide a control over nature and society. It is in society's interest that the knowledge should be properly used and only the "professionals" really understand such knowledge and thus they control its application in the community interest. The society then rewards such professionals since the occupation is highly valued.

Such an analysis assumes that all practitioners have the same degree of orientation to the community interest, and that all sections of the community value equally the use of this knowledge. It initially accepts the professions' own evaluation of themselves and believes them to be protecting the public. The twin motives of service and self control are seen to be central

and while it would indeed be to the benefit of society if groups of people were imbued with this unique character, such a view is less an assessment of reality than a statement of what the authors "hope might be so." Added to this is the idea that the professions are "a sector of the cultural system where the primacy of the values of cognitive rationality is presumed." (Parsons 1968 : 536). This assumption that professions act rationally both adds to the euphoria and ignores the bases of power in the social structure and hence the ways in which groups can exert their authority.

The Power Perspective

The practitioner/client relationship was proposed by Johnson (1972) as a third way of looking at professions. In so doing he showed how change in the distribution of power in society changes both the nature of the clientele and the institutions of control. The basis of occupational power and the resources needed for its control were examined by Kronus (1976 : 303-331) who defined occupational power as the occupations ability to establish and maintain barriers round its task domain, and its ability to affect the behaviour of others by the use of resources "any attribute, circumstance or possession that increase the ability of its holder to influence a person or group".

Any analysis of power must study which resources are important and how they are used. The relative ability of an occupation to protect its task domain from encroachment and/or encroach on others is the central measure of power, since the critical output of an occupation is the service produced by definable work skills

Thus the occupation must maintain boundaries around its operating activities. The power of any occupation will change with time, market conditions and social pressure, and any analysis in whic historical assumptions are built into an examination of the current situation ignores the reality at the expense of defining an ideal situation.

Occupational specialist skill creates social distance and when the client's judgement is inadequate to assess the task, th greater is the potential for exploitation, and the greater the need for societal control. But not all sections of society will need this control and the skill content and social distance may change with time. This will effect the potential for autonomy of the occupation, since its cultural significance may decrease. Emerging social change and needs (in response to changes in power) demand institutional forms of control, of which professionalism is one, i.e. a profession is not an occupation but a means of controlling an occupation and professionalisation is historically specific. Johnson suggests a typology of institutional orders of control and the conditions for their emergence.

Johnson first discusses "Collegiate control", where the produce defines the needs of the consumer. Professionalism is the basis of such control and was the product of social conditions in 19th century England. When consumers are a large heterogeneous group, attempts by an occupation to extend its technically based

authority to a broad social control of practice are likely to be more successful - e.g. the voice of medicine is heard across many fields such as social welfare and the control of drug usage. The expanding middle-class in the 19th century created an expanding demand for professional services, and provided practitioners from among the ranks. Middle-class power gave the basis for expanding professions to create autonomy of practice.

Professionalism flourishes when the occupation has homogeneity of outlook and low levels of specialisation, although professions already strong can control new specialist interests by subordinating them to the control of the dominant profession. For example, The Law Society presents a united front to the outside world which conceals the strains within the legal profession, although it is argued (Podmore 1980) that in a segmented profession, these strains may eventually result in interest groups within the profession presenting other viewpoints directly to the profession's members and the public.

The professional body in collegiate control will control entry, sustain uniform interest, control a monopoly of practice and be the registering body and the arbiter on the code of ethics. The occupation is seen as the only arbiter of decisions affecting its practice and public concern is treated as an affront. The idealogy stresses service to the client, but the client is rarely given the opportunity to express his satisfaction or dissatisfaction with the service received since professionals are usually assessed by each other. Thus it defines as "quackery" and "charlatanism" anything outside its monopoly. The diagnostic

relationship is used as a control mechanism within the profession and its relations with other occupational groups - most tellingly in medicine where "professions supplementary to medicine" (physiotherapists, chiropodists, dieticians etc) may treat patients only after a medical diagnosis has been made; the physician thus retaining his authority. An awareness of these power relations is essential to an understanding of the role of pharmacy and other "professions allied to medicine."

The second type of control identified by Johnson is where the consumer defines his needs and the manner in which they are to be met. Patronage is essential to this, from that of the Venetian Court for painters, to government and army posts in England given to sons of the upper classes until the middle of the 19th century. The patron defines the task and selects the person to undertake it. Today, such patronage is offered to lawyers working for corporate bodies where the specific legal knowledge required is pre-determined, or for company doctors who are required to treat only work related ill health. ("Consumer politics" also illustrates this process. Traditionally the consumer and producer of goods or services met only at the point of sale, but "consumer politics" now ensure the consumers voice is heard before decisions that affect him are made, and thus he defines his needs.)

Thirdly, Johnson noted the situation where a third party mediates between producers and consumers. This third party defines the needs and how they are to be met, e.g. state welfare. For

medicine in Britain, the state defines the needs, although medical practitioners often control the manner in which they are supplied.

The control change implicit in such arrangements is that consumers are guaranteed, and practitioners are salaried and become part of a bureaucratic organisation. An awareness of broad social consequences grows, rather than the "personal service" orientation. Thus preventive medicine becomes a political issue and "the medical profession has first claim to jurisdiction over the label of illness and anything to which it may be attached, irrespective of its capacity to deal with it effectively" (Freidson, 1970 : 251). Despite the fact that medicine cannot cure most cancers, any alternative philosophy is ridiculed, or danger is imputed in its use. Zola (1975 : 170-185) argues that the long arm of medicine reaches out to embrace all of mankind in its domain, through the expansion of what in life is deemed relevant to the good practice of medicine. The changed perspective of medicine (the result of such mediated control) means that it extends to control chronic disease by changing the patients life-style and habits and persuades him to change before any disease is evident. This extends to genetic counselling so the patient is asked to control his fertility for the sake of his unborn children.

The physician's monopoly of the right to prescribe, pronounce on and regulate drugs gives him awesome power, and many ofthese drugs are used in states that have nothing to do with disease - such as sedatives, appetite suppressants and anti-depressants. Anything which affects the body or to a lesser extent the mind

has become a medical problem and natural functions such as pregnancy and ageing are now within its brief. The bitter controversy over the legalising of abortion demonstrated the reluctance of the medical profession to "let go." Much of the medical establishment claimed that abortion was an immensely dangerous undertaking, which has not, of course, been proved by the statistics. Many more people now visit their doctors for "personal problems" - access to the body opens up access to the mind as well. (Zola, 1977 : 41-67).

3. THE RISE OF THE PHARMACY PROFESSION

This section provides a brief overview of the development of pharmacy, which in essence is that of a series of long drawn out demarcation disputes between one vocation and another. The intention in presenting this historical overview is to put the present day position of pharmacy into context. The source for the early development and organisation of pharmacists is the definitive study by Bell & Redwood published by the Pharmaceutical Society in 1880.

In Medieval England, physicians were the only practitioners of medicine who received any kind of formal education. They often came from good families and then were educated at either Oxford or Cambridge. An Act of Parliament of 1511 sought to separate science from witchcraft by decreeing that only those who had been examined by the Bishop of London could practice as physicians or surgeons within a seven mile radius of the City of London. It

was hoped thus to remove "practice by ignorant persons so far forth as smiths, weavers and women." Originally, physicians prepared their own medicines, or superintended their preparation by apothecaries "physicians cookes" who began to transact business on their own account; but a further Act of 1553 gave the College of Physicians authority to "search, view and see the apothecary wares, drugs and stuffs."

Apothecaries at this time were part of the Grocer's Guild, but in 1617 obtained legal independence from the Grocers on the basis of their occupational skill or "mistery." This also ensured that no grocer or surgeon could keep an apothecaries shop; and gave to the Society of Apothecaries the right to inspect apothecary shops within a seven mile radius of London. The Society prospered and in 1623 opened its own dispensary which produced the most important preparations to a specific standard for their members. The professed aim was to remove the "frauds and artifices" practised by the grocers and druggists from whom they obtained the raw materials. It is hard to tell how they discovered the purity of some of the preparations in their pharmacopoeia of 1653 which included: The thigh of a hanged man, the fat of a stork, urine of a hare, excrement of peacocks and not least, the head of a coleblack cat.

Druggists were part of the Grocers company and sold articles in a raw or unprepared state to the apothecaries,, while chemists (who were not incorporated) traditionally prepared those

medicines which required the aid of fire. It is probable that they were the descendants of the alchemists.

The Great Plague of 1665 resulted in the physicians (along with most other people who could afford to do so) abandoning both London and their patients, while the apothecaries stayed on and developed the neglected medical role of physicians by prescribing and treating as well as preparing medicines. This improved their status and in 1671 the Society added a chemical laboratory to its dispensary and thus prepared both chemicals and galenicals to a high standard. They received, shortly after, the contract to supply the Navy with all medical requirements and their growing influence is shown by the increase in their numbers which rose from 114 in 1617 to 1,000 in 1694.

The Royal College of Physicians responded to this encroachment on their traditional role by opening their own dispensaries in 1696, arguing that the products were both of a higher standard and cheaper than those of the apothecaries. They employed assistants to prepare the medicines who, as the apothecaries had done, began to set up as dispensing chemists on their own account. Some apothecaries also chose to remain dispensers of drugs and together these groups became the "chemists and druggists."

Apothecaries increasingly bought medicines ready made from chemists and druggists but resented the latter's developing role of dispensing directly to the public. The apothecaries formed

the General Pharmaceutical Association of Great Britain and urged all educated members to join in refusing to purchase drugs from chemists and druggists who sold to the public. This attempt failed since the number of chemists and druggists was so great. By 1799 there were almost equal numbers of each:

Table 1
Professionals Practicing in London in 1779

	Number
Barristers, special pleaders &c	83
Attorneys, proctors, notaries &c	81
Physicians	-
Surgeons	58
Apothecaries	32
Chemists and Druggists	34
Dentists	4
Opticians	8
Architects	1
Surveyors	20
Auctioneers	18
Accountants	2

Source: Holden's Triennial Directory for 1779

At this time the apothecaries were developing their medical practice but did not wish to lose their trading base, since their Naval and East India company contracts were very valuable. After intensive lobbying against "unqualified practitioners" the 1815 Apothecaries Act gave them the right to determine the examinations and training necessary for licensing, and monopoly of the occupational title. However, organisation by the increasingly powerful druggists ensured the insertion of a clause which allowed them to continue to practice pharmacy. The apothecaries clearly realised they could not fight on both fronts at the same time; this was shown in a letter from the Society of Apothecaries to that of chemists and druggists at this time.

"The comittee note with concern misrepresentation of their object, which is an improvement of their branch of profession in medical knowledge. To this end our efforts are entirely directed."

(Bell & Redwood 1880).

The 1815 Act had given chemists and druggists the right to dispense directly to the public but there was increasing misuse of this freedom - so much so that surgery was regularly performed by so-called chemists and druggists who were in reality practising apothecaries saving the cost of a medical education. A qualifying association for apothecaries (which became the British Medical Association) was formed in 1832 and was the first such association to train, examine and induct new members.

A further threat to the external control of the task domain of chemists and druggists came in 1841 with the Medical Reform Act, which sought to give the power to license pharmacies to the apothecaries and also to ensure that pharmacists would not give advice. Again a protective association was formed which pointed out that pharmacists could not avoid giving advice without appearing ignorant and this association became the Pharmaceutical Society of Great Britain. Thus in 1841 the two occupations separated their roles

"the apothecaries had left their shops and become doctors. The druggists had stayed in them and become pharmaceutical chemists."

(Reader, 1966 : 41).

The Pharmaceutical Society was formed "as a means of raising the

qualifications of pharmaceutical chemists and placing between them and unqualified persons a line of demarcation". (PJ,1919 : 306). It wished to raise the professional character of pharmacy and to organise training and did so by almost immediately setting up a school of pharmacy in 1843 and awarding a diploma. This self regulation both protected it from outside control and improved the status of its members.

Jacob Bell, a rich and influential London pharmacist declared it the object of his lifes' work to raise the status of pharmacy. He realised that to gain state support the aims of the society must be wider than just trade protection and must follow the example of the apothecaries in licensing training and inducting new members. He became editor of the Pharmaceutical Journal from its inception in July 1841, and made appeals for support round the country resulting in an increase in the number of members from 450 in 1841 to 1958 in 1842. It had been said that the druggists of London who at this time formed the council of the pharmaceutical society have never been surpassed in the power and influence they possessed. They were under real threat from the powerful apothecaries and were fortunate that this testing time produced a man such as Jacob Bell, who could mobilise action and respond very strongly.

A study of the preparation of parliamentary bills of this period shows a parliament which believed in free trade and therefore hesitated to grant monopolies of practice, but which at the same

time was under severe pressure to keep order in a changing society. For example, the development of insurance funds increased the incidence of murder for gain, and a fast growing population with a good network of communications resulted in major surgery being carried out by totally untrained people who could and did quickly depart for another city if the outcome was fatal. During discussions with a paliamentary secretary the council for the Pharmaceutical Society were asked if they wished to obtain a charter. They had not at that time prepared their submission but the carter was granted in 1842, its mandate being;

to advance chemistry and pharmacy

to promote pharmaceutical education and the application of pharmaceutical knowledge.

to maintain the honour and safeguard the interest of its members and to provide relief for distressed members.

The constitution was that the members elected, by postal ballot, an Executive Council of 21 members, seven retiring each year. To this council was given "the entire direction and management" of the Society of which the most important function was to control admission by determining pre-entry qualifications required by undergraduates, prescribing the course to be followed, and registering successful candidates. The ideals of the founders of the Pharmaceutical Society were not universally accepted (then as now). One of the earliest issues of the Pharmaceutical Journal contained a letter complaining of "the useless expenditure of the society's funds on rearing up a class of young men who are inspired with high fangled notions that places them above their occupations." (Bell and Redwood 1880). Segmentation had begun!

Poisoning by arsenic was a serious problem in Victorian England - the innovation of burial funds meant that parents were found guilty of poisoning their own children and that of insurance funds resulted in increasingly common murder by arsenic poisoning. The Pharmacy Act of 1852 required the Pharmaceutical Society to keep a register of members and to hold examinations for admittance to the Society, whilst that of 1867 defined the titles of those allowed to sell listed poisons. The Society was required to prosecute for unlawful sales and to ensure that correct standards and registers were kept by its members where poisons were being sold.[3] Thus it was in the interest of the state to use the professionalising aspirations of pharmacists to control a serious social problem. The power of the apothecaries was such however that pharmacists at that time were not allowed to learn medicine or even toxicology. The pharmacists protested

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3. The Pharmaceutical Society continues to inspect the registers of all establishments where poisons are sold. These duties are carried out by the Inspectorate of the Society - currently 16 in number who in 1983 visited 9,563 pharmacies and 1,874 agricultural traders resulting in 15 prosecutions for unlawful selling of drugs and the prosecution of seven pharmacists for offences under the Medicines Act. The function of testing prescriptions is resented by pharmacists who point out that dispensing doctors who both write and dispense their own prescriptions (and thus there is no second opinion) - are subject to no such check. Ten per cent of all prescriptons are dispensed by doctors.

in vain that they should know of the effect of poisons on the body since they were required to control their sales.

The Pharmacy and Poison Act of 1908 allowed companies to become sellers of poisons provided that the sales were under the supervision of a pharmacist superintendent or manager and the 1911 Insurance Act gave the monopoly of dispensing to pharmacists with exceptions only for doctors working in rural areas. Together these Acts have significantly affected the development of pharmacy, by guaranteeing a market and by allowing companies to share in this monopoly of practice.

Thus pharmacists who had traditionally sold only drugs were forced to compete with companies, with a wider range of stock, for the dispensing market. The changes were seen by a commentator in the Pharmaceutical Journal in 1918 "the true pharmacist is a professional man by education and a tradesman by force of circumstance." (P.J., 1918 : 297) In countries where each pharmacy must be owned by a pharmacist, the pharmacist retains his role as a seller of drugs and medicines alone.

An assessment of the success of the pharmacy profession during the 19th century was made by Sydney and Beatrice Webb (1917), who wrote that of all the professions allied to medicine, the pharmacists were the best organised, with the largest measure of professional self-government. When the Webbs were writing, the Pharmaceutical Society was the sole examining body (this function is now devolved to the universities) the licensing and prosecuting authority, the scientific society, the technical and

education body, and the political voice of its members.

Developments in the last 50 years include the inception of a statutory committee, which has the power to remove pharmacists from the Register, and legislation which regulates all retail and wholesale dealings in medicines and poisons. These may be sold or supplied in retail only in registered pharmacies, unless special licenses apply, or if the medicines are in the "general sales" list. Thus the pharmacist has no monopoly over sales, but does have a virtual monopoly (which the exception of dispensing doctors) over dispensing.

The College of Pharmacy Practice was established in 1982. Its intention is to maintain and raise standards of practice and its members have a personal commitment to continuing education. Initially, membership was obtainable by those on the Register for a minimum of ten years (and who could prove a high standard in the practice of pharmacy) but is now by examination.

4. The Pharmaceutical Profession Today

The Pharmaceutical Society finally relinquished control of the qualifying examination to universities and polytechnics in the 1960's, but still approves the syllabuses which students will follow and the emphasis to be placed on aspects of the syllabus. Entrants to schools of pharmacy require three GCE Advanced levels, of which one must be chemistry. The subjects followed typically comprise the chemistry of drugs, pharmaceutical technology of medicines, the action and uses of drugs and

medicines and pharmacy law and practice. Students follow a three year degree course at one of 12 universities and five polytechnics, at the end of which the degree of B.Pharm is awarded. There follows one year's pre-registration experience, which may be undertaken in any sphere of pharmacy and during which the preceptor is required to give training and experience in aspects of practice listed by the Pharmaceutical Society.

Unusually for "Health Professionals," pharmacists are allowed to practice without necessarily ever having worked in a hospital. The disadvantages of this are twofold - they have never worked alongside other health professionals nor do they receive the breadth of practical experience in specialist services that a hospital can offer. Of the 1,063 graduates awarded degrees in pharmacy in 1981, only 433 spent the pre-registration year in hospital practice.

There are 25,550 working pharmacists on the register in Great Britain (1985) of whom one third are women[4]. (the percentage of women has risen by 31% over the last 11 years) (P.S.G.B., 1982 : 131-3). Pharmacy practice today is segmented into four main areas - academic practice, the pharmaceutical industry, the hospital service and community pharmacy. Each of these will now be considered.

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4. This would suggest cause for concern since Simpson and Simpson (1969) suggests that occupations with a high proportion of women are less prestigious - this seems to be because women are more likely to work part-time, are assumed to move more frequently and to be less dedicated to the pursuit of a career than men.

Academic practice

There are currently 228 pharmacists employed in universities and polytechnics, 1% of all qualified practising pharmacists. This represents a fall of 226 (almost 100%) since 1977, (P.S.G.B., 1982 : 131-3) and is a matter of concern to the Pharmaceutical Society, which recognises that pharmacy should be taught by qualified pharmacists who are better able to understand and react to changes in practice and to replenish the knowledge base.

Most of the funding for research comes from the Science and Medical Research Councils though, increasingly, universities and polytechnics are encouraged to obtain funding from industrial sources. Pharmacy departments are often successful in this but it is quite often "tied" i.e. the industry has a problem which the university or polytechnic agrees to investigate. Their expertise is in looking at drug complexes with an expert knowledge of chemistry. Funding is also obtained from the charities which specialise in raising money for research into a particular disease state, for example cancer research, when the funding is given for research into drug complexes which will affect that disease state. None of these patrons has much interest in research into the practice of pharmacy, which consequently has low prestige and many pharmacy departments have difficulty in recruiting pharmacists with honours degrees into this area of teaching and research. At the same time, the main thrust of pharmacy department research (which is chemistry orientated) attracts a high percentage of post-graduate students who did not study pharmacy for their first degree.

The Pharmaceutical Industry

The Pharmaceutical industry employs 1,430 pharmacists (5% of the profession) of whom 19% are women. There are three broad types of employment. The first is in large, usually multinational companies which are research based and where research forms a fundamental part of pharmacists' activities. Such companies employ large numbers of graduates from all disciplines and they have contributed to all the latest advances in drug therapy. For example, H_2 antagonists, which have removed the necessity for surgery for gastric and duodenal ulcers, a wide range of antibiotics (of which one of the latest groups is cephalosporins) and products such as cyclosporin without which transplant surgery would be impossible. Their huge research departments investigate pharmacology, toxicology and the activity and safety of every drug under investigation. For each new product that they develop they are allowed a patent life of 1[illegible] years and then a further four years in which other companies may market their products under licence to the originators.

A second type of company in the pharmaceutical industry is the "production based" company. These are smaller and usually national (rather than international) companies which specialise in the production of drug complexes whose patents have expired. They employ few science graduates and usually a small marketing force, the main thrust of their activities being in production usually for supply directly to the NHS. They never engage in research and consequently their costs of production are low

Thirdly, many of the research based international companies are now forming subsidiary generic companies which have very bright futures, since "limited list dispensing" means that the prescrib may not specify branded products and these companies retain their profits by producing their own generic drugs.

The Hospital Service

There are 4,005 pharmacists (and 564 part time) of whom 61% are women. This represents 16% of all practising pharmacists. Thi is the fastest growing section of pharmacy practice, the numbers having risen from 1,860 in 1972. The hospital pharmacy service performs many functions (outlined in the Noel Hall Report, H.M.S.O. 1970). These include the purchase of drugs, quality control, quality assurance, manufacture and distribution. Several of the recommendations in the Report suggested an expansion of the role of the hospital pharmacist and their implementation has resulted in the emergence of the practice of clinical pharmacy. This role was explained in the submission by the Pharmaceutical Society to the Royal Commission on the National Health Service.

> "We believe there is an important role for the pharmacist to play in direct contact with patients on all matters concerning medication . On the patients admission, pharmacists can take the previous medical history. Because of their specialist knowledge they can make an invaluable contribution in the selection of drug treatment for the patient. They can monitor the progress of the medication, particularly in relation to possible side effects

or adverse reactions, and they can counsel patients in the proper use of drugs both in the hospital and on discharge." (P.S.G.B., 1979).

Many hospital pharmacists are developing this role and thus apparently encroaching on medical territory. Freidson (1968) noted the potential conflict between doctors and pharmacists since the latter provide a service which, if unregulated, could become competitive with medicine. Eaton and Webb (1979 : 70-88) argued that this apparent encroachment pays insufficient attention to the reaction of the medical profession to such activities, which has regrouped to contain them. Clinical pharmacology "the scientific study of how drugs affect the body, and the body affects drugs" is now a recognised medical speciality and is increasingly taught in medical schools. Clinical pharmacologists argue that only those with a medical degree are qualified to initiate or regulate drug therapy and see these roles as in their domain, whilst clinical pharmacists may only advise since this is not prescribing. Medical practitioners may be increasingly prepared to accept the advice of a pharmacist on drug therapy, but only if the pharmacist accepts the final authority of the prescriber. The pharmacist may develop clinical activities such as patient counselling, monitoring of side-effects, and anti-coagulant control but in essence the relationship with the medical profession is little changed. Indeed, it could be argued they are some of Goodes (1969) "dirty work" tasks. Thus medicine has incorporated the knowledge and skills of pharmacists into a new medical specialist group within

its own hegemony - after this knowledge has been acknowledged to be the ultimate responsibility of the medical profession. Clinical experience and the notion that diagnosis and treatment cannot be separated remain central to the defensive ideology o the medical profession. If other groups accept this, it retains its dominance.

At the moment, hospital pharmacy departments have functional autonomy but the Griffiths Report (1983 : 500) with its concept of a health service run by a General Manager, may well chang this status and already most pharmacists have been made responsible to a "second line" officer. A possible future may be that, just as radiographers are managed by a radiologist, so may hospital pharmacists be managed by clinical pharmacologists. To counteract this danger, pharmacists in the hospital service increasingly realise they must retain power over their task domain. This requires a clarity of perception that what they provide is not simply a dispensing service, which can easily be privatised , but a pharmaceutical service. To do so they are adapting their practice so as to achieve a much closer control over all medicines used in hospitals, for example greater clinical involvement in therapeutic committees, "vetting" of new products for efficacy, and greater involvement in determining when therapy should commence and when it should stop (including interpretation of biochemical profiles).

COMMUNITY PHARMACY

The great majority of pharmacists work in this sector (18,844, 74% of the total), of whom 20% are women; 5,099 work part time

and 55% of these are women. Three thousand are employees of companies and thus the great majority of community pharmacists are self employed. Community pharmacy is the "public face" of pharmacy - "the chemist" whose role development is the focus of this study. Pharmacists have wished to be so named since the last century and on the way have changed their self description from the prefix "retail" to "general practice" and now "community." Throughout all this the average person has resolutely retained his perception that medicines are dispensed by "the chemist", thus showing a greater sense of historical accuracy and less interest in social niceties.

The practice of community pharmacy has changed out of all recognition since the advent of the National Health Service in 1947, when medicines were initially free. The number of prescriptions dispensed has risen from 1937 when 13,000 pharmacies dispensed 65 million prescriptions to 10,900 pharmacies dispensing 380 million prescriptions in 1983. (P.S.G.B., 1984 : 49). Prescriptions continue to be dispensed largely in small independent businesses (82.9% of pharmacies are still privately owned [5.]) and each proprietor pharmacist or superintendent of a company has a contract with the National Health Service for the supply of medicines and appliances. This contract is negotiable through the Pharmaceutical Services

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5. The National Pharmaceutical Association has 7000 members who own 9700 pharmacies. Only 1.2% of those have more than ten branches.

Negotiating Committee and commits the pharmacist to agreed opening hours and conditions of service. Pharmacies are usually situated in shopping centres and the majority are small, "traditional" practices. There is a growing number of "small chains" who have all the appearance of the traditional chemist shop and, finally, there are branches of the largest multiple (Boots) with 1110 branches. The customers are offered both the facility to have medicine dispensed and to purchase medicines "over the counter" with appropriate advice where it is necessary. Traditional pharmacy practice adds to this the sale of perfumes, cameras and surgical appliances and in the case of the multiple chemists this range of goods is further extended. The pharmacist has sole responsibility for both the dispensing that takes place within the pharmacy and the medicines which are "pharmacy only", all of which must be sold with his knowledge. Many pharmacies employ trained technicians to help with the dispensing but their work and the sales of medicines undertaken by counter staff remain the responsibility of the pharmacist at all times.

The next chapter will examine the traditional role of the community pharmacist and changes in his practice. It is sufficient here to note that it is currently a highly profitable activity. The salaries now offered, (£12,000 for a new graduate) are much higher then those offered in the hospital service (£7,000) so that the latter is chronically understaffed (by 30% in the West Midlands).

5. The Professional Status of Pharmacy

Some of the main trends in the sociological analyses of the professions were discussed in Section 2 above; the concepts and issues introduced are now used in an analysis of the pharmacy profession. Initial approaches to the study of pharmacy focussed on its so called "marginal" professional status (McCormack, 1956 : 308-15). Denzlin and Mettlin (1968 : 375-382) refer to pharmacy as a "case of incomplete professionalisation" and in both of these studies the prime consideration in deciding that pharmacy was not a profession was the identification of characteristics which rendered it inadmissible as such.

Three main points were raised. First, it was argued that the "collective" or "service" objectives of a profession are at odds with the pecuniary goal of a business and the professional drive must be blunted by subordinating a service goal to individual achievement for its own sake. But the outcome of this conflict must depend upon individual value systems and is equally true any professional person running a business as opposed to those who work in a mediated role or who are salaried by the state. It is unlikely that lawyers will often counsel their clients that litigation is unwise or accountants that the clients can easily manage their own affairs, although it is argued they work for a fee and money does not physically change hands. This may have been so but lawyers now openly compete for house conveyancing business and are prepared to alter the recommended charges to secure the work. It is not questioned that law is a profession, so the crux of the argument must be that pharmacists "sell

things."

> This is indeed a real irreconcileable dilemma; the contrast between the professional's (partly altruistic, partly self justifying) compunction to serve his patients as he perceives their pharmaceutical needs, and a very real commercial incentive to conduct the business to the satisfaction of his bank manager. And that very often means giving clients what they want."
>
> (Largus, 1984 : 98-9).

The primacy of the "needs or wants" of the client is not peculiar to pharmacy - people tell lawyers what they want and they act accordingly, and three out of four people who visit their doctor expect to receive and are given a prescription although none would argue that all are needed. But it is what pharmacists sell that is the crux of the problem.

To sell handbags erodes the professional "image" of the pharmacy, but to sell spurious quasi medicines and tacitly endorse them undermines pharmacists' credibility as purveyors of impartial advice. The danger is that such an atmosphere of commerce encourages an instrumental attitude on behalf of customers and makes people expect a result in a specific time; this attitude extends to the dispensing service, when the pharmacist is seen as an agency through which the drug may be obtained rather than one offering a service.

The extent to which a dispensing service is measured as efficient by the speed with which it is conducted was reflected in an

advertisement in the Pharmaceutical Journal (1984) which offered pharmacists a course on determining how agitated and short of time their patients were so they could be more quickly dispatched with their medicines. Thus the "service element" had been reduced to an analysis of the time saved and any consideration of a "professional" relationship had completely disappeared. A second factor which rendered the professional status of pharmacy "marginal" was the notion that pharmacists do not control "the drug" (Denzlin, 1968). That is, they have no monopoly either over dispensing (10% of prescriptions in the UK are dispensed by doctors) or over sales (drugs from the General Sales list may be sold in supermarkets, etc). Further, pharmacists are not trained to have an ideology of the drug as undergraduates, i.e. they are expected to produce it and supply it in the performance of a service but not to question the morality or indeed usefulness of its supply. However, doctors have no monopoly over treatment and pharmacists may counter prescribe at their discretion. Only 25% of diseases get as far as the doctor (Horder and Horder, 1954 : 177-87) and the advice of a pharmacist is often sought for short term ill health problems. Their control is therefore considerable, if not absolute.

Thirdly, pharmacists are not "decision makers", it is argued, because the diagnosis is the decision point and all else is secondary to that. This is to accept the power of the medical stance that it is diagnosis is of central importance. If looked at from the patient/pharmacist and patient/doctor relationships (Johnson 1972) then it is as important that the

prescription is correctly dispensed. This is so in law (P.J., 1982 : 205). In a case brought in 1980 where the patient died because the doctor wrote, and the pharmacist dispensed, an overdose. It was judged that they were both to blame - rather more than one would expect of a "non-decision maker" who is expected to be a "watchdog" only. At each transaction with prescribed drugs the pharmacist fulfils a vital service, a life or death transaction, and the client must trust the pharmacist equally as he does the doctor. Finally, it may be noted that 73% of pharmacists work in the community setting where there is direct access to the patient population who may and do consult the pharmacist without reference to the general practitioner.

These claims that pharmacy is not a "proper" profession because certain attributes of "professionalism" are absent are interesting but, as indicated in Section two above, the "trait" approach has serious deficiencies. More recently, sociologists have been less concerned with professional attributes than with understanding the relationship of pharmacy to medicine within the power perspective, where pharmacy is seen as a paramedical occupation. Professions defined as paramedical have relative lack of autonomy, responsibility and authority (Freidson, 1968 : 114-120) because, he argued:

> much of the technical knowledge of paramedicals learned during their training tends to have been discovered or enlarged upon by the medical profession:
> their tasks assist focal points of diagnosis or treatment:
> they perform a subordinate role and the work is initially

requested by a doctor:

the prestige assigned to them by the public is less than that to physicians.

(Freidson, 1968)

Freidson argued that constraints upon action have been accepted by all such professions in return for a monopoly of practice granted to them by the state, but other branches of "healing" which have sought no such powers are under no such constraints. For example, herbalists work outside the framework of medicine and its satellites. Such fringe activities are seen as "quackery" by doctors who, mostly, do not recommend their patients visit herbalists, osteopaths or accupuncturists, but will encourage visits to physiotherapists who work under the hegemony of medicine.

Paramedical professions are not merely part of a technical division of labour but part of a division of labour organised round and controlled by a central dominant profession (no other profession has such satellites). Freidson noted that pharmacy is not fully integrated into this division of labour, since pharmacists can both sell and counter prescribe. This is a good example of an occupation which provides services related to healing which, if unregulated, could become competitive with the practice of physicians.

Pharmacy services are useful to the physician and necessary to his practice even if dangerous to his position; for this reason such activities must be circumscribed by the dominant group if

their pre-eminence is to be maintained. The more autonomous the occupation (i.e. the degree to which it can be carried out independently of medical supervision and the degree to which it can be sustained by attracting its own clientele), then the greater the potential for conflict.

The knowledge base of pharmacy (the action, uses and formulation of medicines) is created in schools of pharmacy which are involved in research for new drug complexes and their formulation into medicines. No other profession knows as much about this area of work and the application of this knowledge has revolutionised medical practice with the introduction of medicines such as antibiotics, anaesthetics, and analgesics. The dilemma for schools of pharmacy is that whilst the pharmacy curriculum has become ever more reliant on the pharmaceutical sciences, practising pharmacists have lost their traditional compounding role to the phamaceutical industry and many of the skills acquired during their university or polytechnic education are redundant in practice. In other words, the research function of schools of pharmacy is in drug complexes for the pharmaceutical industry and thence for medical practice, but most pharmacists have no function in either hospital or community practice to use this knowledge.

Pharmacy departments in the hospital service are run entirely by pharmacists (with no outside supervision) and the organisation of the work is entirely in their domain - unlike any other paramedical profession. They have authority to recommend that generic equivalents be prescribed according to a drug formulary which they produce as members of therapeutic committees and they control medicines in ordering, storage and supply. But until the advent of limited list prescribing in 1985 the final decision about whether a drug would be used was always with the consultant, i.e. if he requested a particular drug then the reasons must be justified but it would always be supplied. The only occasion on which a pharmacist may refuse to supply on the prescription of a consultant is when that refusal is legally enforceable, ie. the medicine is on the prohibited list.

Hospital pharmacists control their task domain, but the power relationship is between them and the prescriber. Pharmacists in this sector are increasingly aware that their specialist knowledge is of most use at the point where clinical decisions are made and they are developing their practice to work as members of a clinical team. (See the discussion in section six.)

In community pharmacy, much of the work (dispensing) is initially requested by a doctor and the pharmacist has responsibilities both to patients and physicians by the conditions of his NHS contract and as such he can find his position problematic when their interests appear to conflict. It is not always obvious who is the pharmacist's client - the physician who requests a service or the patient on whose behalf a service is rendered. (However,

the code of ethics of the Pharmaceutical Society (1984) states that the pharmacist must not undermine the patients confidence in his medical advisor. For example, if the prescriber has ordered the wrong dosage and is uncontactable by telephone, the pharmacist will normally alter the dosage, possibly to the detriment of his relationship with the prescriber.)

The community pharmacist has a near-monopoly round his task domain in dispensing and the Pharmaceutical Society is vigilant to deter any further encroachment on this role, but it has failed in its efforts to persuade Government that all non-prescribed medicines are special commodities whose sale requires the supervision of a pharmacist. Consequently, these are available in a multiplicity of non-controlled outlets. The Society recognises that in fighting to uphold the boundary demarcation with the medical profession it can only maintain a strong case for "pharmacy only" dispensing if it is not seen in any way to encourage pharmacists to diagnose disease. Hence pharmacists are trained in their undergraduate course and after graduation to "respond to symptoms" i.e. decide the most appropriate treatment for the symptoms that the patient has described. Thus the convention is observed that pharmacists do not "diagnose".

It is the contention of the writer that pharmacy has all the attributes of a profession, whether judged by trait analysis or from the power perspective (where it's virtual control over the suppl of medicines is crucial). Unlike opticians, who have just lost

control over the supply of spectacles, it is inconceivable that, in a society where drugs are increasingly misused, pharmacists will ever lose this supply monopoly.[6.]

6. The Future of Pharmacy - New Roles in a Segmented Profession:

Pharmacy shows with other modern professions an important and significant characteristic - it is increasingly segmented. Bucher and Strauss (1961 : 325) have argued that modern professions contain different segments or groups which share values and interests which are distinctive and different from other groups within the same profession; this is certainly true of pharmacy.

It is often held that professions possess unusually strong sense of cohesion and solidarity (e.g. Goode, 1957 : 194-200 portrays a professional community as having homogeneity of training, interests and values.) Indeed, it is widely argued that the function of professional training is to instil long lasting values that direct and guide the practitioner after he completes his training. Thus the internalised values and attachments to occupational reference groups form a stable identity which enables practitioners to withstand either isolation from

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6. The concept of "supply" usually suggests a middleman, handing over articles (about which he knows little) on request, but in pharmacy, each such supply is potentially a life and death transaction for which the supplier is legally responsible equally with the prescriber.

reinforcing colleagues or organisational pressure to replace professional with organisational values and references. A contrasting view is that structural features of the work setting such as the power structure and autonomy of the occupational groups are more important influences on the identity and behaviour of professional practitioners (Freidson, 1960 : 374-382). If the professional influences on practitioners are weak, then it would seem more likely that occupational influences will become dominant. In any profession where this is true, segmentation is likely to occur since role models will be adopted from the organisational rather than the professional and occupational situation.

In schools of pharmacy in British universities and polytechnics, the increasing emphasis on the dominance of pharmaceutical sciences has meant that more pure scientists (for example biologists, microbiologists, chemists) have been employed for research programmes which need their specialised knowledge. The result, with serious implications for the professional role, is that the percentage of pharmacists employed has decreased by nearly 100% since 1977). The total number of registered pharmacists employed in schools of pharmacy is 228, out of a total of 372 staff. Neither the Pharmaceutical Society nor any university requires as a condition of employment that academic pharmacists should continue to practice pharmacy and it is very unusual for a pharmacist member of staff to have a joint appointment i.e. a regular commitment to practice in any sphere

of pharmacy.[7] Thus only a minority of the teaching staff retain up-to-date experience of the practice of pharmacy. This may be contrasted with medical clinical training where teaching is exclusively by medically qualified practitioners all of whom have joint appointments as teacher practitioners. Given this situation, pharmacy graduates can hardly be expected to have a clear perception of the function of the pharmacist nor to have long lasting values to guide them after they leave university. It is more likely that the pharmacist will find his reference group identification in his organisational and occupational role and this is confirmed by the deep segmentation in pharmacy.

Only 16% of pharmacists work in the hospital service but this segment has been instrumental in effecting the most significant changes in their functions. The so-called "drug explosion" in the post war years made hospital pharmacists realise that they had a greater contribution to make than simply a supply function in response to medical prescriptions. Their knowledge of pharmaceutical sciences suggested they could make an invaluable contribution to the selection of drug treatment and monitor its progress (particularly in relation to side effects or adverse reactions) but the development of this role was seriously impaired by the pharmacists' lack of knowledge of the pathology of disease and therapeutics. Hospital pharmacists argued that they were no longer required to be involved in the formulation

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7. Source: Heads of UK Schools of Pharmacy, 1986
EVIDENCE TO NUFFIELD ENQUIRY INTO PHARMACY.

of and compounding of drugs but could not be equal members of clinical teams until they understood disease processes and the part that drug therapy has to play in the whole treatment of the patient. Most schools of pharmacy could not respond to requests for such teaching since departments are staffed by science orientated pharmacists or pure scientists unable to teach a course in therapeutics.[8.] This gap between theory and practice resulted in the first breakaway pharmacy organisation dealing exclusively with clinical practice.

The United Kingdom Clinical Pharmacy Association was established in 1981 and now has 1000 members. Its aims are to promote th concept of clinical pharmacy by developing its practice and by national training days (taught by pharmacists) and conferences. Up to this time the Pharmaceutical Society had insisted the needs of those in the hospital service were accommodated by its hospital pharmacy group but the stimulus of U.K.C.P.A. resulted in fresh effort from the Society to meet the professed training needs of hospital pharmacists and so prevent further segmentation. This effort has little chance of success, since the evidence of the American clinical pharmacy movement is that it is now an entirely separate organisation with its own journals, conventions and specialist undergraduate and

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8. The Nuffield Report makes the important point that this is partly historical - pharmacy departments usually being in former technological establishment where the other faculties - are "hard science" with whom they have to compete for research funding.

postgraduate courses. In the U.K. the clinical pharmacy movement already has its own journal and annual convention and universities are slowly modifying their courses to include the teaching of therapeutics. In the long term, it will be incorporated into undergraduate courses but currently is taught in most health regions as part of in-service training programmes, the teaching being done largely by hospital pharmacists.

According to Bucher and Strauss (1961), one aspect of a segmente profession is the separate activities and unique "missions" carried out by the different segments. Clinical pharmacists undoubtedly have a sense of mission and are prepared to organise their own training programmes, to publicise their developing role and to create a new function for pharmacists in the hospital setting. Their success means that the tasks they perform are clinically orientated, for example, in identifying patients where monitoring of drug blood levels is important to ensure that a therapeutic dose is achieved and that dangerous levels are avoide They are prepared to advise on the appropriate use of medicines and to question unsuitable therapy.

Hospital pharmacists have thus extended their role in the supply of medicines to that of working as members of a clinical team. Their power relationship is with clinicians since they have specialist knowledge and abilities which directly improve patient care. This developed role is currently threatened by undermanning. The Pharmaceutical Society (which was concerned

with potential overmanning) provided estimates of future manpower needs which is has since agreed may have been too low. On the basis of those figures the number of places in schools of pharmacy was curtailed by the University Grants Committee and entrants to universities have decreased from 1329 in 1980 to 1193 in 1984. This has worked against the interest of hospital pharmacists who increasingly find it necessary to curtail specialist services such as residency schemes and "on call" services. As indicated above, the hospital pharmacy service is chronically understaffed. Medical schools in the U.K. are currently producing slightly more doctors that there are jobs available and it is a matter of concern that the developed role of clinical pharmacists will be taken over by clinical pharmacologists, to the detriment of hospital pharmacy. History shows that the profession of medicine is likely to absorb developing specialist interests and unless something is done quickly to increase the number of pharmacy graduates, this may happen in the hospital segment of pharmacy.

Hospital pharmacists are performing functions very different from those of community pharmacists, whose clients are both the prescriber and the patient and to whom he cannot offer the specialist services available in hospitals. This has lead the Pharmaceutical Society to argue that the role of <u>every</u> pharmacist is to perform a clinical function - in the case of a community pharmacist to advise the correct use of medication, to monitor its progress and to report any side effects. However, community pharmacists largely work in isolation, do not have the same sense

of colleagueship as those in hospitals and rarely develop a clinical role. For example, very few community pharmacists keep patient medication records or have access to patients medical notes; without these it is hard to see how clinical monitoring of drug therapy can be achieved. Nor do they have much contact with prescribers or involvement in prescribing decisions. A clinical role seems doubtful but community pharmacists do continue to maintain full control over their traditional role of dispensing medicines.

The growing power of consumerism offers to community pharmacy an extension of its power base. Tragedies such as that of thalidomide have increased public awareness of the possible dangers of drug therapy and the pharmacists' advice is regularly sought on the action and uses of drugs. Thus he can affect drug taking behaviours for prescribed medicines both by verbal advice and supplementary labelling. Further, the community pharmacist has the ability to advise and treat patients who request help, entirely outside the hegemony of medicine and the changes in practice involved both with the advent of limited list prescribing and high prescription charges imply that this advisory role of the pharmacist will increase.

The College of Pharmacy Practice seeks to raise standards of practice throughout the profession, and offers broad based study days across the country. Their membership, however, shows a strong bias towards hospital pharmacy and in the future they may be forced to accept the differing needs of sections of a

segmented profession.

In conclusion, it has been argued that the hospital sector o pharmacy offers a service greatly enhanced and developed fro that of its basic supply function and hospital pharmacists hav strong bonds of colleagueship. They have, moreover, develope close working relationships with medical practitioners and se their future as working in the clinical field. They hav maintained their power base and extended their practice to mee the challenge of modern medicine Hospital pharmacy has thus rise to the challenge of the 1980s and the only concern over its futu is manpower shortage and potential changes emanating from the ne structure of District Management.

The situation in community pharmacy is rather different - whil they have maintained their near monopoly over dispensing it i not obvious that the future will hold out the prospects of greatly enhanced clinical role. However the great and developin strength of community pharmacists lies on their direc relationship with the general public. This advisory role, bot on the action and uses of drugs and in wider aspects of healt care, is one which is increasingly sought and meets the changin needs of a more informed society. The changes which have occurre in the practice of community pharmacy, and the ways in whic these have developed will be examined in the next Chapter and th potential for the development of the role of the communit pharmacist as a health care professional will be explored.

C H A P T E R T H R E E

THE ROLE OF THE PHARMACIST IN COMMUNITY PRACTICE

Having outlined the main features of the profession of pharmacy in Chapter II, attention is now focussed on the community pharmacist, the central concern of this thesis. This Chapter examines the contractual agreement of the community pharmacist with the NHS and his remuneration for this service. This is followed by an examination of the work of the pharmacist (dispensing, selling and advising). The second chapter explored the professional role of the pharmacist, and this section looks at his other role - that of a small businessman - and the tension between the two is examined. The changes in pharmacy practice which have occurred in the last 50 years are discussed, and present-day activity is highlighted by an ethnographic study in two community pharmacies. Finally, future roles for the pharmacist are considered, one of which is the potential role as an advisor on health education.

1. The Community Pharmacist and the NHS

Community pharmacists, "the chemist", are largely proprietors of small independent businesses. In 1982 82.9% (Nielson, 1982 : 817) of pharmacies were so owned, the rest being multiples and co-ops. An NHS contract for a dispensing service is between the proprietor pharmacist and the local Family Practitioner Committee (FPC) which has two representatives from each health group supplying a service to the NHS (general medical practitioners, dentists, opticians and pharmacists) and is managed by a full-time administrator, responsible to the committee for all arrangements for providing these services. Each health care group also has its own local committee (for pharmacists, the local Pharmaceutical Committee) which is composed of either nine or 15 pharmacists who provide pharmaceutical services for the F.P.C. The number depends on the population of the district concerned, and from this committee the two members are elected to the F.P.C. It sends representatives to the National Negotiating Committee (Pharmaceutical Services Negotiating Committee) and decides upon rota duties and out of hours services. All complaints about pharmaceutical services are referred and recommendations for action are submitted to the main practitioner committee which acts as the arbiter. The Pharmaceutical Services Negotiating Committee discusses with the DHSS any change in the pharmacists' contract and the renumeration obtained for items of service. These agreements then apply to all contracts.

Each pharmacy (with the exception of those opening within one kilometre of an established pharmacy) receives a basic practice allowance of £2,400. The essential small pharmacies allowance is further payable where there is deemed to be a social need for a pharmacy and in 1983 404 pharmacies received this payment, totalling £375,000.(PSNC, 1984 : 504). The pharmacist is then paid 98p per prescription to cover the professional fee and notional salary. To this is added "the on-cost" 11.22% of the net cost of medicines and the remainder is paid retrospectively, individual prices being based on the amount the pharmacy uses.

The P.S.N.C. has negotiated a new contract with the Department of Health, in which some small and "uneconomic" pharmacies would be encouraged to close (and be compensated to do so) and the opening of new premises would be strictly controlled to ensure rational distribution of pharmacies. It is in the interest of the Government so to act, since it costs more to pay a large number of small pharmacies at a high rate for each dispensing, than to pay lower bulk rates to large ones. Already established pharmacists would be well served by the new contract since their livelihood would not be endangered by someone opening nearer the doctors surgery. However, concerted action by some pharmacists expressing disapproval caused the Minister of Health and Social Services to consult his legal experts and the contract is being re-considered.

For 1983 the average total payment to a community pharmacy in England and Wales was £31,250 made up as £14,350 for

"professional fees", £13,750 for "on-cost" and £3,150 for basic practice and other allowances. In addition, the remainder of the drug costs were reimbursed retrospectively. (PSGB, 1984 : 103)

2. The Work of the Pharmacist

In return for the payments discussed above, the pharmacist has a contractual arrangement to open at certain hours, to supervise the sale and dispensing of all prescribed or "pharmacy only" medicines, to ensure that no such medicines are given out in his absence and to ensure that professional cover is supplied.

Ancillary Staff

Most pharmacists obtain dispensing help which may be the services of a second pharmacist, a dispensing technician or a dispenser. Technicians are trained on a two year day release course and formerly (until 1983) received a City and Guilds or Apothecary Hall Certificate, but now a B TEC qualification. The course covers the action and uses of drugs and legal requirements of medicines, as well as practical dispensing classes. Dispensers have no nationally recognised qualification and their training varies from that of the Boots organisation which has a comprehensive programme to that in independent pharmacies where training is by "on the job" experience. The National Pharmaceutical Association has initiated a training programme for dispensers, but to date only a minority of pharmacists have enrolled their staff.

Alison Morley and the Author conducted a survey (Panton & Morley, 1986) to determine the extent to which community pharmacists received dispensing help. The data was collected by means of telephone calls to a 20% random sample of all pharmacies in the

West Midlands. The response rate was 85% (134) although only 79% (124) answered questions on prescription numbers. The pharmacies were classified according to the Pharmaceutical Society's 1972 classification which defines independent pharmacies as being single ownership, "small multiples" having two to ten branches and "large multiples" with more than ten pharmacies.

Table 2

Classification of pharmacies in the survey

	Original sample	Participants
Independent	92 (58.6%)	85 (63.4%)
Small Chain	20 (13%)	17 (12.6%)
Branch of Large Multiple	45 (29%)	32 (24%)
Total	157	134

Table 3

Employment of second pharmacists, technicians and dispensers by prescription numbers per month

	Upto 2300 n = 43	2300-4600 n = 56	4600 or over n = 25	Number	Expresse as % of sample
Second pharmacist 1.	2 (4.6%)	2 (3.6%)	10 (40%)	14	11
Technicians* only	11 (25.6%)	13 (23.2%)	3 (12%)	27	22
Dispensers only	14 (32.6%)	24 (42.9%)	10 (40%)	48	39
Technicians & Dispensers	5 (11.6%)	13 (23.2%)	11 (44%)	29	23
No dispensing help	13 (30.2%)	6 (10.7%)	1 (4%)	20	16

* With recognised certificate

Table 3 shows that 20 (16%) pharmacies had no dispensing help (these were all independently owned)and a further 48 (39%) employed only dispensers they have trained. Technicians were employed in 56 (45%) of shops, whose work must legally be supervised but the employer is ensured of a standard of knowledge and training.

Very few of the pharmacies, 14 (11%), employed a second pharmacist and of these ten (70%) were employed by Boots. No

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1. One employed full-time (to differentiate from locum cover.)

financial incentive to employ such professional help is offered, although the Pharmaceutical Services Negotiating Committee regularly requests such payment from the DHSS. 112 (84%) of pharmacies surveyed employed a locum for one day per week and although the questionnaire did not ask a specific question on annual holiday, 49 volunteered the information that they took two to four weeks annually.

Only about half of all pharmacists complete their pre-registration training year in community practice and since so few pharmacists offer employment to second pharmacists many recently qualified graduates must take on shop management without any relevant experience. Thus they have no 'role model' on which to base and develop their professional practice. General medical practitioners are now required to complete a two year training programme before they may become principals and the Pharmaceutical Society proposes that graduates must complete one year before they taken on management of a shop, but this has yet to be enacted.

A net total of 82 pharmacies have opened in the West Midlands in the last year. This increase is largely because the proposed contract will limit the number which may subsequently open. One chain (Lloyds) buys a large percentage of established businesses which come on the market and is opening many new ones. This unbridled development (they now have 85 branches) means the shortage of pharmacists experienced in hospital sector is exacerbated since each branch must employ one and more are

needed for locum cover.

For employee pharmacists there is a regular pattern of work - fixed hours, holidays and locum cover. Most work a 37 hour, five day week plus four weeks annual leave. The largest multiple (Boots) employs two pharmacists in every shop dispensing over 4,600 prescriptions per month and all their dispensing staff are trained by undertaking a course set by the employer.

For independent contractors life is less predictable. Of the sample most, 59 (69%), worked 43-50 hours per week and 14% worked over 50 hours per week. 16% never employed a locum, ie they were present all the time the shop was open. This survey throws into sharp relief the constraints on development of practice for community pharmacists. They are legally required to be on the premises when they are open and to supervise the dispensing and sales of poisons and of those dispensing 4,600 prescriptions or over, less than half employed a second pharmacist. The support staff available must be a key element in any extension of practice.

Pharmacy Sales

For multiples and co-operative pharmacies "over the counter" and non-prescription sales form almost one half of their total turnover (47%) , but for independent pharmacies, the figure is 32% (Nielson, 1984 : 540). These "over the counter" sales comprise three main categories. First, the average pharmacy offers a wide range of "General sales list" medicines, i.e. those that are also available in supermarkets and drug stores. Within

this category some manufacturers choose to restrict their sales outlets only to pharmacies and in return hope that pharmacists will selectively buy more of their products across the whole range of medicines. Most small pharmacies also sell cosmetics, baby foods, health foods, photographic equipment and a variety of surgical dressings, but the large multiples have developed this to the extent that they now sell a wide range of goods.

The second category, "Pharmacy only medicines" is made up of products available only in pharmacies and in theory sold under direct supervision. Pharmacists have pressed for more products to be released from the prescription list into this category, with consequent saving of medical time and sales controlled by the pharmacist. Commercial reality intrudes in this area and one such product to be released, ibuprofen, (an anti-inflammatory agent) has been heavily advertised in the mass media. Pharmacists who protested about this were told by one manufacturer that they must "live in the real world" and the promotion was claimed to the "most successful launch of a product in recent years." No prescribed medicine may be advertised to the public and pharmacists must ensure the same applies to pharmacy only medicines.

Finally pharmacists are allowed to sell a wide range of medicines needed in an emergency - for example oral contraceptives or antibiotics - to those who find that they have no supply. (This list does not include "controlled drugs"i.e. those liable to misuse). In such events the pharmacist must record details in a

register available for inspection by the police, or inspectors of the Pharmaceutical Society. He must also record details of medicines sold over the counter which are suspected of misuse (the names of such medicines are notified to the pharmacist by the Pharmaceutical Society).

The Dispensing Activity of a Pharmacy

The Misuse of Drugs Act of 1971 and its amendments require the pharmacist to ensure that prescriptions meet various requirements before they are dispensed. For example those for controlled drugs must be handwritten by the doctor and must contain certain information "expressed in words and figures." Details of these prescriptions are recorded and the drugs must be stored separately in a cabinet of a required standard. This last requirement has made the identification of the drugs much easier for addicts and the number of burglaries in pharmacies has soared. New legislation now gives the pharmacist more latitude with regard to the kind of cabinets he buys, and most pharmacies now have very strong security systems.

The reference book, issued by the DHSS for pharmacy use, is the drug tariff which lists prescribable drugs and dressings. Pharmacists must ensure they dispense only these or payment is witheld. It also specifies the pack sizes on which payments are based and if a particular drug is rarely used the pack size must be noted on the prescription or payment is based on the standard size.

The charges which require to be obtained from the patient vary

with what is requested, age and social circumstances and the prescription must be endorsed with what has been charged. All of this results in a huge clerical load before prescriptions are sent to the pricing bureau for reimbursement, and unfamiliarity or oversight of the requirements can result in loss of payment. Many prescriptions are incomplete, illegible or have an inappropriate dosage and all must be checked with the doctor (or with the receptionist who has written many of them). It is estimated that 2% of prescriptions cannot be dispensed without reference to the prescriber for elucidation, checking of dosage, verification of prescribers intent, or some other reason (Smith, 1984 : 308-9).

The traditional role of the pharmacist has always included that of provider of medicines directly to the patient and as an adviser on trivial illness but since the 1948 Health Service Act, the whole population has been able to obtain prescriptions for a fraction of their real cost. This has resulted in an escalation in the number of prescriptions from 1937 when 13,000 pharmacies dispensed 65 million prescriptions to 10,900 pharmacies in 1983 dispensing 380 million prescriptions (P.S.G.B., 1984 : 49-52). The role of the pharmacist is now dominated by dispensing prescriptions and upon this his livelihood largely depends (NHS business is 70% of the total turnover for independent pharmacies.) (Nielsen, 1984 : 540). This is reflected in the recent appearance of pharmacies either in or near group medical practices or Health Centres, where only a small range of "over the counter" preparations are stocked and the work of the pharmacy is

as a dispensary of prescribed medicines. While this produces a perceived highly professional role for the pharmacist there would be serious economic and social consequences if pharmacies were to disappear from shopping centres and medicines could be obtained only from a Health Centre complex. Prior to the National Health Service the cost of a medical consultation was beyond the financial means of many and it was common practice to consult the pharmacist first and only thereafter to visit a doctor. Since its inception more patients consult their medical practitioners as a first resort rather than using self medication coupled with the advice of the pharmacist.

The proportion of prescriptions which are exempt from any charge is currently approximately 75% (Smith, 1984 : 308-9) and this means that some who might have considered self medication continue to obtain treatment for minor ailments through the NHS by visiting their doctor.[2.] From a total of 360 prescriptions written in 1981, 73 million (just over 20%) were issued for possible minor conditions (Smith 1984). For example, prescriptions issued for antacids, laxatives, minor analgesics, expectorants, cough suppressants and vitamin preparations totalled £85 million in 1982 not including the list of medical consultation time. These considerations led to the introduction

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2. The categories of patients who are exempt from charges are people over retiring age, children under 16, those who are in special categories of "chronically sick" and those on low income. This last obviously includes the three million unemployed, their families and most students.

of a limited list of prescribeable medicines which became operative in April 1985. Within this list a very small number of the above medicines are available on prescription and the rest the patient must obtain from a pharmacist or from a supermarket. This discriminates against those who are exempt from charges, and the pharmacist may lose up to 20% of his dispensing business. The suggestion is that "over the counter"sales will increase as people buy their preferred medicines off prescription. This question of "self-medication" is now considered.

Self Medication in the Community

There is good evidence that people "treat themselves" for minor ailments, with the help of proprietory medicines. Horder and Horder (1954 : 77 - 117) showed that only 25% of diseases get as far as the doctor although most of these non-presented events are for trivial complaints as indeed are many of those which are presented. Banks (1975 : 189) note that educational levels have consistently been demonstrated to influence the demand for medical care and lower demands occur among those who proceeded beyond the age of 15 in their education. This is a reflection of the poorer health of disadvantaged sections of society, discussed in Chapter Four. Greater use of preventive services is made by patients with more years of formal education and emergency services are used less. In the U.K. it has been shown that age and social class interact in determining the demand for medical care and Banks demonstrated in his study on factors influencing

this that only 1 in 37 symptoms result in a medical consultatio and then in disproportionate order. Anderson (1977 : 155 160) noted that patients who visited the doctor perceive themselves as less healthy and fewer attempted self treatmen than those who did not. A study carried out on a post wa housing estate revealed that 25% of the people interviewed ha taken a prescribed medicine in a four week period while 66% ha taken a non-prescribed medicine. 40% of the adults and 20% o the children had taken some form of aspirin or painkille purchased without a prescription and 25% of children had bee given a non-prescribed laxative (Jeffrey . Brotherston & Cartwright ., 1960 : 64-8). These findings were confirmed b a national opinion poll commissioned by a pharmaceutical compan (Aspro-Nicholas, 1966) which interviewed more than 2,000 peopl and showed that 71% were taking medicines, one third of whic were prescribed by doctors and two thirds by themselves.

In the light of this widespread use of self medication and als of the demands upon the health service for treatment of mino illnesses it is not surprising that pharmacists are urged both b the D.H.S.S. and by the Pharmaceutical Society to develop thei advisory role. If pharmacists were to play a greater part i primary care (that is, the point at which advice is firs sought), the saving in medical time could be considerable, an medicines currently purchased without any advice could be take safely and appropriately. The role of the pharmacist in primar health care is now considered.

3. The Pharmacist as a Provider of Primary Health Care

The potential health role of the community pharmacist has bee recognised for many years. A report from the Office of Hom Economics (1964) stated that:

> "The pharmacist, having inherited the mantle of his trades predecessors in the late 19th century must give up handlin non-pharmaceutical goods personally so that he can devot sufficient time to pharmaceutical matters or his place in the area of health care may not be recognised."

Recently, the Pharmaceutical Society's working party on th future of general practice pharmacy (PSGB, 1978 : 11.12) took more pragmatic view;

> "the dichotomous nature of general practice pharmacy, which includes the provision of professional services and the retailing of non-pharmaceutical goods, has meant that pharmacies have normally been situated in most shopping centres. This has led to the pharmacist playing unique role in the community as the most accessibl professional person who has detailed knowledge of medicine and an understanding of other health matters."

This was supported by the Consumer Council, which noted the hig esteem in which pharmacists are held by the community and judge their advice-giving to be competent and appropriate. Thei report, based on two sample surveys of 300 patients, argued tha pharmacists should be paid for their advisory role; this woul encourage more pharmacies to open and provide a service in area of low population. (Consumer Council, 1973).

A cautious welcome to this concept was exended by a leading article in the British Medical Journal (1981) but it questioned whether the pharmacist had sufficient clinical training for primary health care tasks.

Two studies (Elliott Binns, 1973 : 255-264) (Whitfield, 1968 : 434-8) which examined the value of health care advice given by pharmacists found that the majority gave advice of a satisfactory and practical quality; 57% of doctors interviewed believe that pharmacists had a greater role to play in advising on minor illness (Taylor Nelson, 1983 : 251).

A Marplan Survey (National Pharmaceutical Asociation, 1982) examined consumer attitudes to the pharmacist as a potential source of advice on health matters and assessed pharmacist s attitudes to this role. Most consumers chose small independent pharmacies for a dispensing service emphasising the personal service which was given. Half the young mothers interviewed had actively sought advice from a pharmacist, but few old people had done so (they tended to treat themselves or to go to the doctor) These findings are very similar to those of the Access to Primary Care Report (Consumer Council, 1973) which found that 7% of old people and 42% of young parents sought such advice in the survey period. The reasons respondents gave for seeking advice from a pharmacist were speed, convenience and friendly service. (The particular advantages of a doctor were seen as an ability to diagnose and the fact that he keeps records. Even when those interviewed did not feel they knew their doctor, or he them, the mere fact of the records made them feel that a relationship

existed). The most common view was that the pharmacist would come out and give advice if asked. If the pharmacist was in view and within speaking distance this greatly affect his perceived accessibility. The responsibilities of a pharmacist were clearly understood by the customers:

> He is definitely not a shopkeeper, he is a medical adviser. He has to know what he is doing, if he makes a mistake he co kill someone.
>
> (N.P.A., 1982 : 20)

Services which the survey showed would be welcomed were advice on dietary problems, urine testing, blood pressure testing and anti-smoking advice.

The majority of the pharmacists interviewed in the Marplan survey regarded the advice they gave on the correct use of medicines as the most important part of their work. Those who said they gave out most prescriptions personally made a positive effort to do so, paying particular attention to verbal information on the dosage and to needs of old people and young mothers. The others said they did so only when there is some special point which needs explaining. This has implications for the development of a primary care role - if prescriptions are accepted and given out by untrained assistants, the main advantage of the pharmacist, his accessibility, is lost. This was emphasised when a pharmacist queried whether the prescription was for a particular patient and described its use. The patient seemed surprised that the pharmacist actually knew what each drug was for and said

later:

> It's only in the past year I've asked the pharmacist anything, I would never have dreamt of it before, if that boy hadn't come out and asked 'are they for you'.
>
> (N.P.A., 1982 : 11)

The pharmacists interviewed wished to develop their role as a source of advice on general health problems and 81% mentioned particularly advice with dietary problems.[3] The pharmacists' own perception of their work, the advice they offered and their accessibility, differed markedly from that of their patients who saw pharmacists as highly respected people who would give advice but only on request. The pharmacists believed themselves to be always approachable, (only one objected to being asked for advice) and to welcome requests for information and advice.

This Marplan survey, and other reports discussed, have shown that there is considerable potential for the development of the pharmacists' health care role and when the advice of the

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3. Only 20% wished to develop a service monitoring blood pressure for the following reasons:

Province of GP	34%
Insufficient training/equipment	19%
Not readily available service	12%
Would cause unnece ssary worry to customers	4%
Other	8%

pharmacist is sought, it is seen to be sound and effective. The pharmacist is highly respected but less easily approached than would first appear. While he is virtually always on the premises when the shop is open, a barrier can be formed by the logistics of how prescriptions are received and handed out. When pharmacists have a policy of doing so personally, then the oportunity presents for him to offer advice. Conversely, many such opportunities must be lost when his presence has to be requested.

The disparity between their customers view and their self-assessment of the health care and advice service offered may be partly due to the tension between a health professional giving impartial advice and a businessman to whom "time is money." Most community pharmacists are small businessmen themselves, or work for small businesses and have particular pressures and conflicts in this dual role.

The next section will examine the role of the small shopkeeper in society and the pressures he faces from "big business." Of all shopkeepers, pharmacists and opticians are now the only two who have to balance the pressures and concerns of running a viable business and at the same time offer an unbiased and professional service to their customers.

4. Pharmacists As Small Shopkeepers

Recent papers (eg. Bechofer+ELLIOTT 1968 : 180-202) have examined

the changing role of the petit bourgeousie in industrial societies and postulate that small shopkeepers have two central economic functions for a capitalist system. They provide a pool from which larger enterprises grow and thus the system does not ossify. It would follow that it is not in the interest of capitalism if their numbers were to drop significantly. Secondly, small businessmen are a source of innovation. Their size, it is argued, makes them more flexible to adapt to change and to exploit new processes.

The role of small businesses is seen as crucial by both major political parties in Britain and their perceived role as "The backbone of the nation" was emphasised by Mrs. Thatcher (1976) who stressed their adherence to the Victorian values of self-reliance, thrift and the acquisition of capital. These beliefs are so central to a capitalist economy that to question whether there is a future for small firms is tantamount to asking whether the system built on private enterprise capital is in doubt: The social significance of small businesses lies in their role as the custodians of beliefs in hard work, thrift, independence and the reward of ones own efforts. Many people have these beliefs but the petit bougeousie live by them. In doing so, they keep alive the values and beliefs which in earlier phases of capitalism provided much of the impetus for the development and formation of capitalist ideologies.

Economic change has greatly affected the social status of small shopkeepers. Formerly, this status was affected to a much

greater extent by the location of the shop and by the social standing of its customers. Most purchases - apart from basic necessities - were made by the middle classes and their social standing was reflected in that of the shopkeepers. Traces of this are still seen in old shop fronts "high class grocer" or even "by Royal Appointment." The growing prosperity of white collar workers and working people has given them greater purchasing power and many more people have access to cars and consequently can shop selectively to obtain the best value for money. Consumer legislation has removed price control and the trend is for consumers to buy on the basis of price rather than for personal service. The disadvantages which small shopkeepers have are restricted capital, lack of business training and of marketing skills. Larger units have greater capital and specialist departments to train managers and to sell effectively. Buying power means that they can negotiate directly with manufacturers to obtain lower wholesale prices.

As small businessmen, community pharmacists face similar problems to independent grocers and ironmongers. One answer to this problem has been to form collective purchasing groups (84% of independent pharmacies do so - (Chemist & Druggist, 1984 :(250)) to obtain cheaper wholesale prices and, in some cases, such as pharmacy, for their general mutual defence (such as the National Pharmaceutical Association). Such groups although achieving particular desired ends, significantly affect the independence of small shopkeepers - one of the central tenets of their desired life. For this independence, they are prepared to work long

hours, and often involve other family members in the running o
the business. In return they can control the work situation
but for pharmacists this freedom is restricted by lega
requirements i.e. they are obliged to be physically present i
their shops which must be open for required periods. For thi
commitment they receive a "basic practice" allowance from th
state for the facility of having a pharmacy in a specific area
(see page 74 above). This means that, for most, they have
basic income on which to build before they start trading - but a
the cost of some independence of action. Their customers com
from all sections of society although pharmacy customers ar
representative of the percentage of prescriptions written - an
hence have a large percentage of parents of young children an
old people.

Most pharmacists spend the day in the company of very youn
girls, of an educational background very different from thei
own. This isolation was examined by Bechofer (1983), who foun
small businessmen to be loners not "joiners" and larg
politically-effective organisations of small businessmen
therefore, rare. The conflict in the situation is that the
have little time for organised groupings and their strong desir
for independence makes them resent any organisation telling the
what to do. The bulk-purchasing arrangements described abov
are very different from organised activity. Unanimity of purpos
is rare in organisations of small businessmen, but common i
professional associations as has been indicated above (page 35).

Like all small businessmen community pharmacists are unpaid VAT collectors for the state and they also collect prescription fees or advise on exemptions. This role they find annoying since many patients believe that they keep the money and many others "sign the back" for exemption without any real understanding of what they are doing. This is salt in the wound to small businessmen, who it may be speculated, believe that our economic collapse is the result of the rest of the population working less hard than they do (a view often expressed by community pharmacists about other sections of pharmacy). Similar feelings were noted by Newby and Bell (1983) a study of small farmers in East Anglia, where those interviewed, who worked long hours themselves could not conceive that other people might work as hard.

A pharmacists' economic success often depends on having premises near to a doctors surgery or a health centre, so as to obtain the maximum number of prescriptions. This has resulted in "leapfrogging" to get as near as possible to newly opened health centres, with much subsequent bitterness in the profession. Such "leapfroggers" do not obtain a basic practice alowance if the distance requirement is not met, but this is compensated by the large number of prescriptions they dispense.

There are serious economic and social consequences in the tendency of pharmacies to "group" round doctors' surgeries. Patients must often travel a greater distance to health centres which increases their reliance on the advisory services provided by community pharmacists. If pharmacies do not remain viable in

traditional shopping areas, then patients will be obliged t
travel to the surgery/pharmacy complex for advice and, onc
there, will be more likely to visit the doctor to obtain
prescription. The economic consequences of this are increase
costs to the Exchequer when patients are provided with medicatio
by the NHS which they might alternatively purchase on the advic
of a pharmacist.

In urban situations neither the shopkeeper or his customers ar
likely to know each other. As a result the shopkeeper is
typically more interested in business and less in persona
service. This is heightened by the rating structure where urba
properties must "turn over" more money to survive. They mus
also compete with big business and become small fish in a larg
pond, thus further eroding their social status. This is shown i
the ethnogrophic study of this thesis when a pharmacis
interviewed had started trading in deprived areas, but had the
moved to the suburbs (see page 107)

Small businessmen have a decreasing amount of political power
Big business provides most employment and has the greates
leverage on local (and central) decisions which may affect th
working life of a small shopkeeper. Local authority decision
can affect his business - such as painting double yellow line
outside his shop or developing health centres which affect ever
pharmacy in the town. Decisions are increasingly being made b
central government which affect the life of small shopkeepers
and such threats can only be rebuffed by national trad

associations. Such groupings of the petit bourgeousie have a clear brief - act for us, but don't tell us what to do. This is shown in the recent advertising campaign by the National Pharmaceutical Association to raise public awareness and expectation of the role of the community pharmacist, when 75% of pharmacists were, "very or fairly willing" to pay a levy for the campaign to be mounted. It has yet to be shown if their practice has changed as a result.

There is tension betwen the role of the pharmacist as a shopkeeper and that of a health care professional. At the simplest level, if people come into the shop to buy something then that is what they expect to be able to do. It is perhaps irritating to try to buy a cough mixture for a child to be told that the condition is self limiting and the "cure" therefore unnecessary. The customer's decision to buy has often been made in advance - this is reflected in a study (Elliot Binns, 1973 : 255-264) which showed that pharmacists are more likely to sell medicine than other sources of advice, for example family or nurses. This is not surprising when the other sources have nothing to sell and it seems reasonable that if people have symptoms they wish to discuss then they want immediate relief as well as advice for the future. The soundness of their advice was rated higher than for any other group in the same study and it had been sought by 11% of the study group (1,000 patients).

The long term future for the community pharmacist (as for small shopkeepers generally) is a matter of concern. If pharmacists

continue to compete with large multiple groups, they will do so to the detriment of the service they provide and time will increasingly be seen as "money". The current trend to pharmacies opening as satellites of group medical practices, or indeed in the medical complex of buildings, offers a convenient dispensing service to the patient, but the resultant absence of pharmacies in neighbourhood shopping areas will make greater numbers of people clients of the NHS. The state might recognise the valuable economic function of such pharmacies by paying the pharmacist for his advisory role and encourage extension of this role to offer screening procedures and health education. These matters are fully considered in Chapters Four to Seven below. A change in emphasis of the role of the pharmacist is essential because of changes in pharmacy practice which have affected both the drugs that the pharmacist dispenses, the distribution of pharmacies in the community and the long term future of the pharmacist. These will be explored in the next section.

5. Changes in Pharmacy Practice

In the community setting the pharmacist rarely sees the doctor whose prescriptions he dispenses and plays little or no part in the decisions for drug therapy. The pharmacist's only intervention is when a prescription is wrong or ambiguous. There is a perception by many that his sole function is the accurate (error free) transcription of prescriptions, whose dosage he checks, into a properly labelled container. Thus this major segment of the profession performs its role to the exclusion of

any meaningful contact with the prescriber. In an examination of the professional interface between pharmacists and doctors (Calder, 1975 : 280-2) only a quarter of the community pharmacists expressed satisfaction with the level of communication between themselves and doctors. Some felt that doctors regarded them in a bad light: probably a correct assessment if the only contact was to verify prescriptions. In contrast over 30% of hospital consultants said that their prescribing was influenced by the advice of hospital pharmacists whom they saw as colleagues with whom they came into regular contact. The discontent expressed in Calder's survey by community pharmacists about their status and professional involvement would seem to be borne out by the results which show the relationship between prescriber and pharmacist to be virtually non-existent.

This loss of identity was referred to by Dr. Gerald Vaughan, Minister of Health and Social Security in an address to the British Pharmaceutical Conference in 1981. The Minister said that perhaps overriding all else and of the greatest interest and challenge was the future of community pharmacy.

> "One knows there is a future for hospital pharmacists, one knows there is a future for industrial pharmacists, but do those present know, because I am not sure that I do, what is the future professional role of the general practice pharmacist?"
>
> VAUGHAN., 1981 : 300)

Changes in pharmacy practice have resulted in the community pharmacist becoming isolated from his customers. Four problems can be identified. First, as has already been suggested, pharmacies are becoming "prescription factories" - often near health centres or group medical practices, when the number of prescriptions dispensed is such that there is little time left over for speaking to patients. It is noteworthy that the Pharmaceutical Society places no restrictions on the number of prescriptions which can be dispensed with one qualified person on the premises, and the average community pharmacist dispenses one prescription every four minutes of the working day (P.S.G.B., 1984 : 85-9a). The number of pharmacies in the U.K. declined from 15,302 in 1955 to 10,632 in 1980. Since then there has been an increase but most of the new pharmacies are in areas where there is already a satisfactory pharmaceutical service.

A second problem with modern community pharmacy practice derives from the high turnover in prescriptions, which has served to cut the pharmacist off from his customers and is compounded by the shop fitting style imported from North America in the 1960s and which has been adopted by most pharmacies. The pharmacist is physically screened from his customers or placed behind a glass booth which has an equally discouraging effect on patients who seek his advice. One large chain adds to this a raised dais. So the pharmacist tends to be behind a screen and to spend large parts of the day checking prescriptions. Thus his customers have

fewer opportunities to seek his advice.

A third factor is that the last 20 years have seen a revolution in the way in which medicines are prepared. "De-skilling" has taken place on a massive scale (Bell, 1983 : 753)and pharmacy has not escaped this process. Virtually everything dispensed nowadays has simply to be counted, poured or at most diluted. The future will bring individually dispensed items to the extent that even the counting and pouring are outdated. The whole discipline of how to formulate medicines , how best to dilute, emulsify and present the same active ingredient in various ways (which pharmacists are trained to do) is now virtually unused and uncalled for in community pharmacy. This is not to negate the vital role the pharmacist has to play in screening prescriptions for problems and ensuring that the correct medicine is given. Teeling Smith (1967 : 198), while agreeing that pharmacy must change, emphasized this crucial activity of monitoring therapy. This must always remain, he argued. It is unthinkable that medicines would be dispensed by unsupervised and untrained people, but what has changed dramatically is what pharmacists now actually do with their time. "De-skilling" means prescriptions may be quickly filled, and customers dispatched without even seeing the pharmacist.

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4. Toffler (1979 : 100) points out that in an industrial society where people are increasingly geographically mobile they are unlikely to have any longstanding relationships with health care professionals, one of the results of which is that they are less likely to ask for advice.

The fourth change in pharmacy practice which has contributed to the isolation of community pharmacists from their customers concerns the medicines which they dispense - "the tools of their trade". The discovery of sulphonamides and then antibiotics helped to eradicate some diseases which had been prevalent for centuries. Mood affecting drugs can control the symptoms of mental illnesses (one drug alone chlorpromazine, has released thousands of previously hospitalised patients into the community) but such drugs come with many and varied side effects. They are more effective , but have an increased measure of risk attendant on their use. As new classes of active agents become available to ameliorate previously untreatable conditions, greater numbers of people become drug takers and problems become evident including the untoward or unexpected effects of potent therapeutic agents. The sophistication of modern drugs (many having narrow therapeutic indices) and the fact that some interact with other drugs and foods are indications of the need for increased counselling and monitoring of their effects.

It is essential that patients are made aware how their medicines should be taken, when they will achieve their best effects, and what to do if adverse reactions occur. The importance of counselling and monitoring is indicated in the percentage of hospital admissions which are drug-induced - as many as one in ten patients admitted to geriatric units in a large scale study (Royal College of Physicians, 1984). A central aspect of the education of pharmacists concerns the action and side effects of drugs. It is in the patients' interest that they should be made

aware of such problems, but many pharmacists find they have little time for this activity because they must spend much of their time supervising the correct counting and labelling of medicines. Many pharmacists believe that what they need to do is impart knowledge - which the patient may well want and need - but to offer useful advice they recognise they must change their practice and come "out front" where they have a vital role to play.

Two pharmacists who are acting on this belief and changing their practice to become more accessible to their customers were visited, to study the activity in their pharmacies and the amount and level of interaction between them and their customers. This ethnographic study forms the next section and the results offer pointers for the future role of pharmacists.

6. Case Studies in Two Pharmacies

The pharmacies chosen were in very different settings - one in an inner city area with a high Asian population and the other in the centre of a county town. The first is a small shop in which the pharmacist is freely available for consultation and able to see all the transactions taking place, while the other, in a busy shopping street, has an open plan dispensary at right angles to the main shop. Thus customers come into this area only with prescriptions or specifically to seek the advice of the pharmacist. Both pharmacists are of similar high standing in their profession (previously ascertained by involvement in

postgraduate courses and undergraduate training.) In neither shop does the presence of the pharmacist have to be requested - patients come to see him and do so usually without waiting.

The plan was to look solely at interactions relating to prescribed medicines, or those where the pharmacist's advice was sought and be present at very busy times (such as morning prescriptions) to reduce the "fudge" factor of practices varying widely from the norm because of the presence of the observer. It was hoped to identify the relationships the pharmacist had with his customers (particularly whether and when they sought his advice), also the potential for extending advice to areas such as health education. Gender, ethnicity and approximate age were recorded to see if the time spent with a customer by the pharmacist varied with any of these factors. (It was expected that older people and parents with babies would have more contact time (Marplan Report N.P.A. 1982) to see they understood the dosage and techniques required for medication.) It was noted which patients asked questions either about their medicines or on general health matters since it suggests a measure of confidence in a relationship to be able to do so (Toffler, 1979 : 350). Therefore the records kept indicated who had been asked (pharmacist, technician or assistant) and how the customers' question was subsequently dealt with. That is,if the assistant or technician dealt with it herself, or there was a referral system such that inquiries went to the pharmacist. (It was felt that there is little advantage in customers visiting a pharmacy for advice if the advice they receive is proferred by someone with little more relevant

knowledge than themselves, or who is perceived in that way.) It was important to see who gave the medicine to the patient or his messenger since this is the vital contact time when patients will raise fears and ask questions about their drugs/disease state or both. Finally a record was kept of the occasions when the pharmacist volunteered advice without being asked. Subsequently each pharmacist was questioned informally about his perception of his role.

The First Case Study

The first pharmacy was in a run down inner city area, at a crossroads with an arterial road. The area had a large Punjabi and black population. In such an area there is, typically, an ageing white population and a younger Asian one. The pharmacy's situation is such that much of the shop trade was expected to be "passing". The staff consisted of a pharmacist, a student pharmacist, a technician (in training on a BTEC course) and a shop assistant. The dispensary was screened by a wall but the pharmacist was freely accessible to the shop and came in and out continuously. It was amusing to note how many people positioned themselves to watch their medicines being dispensed, sometimes craning their necks at remarkable angles to achieve this.

A seat in the dispensary was offered but rejected by the author, who sat in the shop. It was not envisaged that much empathy would be felt by sitting there, merely low visibility, but it is surprising how quickly the world is seen from the patients point of view. Each observation session lasted for three hours with four sessions in each pharmacy, and then the pharmacist and all

his staff were interviewed.

The plan to time each customer-staff transaction was impossible to achieve, because there were large numbers of people waiting for prescriptions at the same time, and the number of drugs given out varied from one bottle to (in one case) a carrier bag.

The hypothesis that proximity to a main road meant a largely "passing" trade and a possible negation of personal service was unfounded; the staff seemed to know most people, if not by name then by the drugs they used. All prescriptions were received by the assistant and nearly all given out by the pharmacist. In discussions with the pharmacist, it was clear that he, too, knew his customers by the medicines they used. For old people this meant that he knew changes in therapy and the two potentially dangerous ones were checked out with the patients. With these exceptions, neither old people nor mothers with young children were given verbal advice, but they were given very clear additional leaflets with many medicines.

The student pharmacist was Indian and he agreed that leaflets written in Punjabi would be helpful, but both he and the pharmacist believed the widespread myth that Indians who don't read English are illiterate. In theory there is a core Indian language, Hindi, which all Indians should be able to speak. In practice it does not work this way, at least in this case study! The Indian pre-registration pharmacist had learned Hindi when he started this employment and when asked to explain something to a Punjabi customer they understood him but replied in Punjabi.

Guidance labels printed in Punjabi would seem a helpful service to offer in this shop.

When patients asked questions they were invariably answered and the pharmacist never seemed to be harassed. Only two Indians asked questions (and one of those was non-pharmaceutical) but they were both answered in exactly the same way, politely and in an unhurried manner. The ethnic minorities were not treated differently in any way but their behaviour differed from non-minority customers. Virtually everyone waited for their prescriptions, with the exception of the Indians. Perhaps it was a coincidence or a factor of age (older people not wanting to make two journeys) but all except two of the Indian customers left and returned later to collect their prescriptions.

The pharmacist's aim is to give out all medicines personally, since student pharmacists change annually and he needs to know his customers. He volunteered that he loved his job and felt he knew most of the community, but shortage of time (even with an excellent supporting staff) had encouraged his use of additional labels and leaflets, which he paid for himself. He actively looked for an Asian student each year to help his customers who were unable to speak English. The relationship between the pharmacist and his customers was paternalistic - while there was much consideration and kindness shown by him, there was no attempt to establish relationships of equals with his customers.

The Second Case Study

The second pharmacy was studied in a busy shopping street in a

fairly affluent country town, where one would expect to find a cross section of the white population but few of ethnic minority origin. The shop was in two parts, at right angles to each other and thus the dispensary staff dealt only with prescriptions and medicines sold or counter prescribed by the pharmacist. It was open plan and the pharmacist and his staff were in view all the time. The staff comprised two pharmacists, a pre-registration graduate and a technician. Prescriptions were taken in by any of these, but nearly all were given out by the owner-pharmacist. Some were given out by the technician, after clearly visible checking (always by the pharmacist), and rather fewer by the student. The second pharmacist dispensed for the entire period of the observation. There was plenty of seating but most people preferred to stand and watch their medicines being dispensed. The morning was, as in the first case study, very busy, and again it proved impossible to time or record the transactions, so those with pharmacist intervention were noted.

The pharmacist-owner was very dominant here - he knew virtually everyone and they knew him. Because he could see everything that was happening and had another pharmacist (whose work did not have to be checked) he had more time for interventions and a far higher rate of doing so than in the first pharmacy. A large number of people came specifically for advice and these conversations often developed along the classical medical path. A medical consultation can be defined as symptoms - investigation/examination - diagnosis - advice - treatment. Patients were prepared to discuss all manner of symptoms with

this pharmacist, and often these developed into investigations. There were several examinations (although there was no consultation area) and his patients seemed not at all concerned that they were in a public place. His investigations were impressive - for example, a woman with a rash was questioned about changes in her diet and new activities and very quickly he identified the probable cause. Problems with drug therapy were carefully analysed and constructive suggestions were given. There were several comments from patients about their unhappiness with "the doctor" (in particular, the appointments system) and these were invariably turned aside without comment.

Any question from a patient about his medicine had an automatic response from whoever was giving it out - all medicines would be taken out of the bag and each routine carefully explained. Nearly all prescriptions were given out by the owner-pharmacist but the rest of the staff, when asked, handled all questions about dosage. Any other questions were referred to the owner-pharmacist and all counter prescribing was done by him. This was mostly the result of the patients' own choosing - they were prepared to wait for him and had come for his advice.

When the author questioned the staff, the owner/pharmacist was still dominant. He probably always is - he talks incessantly and is very confident of his professional ability. The system of "instant referrals" to him has just grown, and was hardly surprising given his personality. He had many patients who see him rather than a doctor and was quite clear about which to treat

and which to refer to a doctor. He considered most people know which illnesses are trivial and which are not, and thinks they like the speed and informality of his shop, rather than appointment systems.

The owner-pharmacist always appeared to be a "professional" when speaking to patients, rather than treating them as social equals. He confirmed that this was a positive decision in the belief that his advice and medicines would be treated with greater respect. He, too, volunteered that he loved his job and had moved here from an "inner city" area when Asian immigration had become a factor in his work. He felt that he could not continue to work where his customers did not understand him and he had been greatly concerned to see medicines being taken away with no certainty that anyone understood their usage. While there was no attempt at conversation on the basis of equality, this man was a communicator and it was a vital part of the satisfaction of his job that the distance between him and his customers was not great. This personal commitment and service also seemed to bring good economic results - the pharmacy was very busy and there was often a queue waiting for his advice. He has incorporated much health education into his daily practice and virtually everything he sold was accompanied by excellent advice.

Discussion

One fact which emerged from these case studies was that both pharmacists suggested that the problems encountered with ethnic minorities were such that they had taken practical action - one to employ a pharmacist as interpreter, and the other to move his

business. Both were committed to their work, cared about medicines being taken correctly and neither remained in the dispensary or let their shop assistants deal with transactions.

In both pharmacies the great majority of prescriptions are dispensed in the morning which meant the "average" time of four minutes per prescription throughout the day was, in fact, greatly reduced at busy periods.

The pharmacies were both in the 20% (Panton & Morley, 1986) range which dispense 4,600 or more prescriptions per month. When adequate trained staff are available to deal with the work (as both had) then the dispensing service can be extended to include an advisory health care role. The first pharmacist's decision to give out nearly all prescriptions put his time at a premium, and there were occasional bottlenecks, but his customers could question him at this point if they wished. In the second pharmacy the advisory role was very well developed, as shown. The possibilities of developing the advisory role are less good elsewhere, the Survey of Pharmacies, (P.S.G.B. 1984 : 85a) showed that there are around 300 pharmacies where every pharmacist dispenses, or is responsible for the dispensing of, one prescription item every two and a half minutes of the entire working day! It may be questioned what advisory role such pharmacists can possibly have, and there would appear to be a case for legislation to ensure one pharmacist should be responsible for a fixed maximum number of prescriptions, if public safety is to be assured.

Finally, it must be noted that both pharmacies were highly

successful as businesses. Both pharmacists would probably have made a success of any small business whch dealt with the public. They were good salesmen - interested in their customers needs, unfailingly polite, and ensured that their staff offered the same high standard of service.

7. Effecting Change in Community Pharmacy

Schondelmeyer (1982 : 2137-42) argues that we must examine changes in society and its needs before seeking to change a profession. He quotes Parsons (1953)

> "All social units, including professions, have two basic functional requirements related to their organisation, its change, and its continued existence. These functional requirements are concerned with activities that affect both the relationships between a professional, its environment and the internal structure and operation of a profession."

These requirements have been labelled as effectiveness and efficiency, respectively. The degree to which a profession's outputs correspond with the needs in the surrounding environment has been described as effectiveness and the ratio of actual inputs to actual outputs as a measure of the profession's internal operation has been described as efficiency. Long term survival and success, it is argued, depend on improving effectiveness, while day-to-day change comes by improving efficiency. Thus if a profession meets the needs of society by performing the right function it will survive.

> "it is more important to do the right things than to

do things right." (Druckerp 1970).

When effectiveness and efficiency are in conflict then priority should be given to the former, but over-emphasis on either will jeopardise the whole. A strategy for change, then, should seek to match the profession to the external needs of the society in which it exists - to compare the profession's resources and capabilities with its environment. Analysis of the strategy for change in a profession suggest it must assess the current position of the profession in four important ways:

> The extent of the profession's present and planned interactions with its environment, which can be referred to as the profession's domain, social object or scope.
>
> The level and patterns of the profession's past and present resources and skill deployments that will help it achieve its goals and objectives. Sometimes, this component will be referred to as the profession's distinctive competencies.
>
> The unique position the profession develops vis-a-vis its competitors (competitive advantage)through its pattern of resource deployments or scope decisions or both.
>
> The additive effects that are sought by the profession throughspecific combinations of resource deployments and scope decisions and their interaction with the environment.
>
> (Hofer and Schendel, 1978)

The community pharmacist is a highly considered health professional (Consumer Council [redacted], 1973) whose advice is respected. His particular knowledge of the action and uses of drugs is rarely requested by the prescriber (because they do not

work together) and a combination of factors have made many pharmacists less easily available for consultation by their patients.

Past legislation has ensured that pharmacists have a near monopoly of dispensing but patients now need their advice on how to take the infinitely more potent medicines that are dispensed, which argues a development of their role as primary care advisers on dispensed and other medication. Pharmacists have a competitive advantage over other health professionals in being outside the referral system of the NHS i.e. the patient does not need an appointment to consult him. Further his premises are still largely in shopping areas and thus no special journey is needed which has considerable resource implications for a greater role as informed advisers on a range of health advice.

This chapter has been concerned with the role of the community pharmacist in contemporary society. Changes in pharmacy practice suggest that new roles for the profession are urgently required. The case studies suggest that advising and counselling roles might be developed beyond aspects related solely to prescribed medicines and for minor symptoms. In the next chapter the possibility of an active health promotion role for pharmacy is explored.

C H A P T E R F O U R

HEALTH PROMOTION - A NEW CHALLENGE FOR THE PHARMACIST

This Chapter examines human behaviour as a cause of disease and the ways and agencies by which health can be promoted are outlined. The anti-health lobby is noted, as are the vested interests which urge unhealthy patterns of life. Having set out this background, the ways in which the community pharmacist may be involved in health education campaigns are discussed, relating this potential involvement to the anticipated interests and concerns of people who regularly visit pharmacies.

1. Human Behaviour As A Cause Of Disease

Infectious diseases are now largely controlled by better living conditions and the advent of antibiotics. A higher standard of living has inevitably given most people more disposable income and manufacturers of cigarettes, alcohol and foods, with the help of the advertising industry, have been assiduous in encouraging the spending of this money in ways which may adversely affect health. Waterborne diseases were not eradicated by encouraging individuals to boil water, but by state legislation and the behaviours identified below are not simply wilful disregard for health on a personal basis but the result of positive promotion of behaviour patterns which can impair health.

Of these behaviours smoking is the greatest single cause of disease. Cigarettes are actively promoted in magazines, newspapers and at many sporting fixtures. Each packet has a tentative statement suggesting that they may result in ill health - negated, some may feel, by the most popular brand being stamped with "By Royal Appointment" which might be seen as a royal seal of approval, far more powerful than possible health risks. It is established that smoking causes lung cancer but it also contributes to ischaemic heart disase,[1] bronchitis , gastric and respiratory disease. Of 1,000 young men who smoke cigarettes six will die on the roads and 250 will die as a result of smoking (HEC 1984). The total quantity of cigarettes smoked has fallen

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1. IHD now accounts for one third of deaths in the UK. This continues to rise although the rate of increase reduced in 1970-80. Acheson (+HAGARD) 1985 : 71)

since 1960 but this varies with social class and the greatest change has been in the smoking behaviour of classes I and II. For women the position is worse and more women now smoke than ever before.

Table 4.
Percentage of people smoking, Great Britain

Social Class	Men		Women	
	1958	1975	1958	1975
I and II	56	36	43	33
III	60	48	42	45
IV and V	57	52	42	45

Source: Smoking and Professional People, Department of Health (HMSO, 1977)

The British diet is now the most processed in history and consumers have little idea what they are eating. Sugar is cheap and therefore included in a range of foods, but the manufacturer is required to state only that it is present. For example, a well-known branch of muesli (promoted as a health food) contains 21% sugar (Walker, 1984 : 180). The National Advisory Commission on Nutrition Education Report (1983) examined the ways in which the British diet had changed and identified the high level of sugar as being responsible both for widespread dental caries and as a large contributory factor in overweight and obesity. (30% of the British population are overweight, 6% sufficiently so to be termed obese.) Adding sugar accustoms people to its taste and hence a desire for it is established in childhood. For the manufacturer the ability to add sugar means the cost of the product is reduced - sugar being cheaper than the other ingredients of, for example, muesli. The same is true of salt which is implicated in the incidence of hypertension and heart

disease. One half of all the salt eaten is in processed food.

Fats are eaten in increasing quantities encouraged by E.E.C. subsidies which offer farmers a high return on saturated fat milk products. The consumption of saturated fats directly relates to serum cholesterol level, which is a significant factor in the development of ischaemic heart disease. (Shaper, 1985 : 197 - 209). As a result of this high dairy food and fat diet 40% of calories now come from fat (NACNE, 1983). Once arteries are diseased and lose their elasticity the process is irreversible and all that can be done is to slow it down.

Fibre is taking out of processed food (such as bread) when salt and sugar are being added, reflecting its unnaturalness. Lack of fibre is implicated as a causative factor in some cancers and bowel disease and the NACNE report recommends the amount eaten be doubled by promoting wholemeal bread, cereals, vegetables and fruit. (The NACNE recommendations are to eat half as much sugar, one quarter less fat, halve the salt intake and double that of fibre.) If manufacturers were required to declare the amount of each ingredient the convenience of, for example, meat products would be retained without buying sausages which currently contain 40% fat. Public outrage when it became known baby foods contained sugar and salt lead to a dramatic change in manufacturing policy and the interest generated by the NACNE report suggests such legislation would be welcomed by consumers.

The cost of alcohol has decreased in real terms. Between 1970 and 1976 the price of beer fell by 4%, wine by 14% and spirits by

21% compared with the retail price index. The average disposable income increased by 17% in real terms over the same period thus further decreasing the real price of alcohol. The number of licensed premises has increased including supermarkets and off licences and alcohol is heavily advertised (much of it directed at young people). Over 20% of drivers killed in road accidents are found to have illegal levels of alcohol in their blood, and suicide rates are high in countries where alcoholism is common. The death rate from cirrhosis of the liver has increased by 50% from 1955 to 1975 and the rate for admission to psychiatric hosptial for alcoholism by the same amount for the period 1970 to 1975. Rates of offences for drunkenness in young people have risen as have those for problems such as wife battering. (Muir Grey, 1979 - 198).

People now take less exercise - wider car ownership and mass transport systems mean that the regular exercise of walking is lost and this is postulated as a contributory factor in heart disease (NACNE, 1983). These four behaviours - smoking, diet, alcohol and lack of exercise - are the most important areas where health education could have an effect on health - specifically, the incidence of ischaemic heart disease, for example - and the ways in which this education is at present offered are examined in the next section.

2. Health Promotion Organisation and Strategies

A range of factors combine to determine individual and community health, including genetic endowment, physical environment,

occupation, socio-economic factors and the provision and use of health services, as well as individual behaviour. With the possible exception of the first, all of these factors are potentially open to change through health education, ranging from action at community/societal level to that on an individual basis (Nutbeam, 1984 : 115-9).

Such health education may be grouped in three main headings - the provision of information and advice on human biology and hygiene, information about and targetting of health services, including strategies for their greater use by those most at risk, and finally information about national and local policies which often pay little heed to health consequences. (Draper, ET AL 1980 : 493-5). The health movement in Britain in the last century provides a classic example of this last approach.

The World Health Organisation in its 27th Assembly examined the links between health and factors such as environment, income, housing and life stresses and recognised the need for multi-disciplinary teams to work at local level which would examine not just health facilities but the opportunities for exercise, work and recreation. The European Region of the World Health Organisation produced a subsequent document "Health for all in the year 2000" which set targets for the achievement of health. Its strategy is the promotion of lifestyles condusive to health, the reduction of preventable conditions and the provision of health care accessible and acceptable to all.

Organisation

Health education in the U.K. is offered at national and local level by the Health Education Council, national and local pressure groups and district health education services. Their objectives all broadly follow the elements of the WHO policy while pressure groups lobby for a special interest.

The Health Education Council is funded by the DHSS who have a representative on its main committee, although it acts largely independently. It is allowed to define its own priorities, to decide strategies and evaluate their success. It works both by national campaigns and by the publication and free distribution of publicity and information material on a wide range of health topics. However, the HEC's funding predisposes it to be ineffective in mounting a political lobby against any particular government policy which it feels to be legislating against health.

National pressure groups do not suffer from this disability and seem to be a more potent political tool to effect change. For example any public discussion about the advertising of cigarettes will automatically include a representative from ASH (the anti-smoking group) but will only rarely include a spokesperson from the Health Education Council. These pressure groups of which ASH, the British Heart Foundation and MENCAP are best known, are extremely effective in acting as parliamentary lobbies to promote the interest of their members. They also raise money which is used both for publicity of the cause and for research into the potentiating factors of relevant disease states. They nearly all

have local networks and here they sometimes work alongside health education groups.

District health education services now exist throughout the NHS. They are managed by a district health education officer, managerially responsible to the district medical officer, who has a staff establishment based on not so much the health needs of a particular population but the degree of importance which the health authority attaches to health education. Their strategies are agreed with the district medical officer and are perceived as responding to the particular needs of that health district. While there is general agreement on the behaviour patterns which should be changed for better helth, there are few national targets set to which district health education officers respond, although there is general agreement about the principles of the WHO targets.

Health education officers come from a variety of backgrounds, some from nursing and an increasing number from social sciences. This disparity of backgrounds and local autonomy means that the ways in which they act are very different. Some respond to national and regional initiatives very willingly - seeing these as the most appropriate way to act but an increasing number work as independent health scientists setting themselves defined targets and monitoring their success by using control groups and measuring any change in behaviour. This is very understandable since each of us likes to see some reward for our efforts but the validity of these exercises is doubtful since in a society

dominated by the mass media any control group must be susceptible to outside influences and education. For example, the results of a health education programme informing teenage girls of the benefit of rubella vaccination, using a control grop, could be distorted by one class teacher's personal memory of a vaccination tragedy being narrated to either group.

In the North American drive to reduce the incidence of ischaemic heart disease state-wide campaigns involved all possible voluntary organisations - womens groups, parent/teacher associations and church groups. All health workers were included - for example in the Maryland campaign ambulance men were trained to take blood pressure and every ambulance and fire station became centres for blood pressure measurement. Such a campaign could be mounted in Britain but as the situation stands each districts' freedom to determine targets must result in some dissipation of energy.

Strategies for Health Promotion

Health education is interwoven both with the different ways in which better health can be actively promoted and with the different groups of people (ranging from individual patients to political pressure at national level) who must be influenced if behaviours are to be changed. Such initiatives are normally classified in three groups.

The primary prevention of disease is concerned with preventing specific diseases developing in individuals in a community. Activities in this class may include vaccination and immunisation

against specific disease, the control of a specific behaviour which causes the disease and encouragement of general behaviour which is known to reduce its risk.

In any branch of health promotion the measures used should be evaluated where possible to validate their continuation and assess their efficiency. For example, in vaccination programmes the patient is encouraged to change his behaviour by being vaccinated, when its results are not as clear cut as would at first appear. Consider the widely held view that vaccination was the most important factor in reducing disease: only by an epidemiological study is it apparent that this view is mistaken. For diphtheria and polio, the case is clear, but for other diseases vaccination was only one factor in their eradication. Thus a health education campaign on vaccination should inform the recipients of the relevant factors affecting their decision either to be vaccinated routinely , when the specific disease is prevalent, or to make the decision that the risk factors involved with vaccination outweigh the possible benefits. The control of specific behaviour e.g. smoking, which causes disease, can be affected by public education on the risk factors and the relative importance of smoking in the incidence of heart disease.

Secondary prevention is concerned with stimulating people to respond to services for the early detection and treatment of diseases once they are established and to ensure that those treated recognise how best they can co-operate and assist with the treatment. Secondary prevention includes direct patient education and screening. Once disease states have occurred, i.e.

prevention has failed, they do not always present with symptoms, and in these cases rountine screening may be of benefit. Such procedures are not restricted to infectious diseases but are increasingly common for other disorders such as the detection of congenital abnormalities in babies and cancers and coronary diseases in adults.

Ethical problems must be considered in any such screeening programme. The health professional has instigated the procedure rather than the patient presenting with specific complaints and it is incumbent on the professional to ensure that the abnormality will be found if it is present so the patient is never left with a false sense of security (Illich, 1977 : 89-94). It must also be determined that effective treatment is possible or, if genetic defects are being screened, the patient should clearly understand the situation if the results will not be able to help the prognosis of his disease. Screening programmes can be specifically targetted to the groups most at risk, for example, men over the age of 40 can be routinely screened for hypertension or recent Asian immigrant women, who have a high perinatal mortality rate, (largely as a result of socioeconomic factors) can be encouraged to accept antenatal care.

Tertiary prevention ensures that patients respond effectively after treatment to limit the recurrence of the disease, minimise disability and return to as active a life as possible. Education about rehabilitation may be equally directed towards ex-patients and their relatives especially where chronic physical

or mental disability is involved.

Health education activities are also designed to be effective on three specific target audiences:

patients and groups of patients or individuals and groups who may become patients,

health service and other staff who are concerned with the provision of services and co-ordinating the efforts of staff from different disciplines,

local and national government where changes may be required if health education programmes are to succeed.

Collating these two aspects of health promotion (the type of prevention to be used and the target group it is desired to influence) gives a planning framework as shown below:

TABLE 5

THE SCOPE FOR ACTION TO PREVENT HEART DISEASE

Focus / Class	Services for Public and Patients	Education and Instruction of Staff	Information and Policies for Government and Corporate Bodies
Primary Prevention "doing away with the causes of ill health"	Public education on risk factors and the relative importance of smoking, diet, exercise, obesity etc	Training and support for teachers, health visitors, health education officers. Control of smoking in NHS premises: NHS to set example	Government & local controls on tobacco promotion, food policy, and provision of community facilities for sport and exercise inter-agency collaboration & sponsorship. Development of special voluntary groups working in this field
Secondary Prevention "attacking the early stages of ill health"	Detection of high risk groups. Screening for hypertension. Smoking withdrawal services. Patient education.	Training and support for clinical teams and GPs in patient education and screening. Occupational health service to focus on smoking, hypertension screening and to encourage exercise and obesity control.	Resources for screening and research into early treatment methods and for patient education and education of families.
Tertiary Prevention "minimising the effects of continuing ill health"	Support programmes for active rehabilitation after treatment.	Training and support for rehabilitation staff, remedial professions—community nursing staff	Resources for rehabilitation and community care programmes. Emphasis on inter-agency collaboration.

The counter argument to such programmes is that the influence of medicine will spread across an ever widening field, exemplified by the statement from the world health organisation Alma Ata conference which declared health to be;-

> "A state of complete physical, mental and social being and not merely the absence of disease or infirmity."

If medicine has a free hand to control all of these Illich (1977 : 89-94) argues there is cause for concern and that if this desired end is achieved everyone will become patients and their lives will be increasingly interwoven with the practice of medicine from birth, whether or not they are ill and whether or not they desire the service.

But society increasingly expects medicine to deal with the consequences of social problems and its inability to do so is often seen to be the result of insufficient funding. For example more money is given to health authorities to deal with drug abuse, although few claim success in any medical treatment of the misuse of drugs which has nothing to do with disease. A report (unpublished) recently presented to the West Midland Regional Health authority expressed concern that in a study of general medical practitioners in Birmingham, few had felt confident to deal with childhood problems such as temper tantrums or bed wetting. None had questioned whether such problems were their concern since it is increasingly to medical practitioners that people turn for help. Religious and family ties are fewer and in a society where the majority of women work, young mothers cannot

rely on neighbourly advice. Much wider dissemination of information on factors which affect health would help people to make their own decisions and perhaps to rely less on the controlling agency of medicine.

Health education programmes invade peoples lives and realistic assessment should be made of the possible outcome i.e. it must be a real health problem for which there are solutions or the fact that treatment is not possible should be made clear to the patient. Of current concern is screening for breast cancer, where those who adhere to the philosophy that any "cure" must increase life expectancy believe that detection and subsequent treatment do not change the equation for those patients. But oncologists argue that their treatments have improved sufficiently to justify mass screening and that greater life expectancy now results.

There is a danger that caution may be overdone, because of Government pressure (since inaction is cheaper than mass mammography), or from vested interests, (such as the farming lobby who have successfully diluted nutrition advice from experts) (Sunday Times August 4, 1985). If society is too punctilious in waiting for absolute proof before acting, it then ignores the evidence of previous generations who did not wait for such direct evidence but enacted legislation which saved many lives. The equivalent controversy over treatment is concealed by the private nature of the doctor/patient relationship. Health education tries to offer patients unbiased information on the latest available knowledge about the health risks of certain

behaviours. The intention is that it should be adequate to make him decide whether or not he will attempt to modify his behaviour, to seek help from health professionals who can help him to do so or to actively lobby political support for changes to occur at national level.

Examples of such changes would start with the simplest lever - that of tax to raise the cost of cigarettes and so reduce the number sold. It would selectively hit the poorer sections of society since it is they who smoke the most but not to take any action argues a callous disregard for human suffering. Smoking in public places can be banned by legislation thus making it easier for young people not to "light up." Eighty years ago it was exceptional to see someone smoking and there is no reason why this situation should not reoccur. Such changes in public policy will result if the statistics of smoking are publicised and its association with disease and death.

Diet could be improved if legislation required more informative labelling and changes in E.E.C. agricultural policy. The power of vested interests, in this case the agricultural and food lobbies, is great and affect parliamentary decisions and public opinion.[2] Part of the subsidy given to farmers to produce high

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2. The Guardian, April 12, 1980 reports that the Ministry of Agriculture has the power to veto advertisements on independent television which are competitors of butter. Thus "Flora" unsaturated fat margarine may not be advertised in a way which suggests awareness of heart disease.

fat milk is used in an advertising campaign which urges that it be given to children. While some underprivileged children still need milk to supplement a meagre diet, no developed society should now be encouraging the drinking of high fat milk as a habit.

If the advertising of cigarettes, alcohol and high sugar sweets were banned, people would indeed have a free choice. As it is, hugh advertising budgets are used to promote an anti-health message and all of these companies are clearly aware of the harm their products can do "it's a free country". The freedom to encourage people to kill themselves by using particular products seems of doubtful value and can only be countered by giving people statistics and facts of what harm these can do.

Future generations will note with disbelief that young people were enticed to start smoking when it was known that cigarettes would be likely to kill them. Information and education on the hazards of smoking, of drinking too much and of an inadequate diet, could affect the incidence of ischaemic heart disease, currently a problem in Britain of epidemic proportions.

Health education can be offered in other areas of health care - for example on the proper use of drugs to reduce the incidence of iatrogenic diseases. Family planning advice can often be the most practical way to help a disadvantaged family and the particular problems of older people can be alleviated by identifying local sources of help and giving specific advice. The

potential role of the community pharmacist in offering such hel
and in promoting health care generally is the focus of this stud
and the next section outlines the ways in which he can b
involved.

3. The Potential Role of the Community Pharmacist

There are approximately 11,000 community pharmacies in Englan
and Wales in which some 335 million prescriptions were dispense
in 1983, the majority of these for young children and th
elderly. Therefore these two target groups for health promotio
programmes - parents of young children, and old people - ar
frequent visitors to a pharmacy. The pharmacy is also used fo
self medication; few overweight people consult their doctor bu
they come to the pharmacy for slimming aids and calorie reduce
foods. Thus pharmacists see both patients and people in th
community who have not visited a doctor or a dentist. Perceive
ease of access to seek the advice of the pharmacist is likely t
reduce the social distance between him and the customer and th
continuity of his presence offers great potential for a role a
health educator. "Campaigns" come and go but the pharmacis
remains in his shop after their departure.

The community pharmacist is well placed to act as a provider o
both primary and secondary prevention of illness and advice, an
considering the groups of people known to visit pharmacies and
their health education needs, the potential role is wide. Hi
education ensures he is competent to give advice on healt
promotion and his position (outside the referral system of th

NHS) means no appointment is needed to seek his advice. There are many aspects of health care in which the pharmacist is well placed and able to offer advice.

Advice For the Elderly

Case studies in Chapter Three show that pharmacists are already playing an important role in giving advice to customers; what is suggested is that this "compliance with drug therapy" role can be expanded into a full "health care promotion role" especially with regard to elderly customers. Older people sometimes cannot read labels on drug containers or medicine bottles and do not understand instructions, or simply forget what they are supposed to do and the pharmacist has a crucial role to play in improving this situation. The pharmacy action group (see page 11) defined this role and compliance with drug therapy formed part of the small scale study which is described on page 160. The Health Education Council has identified particular problems faced by the elderly - the dangers of hypothermia, of poor nutrition for people living alone or on low incomes, and accidents in the home. They publish excellent booklets and the pharmacy could be used as source of these, complemented by lists of local welfare services. The pharmacist can support these with verbal advice to aid older people who are often among the most isolated members of the community, but most of whom visit the pharmacy regularly (N.P.A. 1982) and might welcome such personal interest.

Advice For Parents of Young Children

Pharmacists have a part to play in the health care of young

children. Antenatal facilities are underused by mothers in lower social and ethnic minority groups. Recommendations to attend antenatal classes, by posters and leaflets in the appropriate language advertising the services, could be shown in the pharmacy. National and regional immunisation levels could be kept at target if the pharmacist were prepared to urge his customers with young children to have them vaccinated. By giving this advice with an appraisal of the current risk factors, the pharmacist would be actively delivering health care.

Advice on Dental Health

Those most in need of dental care visit the "chemist" for pain relief for toothache. The pharmacist has a positive role to play in informing people who are afraid to visit the dentist of modern painless dental treatment and to emphasise the danger if they do not do so. The pharmacy action group produced an assessment of this role in the small scale study. (See page 149)

Advice on Nutrition

Many foods and supplements are already available in a pharmacy. Mothers of young children are persuaded by television advertising that extra vitamins (which in many cases are unnecessary) are essential. Some pharmacists, to their credit, do not sell them without discussion and agreeing the need. Baby foods and slimming aids are also sold in the pharmacy, as are a variety of health foods such as bran and bran compounds. This is an area where pharmacists need to invest in training at the postgraduate level, followed by capital resources to provide a suitable

environment on their premises to offer advice on better nutrition.[3]

The Prevention of Accidents to Children

Posters can be used in a passive way in a pharmacy and again be supported by leaflets for parents to develop awareness of the dangers to young children in the home. Again this was part of the small scale study and is discussed on page 146.

Advice on Family Planning

The Pharmaceutical Society carried out a survey in 1982 (Pauncefort 1985) and followed this with an extensive trial. The results show that pharmacists were willing to offer advice but customers (not surprisingly) showed reluctance to discuss their needs in a shop. A recommendation was that a counselling area should be provided before such discussions are attempted. Nevertheless many women buy pregnancy testing kits from the pharmacy and it would seem likely that many of them would be glad to receive information about antenatal and abortion facilities. Great social benefit would ensue if the Pharmaceutical Society would persuade the Medicines Act committees to make the "morning after" pill available as a pharmacy only medicine. Currently, the usual three day waiting period for an appointment with a doctor renders this method of contraception ineffective.

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3. The managers of "health food" shops are prepared to spend a lot of time advising on these matters, though they are unlikely to have the knowledge of vitamin requirements, for example, that a pharmacist does.

Advice on Losing Weight

Advice on weight reduction and planned weight loss would need to involve all responsible members of staff who could check progress on weight loss and, after the appropriate training, give advice on nutrition matters such as the saturated fat, sugar and fibre content of foods.

Advice on Stopping Smoking

Many pharmacists are committed anti-smokers and have shown great motivation about anti-smoking advice. This subject formed the major empirical study of this thesis. (See Chapter Six.)

The Prevention of Heart Disease

Anti-smoking advice, screening for hypertension and dietary advice are the main preventive measures. The measurement of blood pressure was tested in the small scale study (see page 152) and the results show this is a very economic and effective way of screening for hyptertension.

A fundamental requirement of any health care and advice programme in community pharmacy must be that the work of the pharmacy is not impeded by them - nor should it be suggested that the pharmacist has any monopoly in giving such advice. This extension of the role of the pharmacist impinges little on the freedom of the recipients of his advice, but gives them the opportunity to improve their life chances.

The particular role of community pharmacists as providers of health promotion has been outlined of which the most important factors are that people do not need to become involved in the

referral system of the NHS to consult them, i.e. they do not first have to become patients. Their continued presence in the same set of premises offers a means by which people can be sure that they will speak to someone they know. The environment of a shop which is visited as part of the normal daily routine may also be a less threatening environment than that of a consulting room.

C H A P T E R F I V E

HEALTH PROMOTION - AN EMPIRICAL INVESTIGATION

Chapter Five and Chapter Six form the empirical work of the thesis. In Chapter Five the hypotheses upon which the work was based are outline, followed by an account of the setting up of the small scale project. The development and results of the project are discussed with a section devoted to blood pressure measurement by pharmacists and consequent referral for treatment to their medical practitioner.

In Chapter Six an account is given of the anti-smoking campaign, conducted in 110 pharmacies in which the physiological measurement was that of carbon monoxide in the exhaled breath of smokers.

1. Setting up the Research

The broad hypotheses of the empirical work were as follows:

That the education and professional awareness of pharmacists would be such that they would be willing and able to offer useful advice and recommendations for action on health promotion.

That after a short training session pharmacists would be competent to measure blood pressure and to refer those with high readings to medical practitioners.

That these services would be acceptable to and would meet the health needs of their customers.

The investigation was conducted by mounting first a small scale study on several aspects of health promotion in 25 pharmacies; this is described in this Chapter. Using the experience and results of this, a large scale study was carried out on one aspect of health promotion (described in Chapter Six.)

The hypotheses were developed in the context of what Rogers and Shoemaker (1971 : 22-23) call "Bundles or packages of innovation." They argue that a receiver perceives any new idea in terms of its compatibility with previously accepted ideas and adoption of an idea may trigger the adoption of others. By identifying practitioners who are interested in this role development, who may already be providing patient orientated services, by designing interventions consistent with their values and finally by careful attention to the "passage and channels" by which they are delivered the focus was on bringing about overt behaviour changes (i.e. the adoption of proposed practice

behaviours).

Special attention was paid to the ways in which pharmacists might be persuaded to adopt practice changes. The following were the most important: - the relative advantage of change to the receiver (i.e. the ways in which it is seen to be of benefit to him such as the degree of profitability, perceived risk, savings in time and effort and the immediacy of reward); the greater the "distance" (time-lag) between an adoption and reward the more difficult it is to achieve adoption. Relative advantages to a pharmacist in health promotion campaigns may include increased professional awareness and appreciation from his customers. Increased contact and demonstration of concern for patients is seen to be positively associated with patient satisfaction, a factor condusive to building professional practice.

People are most likely to adopt an idea which is consistent with their sociocultural values and beliefs, past experiences, and the needs of the receiver. Much thought was given to this and care was taken to ensure that proposed changes were only minimally disruptive to pharmacists' current practice. For example blood pressure measurement was by appointment, at a convenient time for the pharmacist.

Rodgers and Shoemaker emphasised that "the more compatible an innovation is, the less of a change it represents" and, thus, the more likely it is that it will be adopted. Hence this study was developed in a segmented manner so that each pharmacist was allowed to choose his level of participation - from mounting a

display of appropriate materials to measuring blood pressure and carbon monoxide in exhaled breath.

The investigation used activities that are within the competence of all pharmacists and which required no special training or new skills. Although blood pressure measurement was included in the continuum of activities, initial participation did not require taking patients blood pressure and this skill, requiring training and testing, was added to those who requested this level of participation. New ideas which can be tested with minimum investment of time, effort or other resources and can be abandoned if desired are more likely to be tried. (Rodgers and Shoemaker, 1971) In this study the pharmacist could withdraw at any time and practice control always remained with the practitioner.

Rodgers and Shoemaker define "observability" as the degree to which the innovation or the result are visible to others and propose that the more an innovation can be observed the more likely it is that the person will adopt it. The study used several strategies to make pharmacist participation in health promotion visible to patients, medical practitioners and the general public. Appropriate use of posters and brochures, press and radio coverage and the use of slide/tape presentations were used to maximise the observability for the small scale and wider studies. The study was evaluated by measurement of the resulting discussions, and noting how they developed into advice, (Appendix One) educational material and screening procedures and

by analysis of the accuracy and effectiveness of screening for hypertension. Questionnaires were devised which measured the attitudes and behaviours of participants in the programme (Appendix 12) p.239 (and a selection of non-participants) (Appendix 13) p.244 and finally there was analysis of the suitability of promotional material for the place and its purpose. The planning framework used, which follows that described on page 125, is shown on Table 6 - and the strategy is shown in Appendix Three.

TABLE 6

Planning Framework for Health Promotion

Focus/ Class Health Promotion	Services to Public	Education and Instruction of Staff	Information and Policies for Government and Corporate Bodies
Primary	Education on risk factors	Setting a "no smoking" example in Pharmacies. Material to health visitors, etc	Advertisement of local sports facilities and anti-smoking clinics
Secondary	1. Screening for hypertension medical referral 2. Screening for carbon monoxide in exhaled breath	Support from Region to participating Pharmacists	Obtaining of finance (for screening programme)
Tertiary	Compliance with Drug Therapy		

Primary health education was offered to the public in all the studies, and secondary prevention was offered by two screening facilities (described later). A basic premise consistent with health education theory and practice is that participation in any such programme requires voluntary commitment and it was recognised that participants could not be presumed to be representative of all community pharmacists. Participation for the first study was invited from personal contacts (known through their involvement with regional committees, and therefore somewhat unusual in being prepared to give time to develop the practice of pharmacy [1]) and of 27 pharmacists directly approached, 15 agreed to take part and 12 declined. All pharmacists in one health district were then invited to take part and a further ten did so. Thus the small scale study involved 25 pharmacists of whom one was an employee of a large multiple (i.e. over ten branches) three were employees of small multiples (up to ten branches) and the other 21 were proprietor pharmacists.

Each pharmacist was offered three levels of involvement:

To mount a display of posters and leaflets

To add to the display an audio-visual programme for one week of each campaign

To have both of these, and also to take a physiological

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1. The development of these studies in the West Midlands now results in averagely 30% response to invitations to take part, showing pharmacists increasingly welcome health promotion involvement.

measurement (in the case of the small scale study, blood pressure, and in the large study, carbon monoxide in exhaled breath.)

In the small scale study all elected to participate with the first two stages, and 16 also decided to measure blood pressure. One pharmacy lacked the private area essential for such measurement, and could not participate at this level. Thus 15 pharmacists measured blood pressure.

2. The Small Scale Study - Introduction

In this section are described the methods used to collect the data in the small scale survey. Response from the public was measured by an evaluation sheet which would be filled in by the pharmacist for each customer he talked to about the survey (see Appendix One). P. 233

Four different aspects of health promotion were chosen, all of some relevance to the traditional practice of pharmacy but with broader health education concern and each was promoted for one month. The development of practice of greatest research interest occurred in the third of these when pharmacists measured the blood pressure of customers who requested this service. The aspects of health promotion which were chosen were:-

The safety of medicines (selected first since pharmacists would feel confidence on giving advice on this subject).

Dental health

The prevention of coronary diseases

Compliance with drug therapy.

One of the causes of heart disease is hypertension and hence for the "coronary diseases" project blood pressure measurement was offered in 15 pharmacies. Although blood pressure measurement was only part of the coronary diseases project, it was a role extension for pharmacists (none of whom had used the equipment before). Therefore, it was important to keep local medical committees aware of the project (since doctors would have the referred patients) and to ensure that pharmacists were competent to use the equipment and to observe the protocol to be followed. Any false readings might have caused concern to their customers, and undermined their credibility. Thus the preparation for the project, and the study day, were dominated by this aspect of the study.

For blood pressure screening, a protocol (Appendix Two) was designed which was observed for each customer and an outline of the study was sent to the five secretaries of the local medical committees in whose health districts the service was offered. (Appendix Four).[2] Two welcomed the study, and requested the results be sent to them, two objected and one refused to co-operate and complained to the British Medical Association. It's response was to protest to the regional medical officer and, in that one health district, participation was amended to a direct agreement between the four participating pharmacists in that

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2. This was an courtesy letter, since anyone may measure blood pressure, but the study would have been ethically unsound without medical referral for those found to be hypertensive.

district and their local medical practices. The two local medical committees which expressed objections believed that patients might become "cardio anxious", a postulated disease state in which the fact of having blood pressure taken might render people anxious enough to "bother the doctor more often." They also felt that the base line set (a diastolic pressure of 100 mm of mercury) was too high and the patients might have a false sense of security.

Powerful intervention was received at this point from a Professor of Community Medicine who wrote to the two objecting secretaries saying that, until all group medical practices have an age/sex register to ensure routine screening of those at risk, such involvement from pharmacists should be supported. The two L.M.C.S. then gave approval.

The next step was that the group practices nearest to each participating pharmacy were sent a copy of the protocol, together with the letter explaining the purpose of the study (Appendix Five). The pharmacist was given a form to record blood pressure measurements and letters (Appendix Six) to send to medical practitioners with patients found to be hypertensive.

Attendance at a study day was obligatory for pharmacists who wished to measure blood pressure, and open to any others who wished to come. In the event, every participating pharmacist attended. Since the screening procedure was a role extension taking pharmacists into new teritory two lectures were also

provided during the day on the epidemiology of hypertension and on the pharmacology of measuring blood pressure. The latter lecture included an explanation of the Korochkof sounds, which are used as indicators or reading points, and the reasons why K5 (the fifth point) gave an accurate reading. The electronic apparatus provided used this point and had been calibrated against standard equipment in the University of Birmingham. These tests had shown the accuracy of the machines to be high and well within the standard error of readings. This accuracy was seen to be of great importance, so that no patient would be needlessly concerned.

Blood pressure rises with age in the western world, and there is no evidence to suggest that treatment of mild hypertension over the age of 60 significantly affects mortality. Therefore the age range to be screened was between 40 and 60 years. Local cardiologists recommended that treatment by a doctor should be instigated at or above a diastolic pressure of 100 mm mercury, and this was used as the point of referral. Pharmacists were given this information in the lecture consolidated by handouts. The protocol for measuring blood pressure was explained and emphasis placed on correct procedures, eg. ensuring that the patient was seated for ten minutes before the first reading. Pharmacists were also recommended to check whether they were already being treated for high blood pressure.

The "display" part of each programme was shown to the pharmacists at the study day, with all the handouts which would be used. A slide/tape presentation had been produced for each aspect of the

campaign for use on Bell Howell Ringmasters which are in appearance rather like television screens. The problems in each area were highlighted and possible solutions offered, the intention being that they would act as a conversation trigger. All pharmacies had a Ringmaster for one week of the campaign.

The four aspects of the small scale study will now be considered, beginning with the safety of medicines.

3. The Safety of Medicines

The importance of storing medicines and other household poisons in secure cupboards was stressed in the promotional literature made available and on the slide/tape presentation. The dangers of the careless storing of medicines are well known - 1140 children were admitted to hospital in 1983 in England alone after accidentally ingesting medicines (HMSO, 1982).

Older people often transfer their tablets from child resistant containers (which they sometimes have difficulty opening) to containers which may be accessible to children. The danger of this practice was recently pointed out. (Royal College of Physicians, 1984). The tape emphasised the fact that ordinary caps would willingly be provided by pharmacists if there was difficulty in using these child resistant containers. Users, especially the elderly, may also put themselves at risk by misreading labels and by storing medicines at the bedside and thus inadvertantly taking more than the required dose. People use "over the counter" preparations at the same time as

prescribed medicines and the promotional material urged that when such medicine is purchased the pharmacist should be told of any other medication currently being taken.

Possible sites to store medicine in the home were suggested, the wet, steamy bathroom being unsuitable for the storage of what are often fairly unstable compounds. Methods of safe disposal of unwanted medicines were recommended, either by return to the pharmacy by the patient or a reliable relative, or by flushing down the lavatory.

Young parents expressed great concern with the best place to store medicines and other poisons. The tape suggested the bedroom as the most secure and least likely to affect the stability. Many parents had known of poisoned children; (manufacturers of kitchen and bedroom units rarely include a locking facility for household articles.) Older patients, in large numbers, expressed concern with the practice of issuing medicines in child resistant containers. While it is to be applauded as a way of saving childrens lives, for older people (often with arthritis) the result is often that they cannot open them. The only solution is to ask a friend to do so, and the medicines are then stored in another, unlabelled container. Thus the patient is required to remember which tablet is for which condition, and when to take them, and both they and visiting children are at risk.

The safe disposal of unwanted medicines, which was explained on the tape and in the posters in each pharmacy, resulted in many

medicines being returned to the pharmacies. Such a speedy, or vast response had not been anticipated and the numbers of returned medicines were not recorded. One pharmacist who retained them for inspection collected 8,200 tablets, some of which were very old. Twenty-four evaluation forms were returned, showing a total of 430 comments from customers were recorded during this project. Of these, 130 were in the one week pharmacies had the Bell and Howell slide/tape projector suggesting that it acted as a conversation trigger.
Customers were quite prepared to discuss this aspect of health education with the pharmacist, and of the 430 comments, 150 (35%) developed into discussions on the specific problems detailed above, all within the pharmacists competence. (Appendix7). This is an area of widespread public concern and greater involvement of pharmacists could result both in greater public safety and wider awareness of their professional role.

One unexpected problem was that the continuous tape proved to be an irritant to the pharmacist and staff, although it acted as the anticipated trigger to conversations. Only one voice was used on the tape initially and work was immediately started to change the third and final tapes to a discussion format. One third of the pharmacies reported little public interest in the project and the reasons for this were more closely examined after this initial study (see Appendix 9). From the results three possible changes in pharmacy practice emerged. These might be extended nationally:-

i) No child resistant containers should be supplied to older

patients without the pharmacist first ensuring that they can open them, or that they live with someone who can do so. Older patients who are obliged to put medicines in unlabelled containers must increase the risk of incorrect dosage and danger to children.

ii) All pharmacies in a health district could mount a co-ordinated surrender of old or unwanted medicines on a regular three monthly basis.

iii) Pharmacies should be provided, and should advertise, with a list of manufacturers and suppliers of lockable medicines cupboards, and of kitchen and bedroom furniture which includes a lockable device.

4. Dental Health

This subject was proposed by district dental officers, who recognised that people who regularly visit dental practitioners tend to have teeth in good order, but many others visit the dentist only in emergency or not at all. Pharmacists receive regular requests for "something for toothache" and this campaign attempted to encourage dental hygiene and urged them to visit a dentist regularly.

The British high sugar diet (NACNE, 1983) means that dental caries is widespread and dentists would welcome the opportunity to save childrens teeth rather than having to extract them because the consultation has come too late for any other option.

The regional health authority supports the fluoridation of water supplies, but has no legal power to require water boards to add fluorine to the water. Fluoridation was a topical and controversial issue in two of the health districts in which this research was carried out. Pharmacists in those districts expressed concern that strong advocacy of this policy might result in contentious debate in their shops and the slide/tape presentation therefore presented the statistical argument showing the decrease in the incidence of dental caries in fluoridated areas, in a low key, supported by the recommendation to use fluoride toothpastes. Even so, participating pharmacists received protests from people who believed they would be poisoned by fluorine in the water supply, while none reported comments from advocates of this measure.

The posters and leaflets, obtained from the HEC, dwelt on the dangers of unattended teeth (for example blackened or extracted teeth). The leaflets were felt by five of the pharmacists to presume that if people did not visit the dentist, they must also be rather ignorant. This patronising writing so offended the pharmacists that they chose not to display the leaflets.

Nine pharmacies noted an increase in the sales of dental floss and plaque revealing tablets (advocated on the tape) and two of these were in areas where such items had not previously been stocked. The results of this aspect of the study revealed a total of 220 comments were received, of which 70 were in the week of the slide/tape programme. A smaller percentage - 48 (22%) developed into discussions, since pharmacists did not wish to

become involved in contentious areas. (Appendix 7)

There was less interest in this subject than in the previous "safety of medicines" project. Only 17 evaluation forms were returned and on investigation the same percentage of pharmacies reported no interest (Appendix Nine). It had been hoped to encourage people who do not visit the dentist regularly to change this practice; three suggestions for a better method of presenting dental health information in the future emerged:

i) Promotional material which is designed to be read by people who already have a fear of the subject misses the point entirely if it seeks to frighten. Further, it cannot be assumed, as many posters appear do, that people who do not visit dentists are unintelligent. Fear of dentists is widespread and positive help must be given by describing modern technology used and the preventive role of regular visits. It is important to take the fear and mystery out of a visit to the dentist. The five pharmacists who took exception to some of the leaflets had already learned this from their everyday contact with the public.

ii) When positive advice as to how individuals can themselves help improve their dental health (as opposed to visiting the dentist) is offered it is well received and acted upon - in this case advocacy of the use of dental floss resulted in immediate sales. More positive advice would have been to offer the names and addresses of local dentists with an offer to make a telephone appointment. Many people

expressed fear of dentists and there was little the pharmacists could do to combat it.

iii) The pharmacy should not be the only promoter of contentious issues. There was strong local opposition to fluoridation in two districts and the posters promoting this concept attracted much unfavourable comment. Pharmacists are, after all, businessmen and in this campaign pharmacies were made a forum for controversy at a time when the correspondence columns of local newspapers were also dominated by this discussion. In a concerted effort to promote this controversial aspect of dental health, the effort should be made in other health outlets also, so that pharmacists would not feel so "exposed". If people fear the dentist, perhaps more should be done to encourage them in the direction of good dental hygiene in addition to merely advising them to brush their teeth.

5. The Prevention of Coronary Heart Disease

Coronary heart disease now accounts for 26% of all deaths in this country (Acheson AND HAGARD 1985). It is of epidemic proportions and there is a great deal of evidence to suggest that changes in behaviour can affect its incidence (Shaper, 1985 : 197-209). Of the contributory factors (smoking, serum cholesterol levels and hypertension) the most significant is smoking and the promotional material emphasised the most effective measure to prevent the onset of coronary heart disease is to stop smoking. This was supported by booklets suggesting ways of stopping

smoking and badges for those who succeeded in doing so.

A second aspect of the promotional material was that changes in diet were advocated, following the guidelines of the NACNE report, and the relationship emphasized between saturated fat intake and the incidence of coronary heart disease.

This aspect of the study included the most innovatory aspect of the whole project - the decision for some pharmacists to measure blood pressure. Fifteen of the 25 pharmacists elected to do so.

Those who were measuring blood pressure were obliged, by the protocol, to interview and counsel customers, and so did not complete evaluation forms. Those registering "no response" (discussed in Appendix 9) continued to do so but this campaign was well received by customers and the remaining three pharmacists (i.e. those who did not measure blood pressure) reported on evaluation forms that customers' favourable comments (both for the campaign, and for the anti-smoking and diet booklets) were so numerous as to be impossible to record. Two pharmacists reported "hundreds" of comments. These three pharmacists said the great majority of comments developed into discussions (they estimated three out of four did so). The publicity material, and pharmacists willingness to discuss it, had matched a perceived need of their customers (confirming Parsons, see page 111 above).

One pharmacist felt unable to quantify the advice she gave

> as the campaign progresses I am becoming totally convinced

that health education lies 100% with myself being able to talk directly to the customer, and of course this is often very difficult in the busy retail situation.

Blood Pressure Measurement

Each pharmacy was given a small notice stating the pharmacist would measure the blood pessure of patients who requested this service. Patients were given an appointment - sometimes right away but always when the pharmacist had enough time i.e. not in busy dispensing periods. The total number of measurements recorded was 665 and measurement led to discussion with the patient.

Results

The success of this aspect of the small scale study is clear. The data shows that public response was excellent - with many people offering to pay for such a facility, travelling long distances to obtain it, and commenting that they felt it should be offered as a pharmacy service. Repeatedly, people expressed an awareness that they should have their blood pressure measured, but had been loath to visit their doctor - either because they disliked having to make an appointment and be labelled as "ill" to have the measurement taken, or because they thought the doctor might be irritated by the request. One pharmacist worked in a small town where the group medical practice keeps an age/sex register, and patients in the age range 40-55 are called regularly for blood pressure monitoring. Alone of all participants he found no hypertensive patients and only ten people asked for the measurement to be done. (See Appendix 8.)

The protocol required that a patient, if found hypertensive at the first reading, had another taken after ten minutes. If the reading was still high they were requested to return to the pharmacy one week later and given an appointment to do so. No patient who attended the second time had a significantly different reading and all were then referred to their medical practitioner. Some patients did not return (some saying that one high reading was enough to make them visit the doctor, but they may not have done so.)

The results of this aspect of the study are shown in Table 7 and the referral rate for each pharmacy is shown in Appendix 8.

Table 7

Blood Pressure Measurements

Total no of tests recorded	-	665
No. of male tests	-	276
no. of female tests	-	389
no. of male found hypertensive at first visit but did not return.	-	7
no. of females found hypertensive at first visit but did not return.	-	16
no. of males referred to GP	-	20 after 2nd visit
no. of females referred to GP	-	29 " " "
total no. of males found hypertensive	-	27
total no. of females " "	-	45
total no. found hypertensive	-	72
incidence of hypertension at 1st reading	-	10.8%
referral rate to GP	-	7%

The protocol required the pharmacist to ascertain if the patient was already being treated for hypertension and, if so, if the treatment had commenced within the last six months. In this case, the patient would not be referred since the doctor's intention might be to reduce the blood pressure gradually. Non-compliance with drug regimes used in hypertension is well-known, (Evans, 1983 : 63-76) since the condition itself may be without symptoms, but the drugs can have various side-effects such as giddiness, depression and loss of libido.

A total of 34 patients reported they were being treated by their GP for high blood pressure and of those who had been treated for more than six months, 14 were controlled but 19 still had a diastolic pressure over 100mm (relating very well to the non-compliance recorded figure of 60% since a raised diastolic pressure suggests the medication is not being taken). Of those being treated but uncontrolled, several admitted they were not taking the tablets; nor were they having regular monitoring. They regretted the facility for monitoring was not available in the pharmacy routinely, since they collected repeat prescriptions from the doctor's receptionist and the pharmacist was the only health care professional they actually met. Three such patients on referral to their GPs, returned with amended prescriptions.

More women than men were screened, but many men had appointments made for them by their wives. Seventy-two people were found hypertensive at the first reading (see Table 7) and of those 49 returned for a second visit and were then referred. Twenty of

these were men and 29 were women. The referral rate was the same for both men and women and of the men referred 14 (70%) came back to report the action initiated by their doctor and 18 (60%) of women did so. The therapy selected was most often drug regimes and then planned weight loss, regular monitoring and encouragement to stop smoking. (See Appendix 8) There were three occasions when the doctor disagreed with the reading of the pharmacist or decided not to treat. There was virtually no difference in the way in which men and women were treated although women were marginally less likely to be given drug therapy. (Appendix 8.)

The large number of patients who requested blood pressure measurement could have obtained this service from their doctor and had not done so. Pharmacists noted that the time between the first and second readings was often used by patients to discuss fears about their lifestyle, e.g. smoking, lack of exercise and diet, particular with reference to obesity. The pharmacist was placed in the role of counsellor and in all these subjects was able to offer advice. This counselling service was seen by them to be as valuable to the patient as blood pressure measurement, and since the latter was always done by appointment, they had time to listen. This role of counsellor directly relates to health educator and has a wider basis than answering only medicine related questions. All the pharmacists found the role "very satisfying" and several said it had broken a barrier of communication between themselves and patients for whom they had dispensed medicines for years, but had not really spoken to.

The act of screening had forced both parties to communicate and had made the pharmacist aware that he has knowledge his patients are pleased to accept.

Some of the busiest pharmacists recognised that they could do only a few measurements daily, and here the appointment system was essential. These patients returned to a pharmacy for an appointment, but had not asked their doctor for one, the essential difference perhaps being that the pharmacist is outside the referral system of the NHS and blood pressure reading does not require any labelling of illness, or formal consultation.

When doctors screen routinely, as opposed to taking blood pressure as part of a consultation, it is usually done by the practice nurse (if there is one) and equally avoids the labelling stigma. If all medical practices performed such screenings, the demand for such a service from the pharmacist would be greatly reduced (as shown in this study where one pharmacist worked near to a group practice which routinely screened). No patient expressed alarm or concern at the concept of measurement, and on only three occasions did the doctor appear to disagree with the result of the pharmacist's test. Several GPs visited the pharmacies to examine the equipment and all expressed approval, one asking the pharmacist to monitor all his patients on hypertensive drugs to check that they were being taken.

The influence and power of the medical establishment was shown in this study and its relationship with the practice of pharmacy. At regional level the worries expressed before the start of this

study (eg. patients might become "cardio-anxious") could be deflected, but at local level, the perceived economic necessity of the pharmacist not to offend his local medical practice became apparent. Four pharmacists wished to take part in the study but did not do so because "my doctors wouldn't like it." Three, even after agreement had been given by their local medical committees, felt obliged to ask permission from the local group practice. It was impossible to determine how real was the fear that, if offended, the doctors would ensure that prescriptions were taken elsewhere. It is perhaps the truth that pharmacists, who dispense doctors prescriptions have adopted a master and servant relationship which is entirely unnecessary. It was those who "sought permission" who were likely to be rejected - NO doctor came to a pharmacy to complain when the study was in operation. Some of the dissatisfaction expressed about the professional interface betwen community pharmacists and doctors may be caused by the roles they have created for themselves.

This aspect of the small scale study demonstrated a genuine and important role extension for pharmacists which they were able to perform effectively and for which there was great public demand. If the pharmacist wishes a more active role in drug therapy, then he has at his disposal a means of monitoring its correct usage which it is economic sense for the State to encourage him to pursue. Medical time (which is very costly) was used only with referred patients. Pharmacists could select quiet periods in the day to take the measurements and for this study, no charge was

made. There is every reason, however, why they should be paid to do so as an item of service. Patient medication records are an essential part of any such monitoring, and computers should be a tax-deductable expense to pharmacists who are willing to incorporate this service into their practice.

Two pharmacists withdrew from the study at this point, both employees, who had changed employment.

6. Compliance with Drug Therapy

The final part of this project was a campaign on compliance with drug therapy for which the posters were specially designed and explanatory leaflets about different drug groups, for example, eye drops, suppositories and antibiotics (each giving specific instructions) were purchased from the University of Aston.[3] The slide/tape presentation highlighted the waste of time and money if prescriptions are obtained, for which the medicine is dispensed but then not taken. The importance of reading the label was stressed so medicine may be taken to achieve its optimum effect, for example medicines where a high blood level is needed quickly should be taken before meals and those where gastric upsets might be anticipated should be taken after meals. The particular problems of older patients were discussed (eg difficulty in reading labels or in opening child resistant containers) and supplementary labels were offered, as was the facility to have ordinary caps. Adverse effects to drug therapy were discussed and assurance given that the pharmacist or doctor always wish to have these reported so proper records can be made

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3. Designed by M Jepson, Aston University

of their incidence and treatment changed if necessary.

The distribution of the explanatory leaflets resulted in very few comments, perhaps because the pharmacists taking part were progressive in their practice and most issued additional labels routinely. Those provided were consequently rather superfluous and the only comments received came from two pharmacists who did not provide additional leaflets.

Only 21 pharmacies were now participating and of these only ten returned the evaluation forms. They recorded a total of 183 comments in the period, of which 22 came in the week with the slide/tape programme. 70 (38%) of these developed into discussions, suggesting the study was within the pharmacists recognised sphere of knowledge. (Appendix 7.)

This was the final phase of the small scale study and the amount of supervision and time allotted to the distribution of the slide/tape presentation and accompanying posters and leaflets had been underestimated. The consequent confusion, when sometimes the posters and leaflets did not match, probably affected the response. Several pharmacists were confused about which was running and most had lost interest in returning forms. It was also seen as rather an anti-climax after the previous study.

The advent of labelling systems which automatically supply additional information has made the provision of extra leaflets less essential and, although such systems are not yet universal, they are increasingly common as there is now a legal requirement

that all labels should be typewritten.

From discussion with pharmacists in the study, compliance with drug therapy could be improved by the following action:

i) Those who had screened for hypertension found that when the slide/tape presentation on compliance was shown several (unrecorded) patients volunteered that they did not take anti-hypertension medication since they could not cope with the side effects. Pharmacists were able to offer advice on ways of alleviating these, and it was an excellent intervention point for the pharmacists (who had retained the blood pressure monitoring apparatus) to take a blood pressure reading and to use a high result to emphasise the importance of continuing with the drug treatment.

ii) Where medication is known to cause unpleasant side effects and where its continued use is of importance, a microcomputer programme could identify which patients should have obtained further supplies and have not done so. They could be contacted and the therapy modified with consequent improvement in drug taking behaviour.

iii) Leaflets instruct rather than offering the patient a chance to ask questions and should be used as an addition to verbal advice. Studies (eg. Royal College of GPs, 1983) have shown that compliance is best affected by ensuring that the patient understands why the medicine is being given, and how to take it. If he is then asked to repeat these

instructions, it offers a conversational point where he can seek further clarification. In some parts of the United States, and in Australia, legislation requires the pharmacist to give out all prescribed medicines personally, thus offering an intervention point. Many of the pharmacists in this study chose to do so and it would be of interest in another study to measure any resultant difference in compliance.

7. Concluding Discussion

Some general conclusions are now drawn from the small scale project. First the influence of the physical layout of the participating pharmacies is considered. Eight of the pharmacists dealt with all medicines and health care enquiries personally, and either worked in completely open plan shops or made a point of being in the shop as much as possible. Nine had dispensaries screened off by glass or positioned in such a way that their customers had a clear view into the dispensary. The other eight had dispensaries so positioned that the pharmacist could not be seen by customers. While there was no relationship in the amount of customer interest recorded in the studies and the pharmacist's position (behind a glass screen or in a closed off dispensary) what did matter was the amount of time they spent in the counter area - the greater the percentage of time the more frequent the questions from customers. It would seem that a large part of the answer to the question of whether the pharmacy is a suitable site for the promotion of health education hinges on this point.

Eight pharmacists held firmly to the view that they are there to dispense and their staff to attend to the public, which does not equate with the role of health educator since patients are unlikely to make a special request to talk to the pharmacist about a health care problem unrelated to medicine. In the prevention of coronary diseases study the pharmacist had a practical role to play in monitoring blood pressure and this forced him into a discussion with the patient, thus breaking the barrier of communication. All of the pharmacists enjoyed this counselling role, many saying they had dispensed prescriptions for these patients for years but had never previously held a conversation with them. However, it should be noted some came out of the dispensary only on request[4], and in these pharmacies none of the research projects recorded many comments, except when the customer requested blood pressure measurement. The pharmacist's legal duty is to dispense the right drug in a clearly labelled container but the practice of some is changing to ensure that they check the dispensing (rather than counting the tablets themselves) and transmit their knowledge of its use to the patient. In so doing, they offer both a better service to their customers and meet the needs of a changing society where people want to know more about their medication. This connects well with health promotion, since discussion about the appearance of symptoms may well continue into a discussion of the lifestyle

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4. This confirms that NPA Study (see page 88) where the public saw pharmacists as people who would give advice on request.

which might be a contributory factor. If the pharmacist, (who is the only person in the shopping street with appropriate training) is sufficiently available to answer questions and offer advice then it makes sense to put health promotion material in his shop. The greater the amount of time the pharmacist spent in his shop the greater the impact of the campaign - the material acted as a conversation trigger and the pharmacist was there to respond. In considering the results of the four projects, it is clear that the measurement of blood pressure was willingly undertaken, its relative advantages being the short interval between the detection of hypertension and consequent action by patient and doctor and the pharmacist's ability to check compliance with drug therapy. Their professional practice was enhanced by much expressed patient satisfaction with the service and although most pharmacists recognised they could do only a few screenings daily in the long term, all welcomed the opportunity to extend this service to their customers.

The "messages" implicit in the four projects varied in compatability with standard pharmacy practice and the one furthest from a customers perception of the pharmacists role (as advisor on dental health) appeared too distant to be acceptable. Conversely, when the subject was relevant to the health needs of parents with young children and old people (who visit pharmacies regularly) they proved successful, evidenced by many discussions and questions. The variety of themes and their scheduling, one immediately after the other, was too disruptive to practice behaviour and lead to abandonment of evaluation returns for the

compliance study (only ten were received) but the staged level of involvement was very effective and offered each pharmacist participation at the level he chose.

Most aspects of the study proved to require knowledge already well within the competence of pharmacists. The exception was blood pressure measurement and for this they were well briefed. This was supported by the provision of a protocol, printed handouts with the salient points and encouragement to telephone the researcher if they encountered problems. None did, and their intitial trepidation soon turned to confidence since the apparatus was easy to operate and reliable.

Greater public awareness of the project could have been obtained by using the mass media, but care had to be exercised to ensure the services of one participating pharmacy were not recommended - thus breaching the Code of Ethics of the Pharmaceutical Society. Radio coverage could mention that "pharmacists in your area are taking part" but this would not very helpful when relatively few pharmacists were involved and, it could be argued, would raise unfulfillable hopes. Many pharmacies who were not taking part received requests for identification of those measuring blood pressure, identified by a small notice on the door and the window.

The space available in an average pharmacy was the main criterion limiting the amount of promotional material which could be used; while some pharmacists were prepared to mount large window displays, it would be unrealistic to think this would be possible

for all. Most of the posters used were too large for the pharmacies and, on the evidence of this study, a request was made to the Health Education Council for the production of smaller poster material. As has been indicated, the continuous tape was irritating for the pharmacist and his staff who, after a short period, were word perfect in each message! The time when the pharmacist least wants to compete with extra noise is at busy dispensing periods yet this is the optimum time when the programme should be watched. A more suitable medium was needed and cartoons with captions and a silent, but pulsed, tape were produced for the next part of this study, the large scale anti-smoking project.

C H A P T E R S I X

THE LARGE SCALE STUDY - AN ANTI-SMOKING CAMPAIGN

1. Introduction - The Campaign Described

The small scale study showed that the general public welcomed the ability to obtain health information and screening in their local pharmacies and that pharmacists were effective in their new health promotion roles. The large scale study further examined the role of the pharmacist, who as before, was self selected (with the exception of managers of the largest multiple, whose pharmacy superintendent wished all branches to take part - see below.)

During the progress of the small scale study, it became apparent that some pharmacists were highly motivated to develop their practice into health promotion and four were invited to attend subsequent meetings of the Action Group, whose membership is detailed on page 11 above). Conversely, while the expertise of the health education officer on the action group was invaluable, it became apparent that help could not be expected from all district health education officers. They come from a variety of educational backgrounds and their perception of the role varies widely (see page 12 1 above). Some see themselves as disseminators of information on health education subjects to a wide variety of people, (and they have the funding and support staff to do this) while others concentrate on a narrow range of tasks which may not include the distribution of material. Thus, for a campaign involving a large number of outlets across the

region, the advice and guidance of one health education officer on the Action Group was of great use but the role required of health education officers at district level was the distribution of material and active support of the pharmacists by visits and replacement of stock. Some were pleased to do this and their help was appreciated , but others declined any involvement and in these cases, district pharmaceutical officers (who are responsible for the pharmacy services in a health district) performed the function and in so doing developed stronger links with local community pharmacists.

Thus the action group (whose functions were to decide policy, approve the promotional materials and to authorise the expenditure of the regional health authority grant) became more pharmacist dominated but retained the help of the specialist in community medicine and one health education officer. The unanimous view was that the large scale study should be an anti-smoking campaign to be run for six weeks - the pharmacists saying they had long wished to mount such a campaign in their shops. The initial letter inviting participation (mailed to all pharmacies in four health districts chosen to give a spread of inner city, suburban and rural areas) resulted in over 220 requests (from a mailing list of 250) for more information showing that this anti-smoking feeling was widespread. Much care was taken with the design of this initial letter (written by the author but signed by identified 'leaders' of pharmacy and health promotion. Appendix 10) which emphasised both the dangers of smoking and the vital role the pharmacist could play in reducing the numbers of

those who smoke. Potential participants were assured that they could withdraw from the study at any time if they wished and the relative advantage to them was stressed by emphasising the development of their professional role.

Smoking is always harmful and this study was to determine how acceptable health education on this subject is when offered in a community pharmacy and how willing and capable pharmacists are to offer it. The first way in which the project was evaluated was by recording the number of booklets taken by the public and the number of occasions on which the pharmacists or their staff entered into discussions or advice giving on smoking. Secondly, the number of occasions on which people used the carbon monoxide ecolysing machine, the outcomes of those readings and any subsequent behaviour changes were recorded. Thirdly, the effects of using the machine on the usual practice of the pharmacy were examined. Fourthly, a questionnaire was sent to each participant to determine motivation, views on health education and their assessment of the project. Finally a random section of non-participant pharmacists were interviewed to examine any differences between them and the pharmacists who had chosen to take part. Some of the reasons for non-participation might be the conflict between the role of the physician and that of health educator and the questionnaire (Appendix 13) explored those areas.

The anti-smoking message is unequivocal and therefore easier to express for counsellors since they are on sure ground, well

supported by statistics. The health risks of smoking are such that counsellors can positively state that to smoke cigarettes is always harmful. Any campaign which achieves some success by stopping people smoking is therefore is of positive benefit.

A second letter (Appendix 11) was sent to all who responded to the initial letter and offered pharmacists the possibility of participation at three different levels, to be chosen by the pharmacist and of the 165 who responded to this letter, 55 had to be rejected because they worked only part-time, or in hospital pharmacies or as locum tenens. They were sent an explanatory letter saying why they could not participate. Of the 110 remaining, 82 chose the first stage, 20 chose stage two and 18 stage three.[1.]

The three levels of participation are now explained.
Level one participation involved a passive display of posters and booklets - "Ways to give up smoking" (HEC) - offered planned programmes and "How They Stopped" (W.M.R.H.A) recorded the ways in which people have actually stopped, compiled in their own words in an amusing format.

Specific pharmacy related posters were added, "You are now entering an anti-smoking pharmacy" and "This pharmacist can help

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1. The pharmacy superintendent of the largest multiple wished all branches to participate, but with one exception, only at level one. Thus these "pharmacist-employees" had no choice in the matter, which resulted in a disproportionately large number at level one.

you to stop smoking, please ask for his advice" (the latter was rightly criticised for being sexist).

Each pharmacist was given a copy of the booklet "Quit Smoking" (WMRHA) with the statistics of smoking related diseases and the ways in which people have successfully stopped. They were also given guidelines for counselling people to stop smoking (collated by the author from published sources). These stressed the importance of emphasising the health and financial benefits of stopping. Customers were asked to identify when and why they smoke, and why they want to stop. The pharmacist suggested a programme of stopping and reporting back with progress, for further encouragement.

Participants at level two added to the display a slide programme with a silent but pulsed tape which told the story of "Little Red Riding Hood" from an anti-smoking perspective. This was available in each pharmacy for one week of the campaign which lasted for eight weeks. The small scale study had shown that numbers of very young children regularly visit pharmacies with a parent. A colouring competition offered small prizes to children in age groups up to ten years and was supported by "Superman" comics with the anti-smoking message.

The third level of participation added the facility to measure carbon monoxide levels in the exhaled breath of smokers (as well as the materials of stages one and two). The gas is measured by using a machine rather like a breathalyser, by blowing into a bag

and attaching this to the machine. Each participating pharmacy was lent this machine for one week and then for a subsequent week two weeks later, so that people who had been encouraged to stop could see the effect of doing so. This machine offers a graphic and instant demonstration of carbon monoxide levels, and the dangers of these were explained by the pharmacist (Appendix 17), and confirmed with a leaflet forthe customer to take.[2]

An initial training day (which was compulsory only for those pharmacists using the ecolyser) was attended by 35 pharmacists. During the day the health risks of smoking were outlined and participants were reminded that more people will die early of heart and circulatory disorders because they smoke than from lung cancer (although the latter danger is better known). This was followed by a lecture on the pharmacology of carbon monoxide in the blood, i.e. why it acts as a poison and the way in which haemoglobin positively selects carbon monoxide rather than oxygen and the consequent physiological effects. These were related to the use of the ecolyser.

The objectives of the campaign were explained, and the ways in which pharmacists could offer help with stopping smoking. The carbon monoxide machine was demonstrated and the audience given the opportunity to use it until they were confident of accuracy.

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2. Written by Dr Jackie Chambers for this study.

Finally, the role of the author in this "action research" project will be discussed because it is felt to be an important aspect of the project. Participants were regularly visited during the campaign by the author. The importance of this contact was great - only in this way can common threads of experience be detected, together with problems which would otherwise be unrecorded. To note what happened was important but to sit and see it happening was quite invaluable in assessing how realistic it is to develop the pharmacists role. Such visits emphasised the need for campaign materials to be more adapted to the size of the average pharmacy i.e. smaller posters and booklets to fit into counter display units. Participant observation also showed that pharmacists must be given maximum freedom to adapt any campaign to their practice. For example, many had peak prescription times when the pharmacist was entirely occupied in checking and and/or giving out prescriptions and no role development at this point would have been feasible. The pharmacists best motivated about the project made a point of developing their counselling role at quieter periods - for example when people came back to collect prescriptions or when their advice was sought for "over the counter" preparations. Thus for the author to have requested that participation must involve willingness to counsel and at particular time would have been self defeating.

As in the small scale study described in Chapter Five, the availability of the pharmacist was of central importance. The promotional material often acted as a conversation trigger and it was when the pharmacist was there to respond to the customer

that it served its most useful purpose. The researcher often heard remarks such as "easier said than done" or "I wish I could" delivered apparently casually, but directed at the pharmacist to see if he would respond. And, when pharmacists were available, they did indeed respond and offer constructive help. Sometimes pharmacists instructed their staff to refer any such comments "Mr Smith can help you if you want to stop" and this worked well on some occasions. On others, the spontaneity was lost and the customer did not pursue the conversation.

The author was not personally acquainted with many of the participating pharmacists. It was noticeable that no independent pharmacist wore an identifying label (though those in the multiples did). The presumption that was worked upon by the author was that any man in the pharmacy was the pharmacist (and this was always so) but it was on several occasions impossible to tell which of the women present was the qualified person. If there was a problem for the author, it must be at least as difficult for customers to identify the pharmacist and the provision of name labels would make it easier for people to "ask the pharmacist."

Regular visits also enabled the author to keep pharmacists informed about public reaction in other shops. Most (90%) (Panton and Morley, 1986) pharmacists work alone and many had no contact with others while the campaign was running. Thus it was essential to reassure them that their experience was not unusual when little seemed to be happening, i.e. at the beginning of the study.

Praise encourages everyone, and many were pleased to have photographs taken of their window displays. Most of all, they wanted, very understandably, to tell the author what was happening and to discuss their findings.[3.]

2. Analysis of Results

Each pharmacy was given 200 copies of each booklet, and 34 requested further supplies. A total of 38,000 copies of the booklet "How They Stopped" were used, and 31,000 of "So You Want to Stop Smoking."

There was a great sense of commitment to this campaign. Unasked, nearly half of the participating pharmacies, 46 (42%), mounted a window display on the subject. The Health Education Council posters were too big for some pharmacies but those specially designed for the project were invariably displayed. Some pharmacies gave out so many leaflets that the piles needed regular replenishment and tidying. Provision of a display rack would have been useful (now used in subsequent projects).

Optimum places for the booklets and slides was near the dispensary till or the prescription waiting area, where both acted as conversation triggers and resulted in many discussions among patients, between patients and pharmacy staff

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3. A report recently published (Howie, 1985) of a similar campaign reported its apparent lack of success. There were many methodological differences one of which was that participants were offered no such support in the form of visits and re-visits.

or between patients and the pharmacist.[4] Thus the pharmacy became a forum for group therapy on how to stop smoking.

In those pharmacies participating at the second level of the campaign, the slide/tape presentation stimulated conversation, confirming the findings of the small scale study detailed in Chapter Five. Although it was largely watched by children and adults together, all consequent discussions were between the parents and pharmacists or shop assistants rather than the children. They, however, filled in the colouring sheets, and sent in 194, their slogans predominantly emphasising that smoking is bad for your sporting prowess (confirming they had accepted the message contained in the programme). Small prizes were given for the best in each age group and many appreciative comments about the presentation were received from parents and teachers. One of the winners felt he had gained inspiration in his effort from watching his father - it transpired that his father was not an artist but a heavy smoker!

The third level of the campaign included the measurement of carbon monoxide in exhaled breath. Publicity on local and national radio and in the press for the carbon monoxide monitoring machine resulted in a large number of people asking to use it. Booklets were given out after each reading if required, often accompanied by appropriate counselling. In their

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4. Placed in other parts of the shop, such conversations were not with the pharmacist, and not recorded.

assessment the project, 16 (out of 18) pharmacists found this counselling role "fairly" or "very" satisfying, the most committed volunteering that they were prepared to use the machine and offer help for up to three hours per day. The machine was loaned to each pharmacy for one week and then returned for a further week two weeks later to encourage smokers to cut down or to stop smoking and to see the lowered readings on the second visit, demonstrating that stopping has quickly detectable results. Several customers followed the progress of the machines around Birmingham, to obtain quicker results of trying to stop.

General interest was stimulated in some pharmacies by getting one person to blow into the bag which encouraged others to gather round, watch and then take part. Group discussions often resulted but these were interrupted by recording smokers personal details. Many smokers said they were ashamed of the habit and did not wish to give even their names and addresses. Reports of these outcomes were widespread, and the researcher amended recording to counting the usage of the machine. Most smokers wanted to stop the habit and said so but one or two used the readings as "that's not too bad is it?" and smokers who did not inhale recorded low readings. Counselling was important at both of those outcomes to stress the addictive properties of smoking. The machines attracted large numbers of people who did not smoke but were concerned that smokers were polluting their air with carbon monoxide. This was never shown to be the case, no non-smoker ever registered more than two parts per million which is to be expected in an urban area.

Some pharmacies found it difficult to deal with the large number of people (many non-smokers) who wanted to be tested, since once one patient asked for a reading, many others would follow. This proved taxing on the pharmacist's time, one saying that at busy times he hoped no one would notice the machine. Most pharmacists spent around one hour daily using it and a total of 5,400 people were screened although some may have returned for a second reading and hence were counted twice. In the two weeks in which personal details were requested only 39 people were prepared to give them, of whom 18 returned for a second reading.[5] Fourteen of those had significantly reduced their smoking intake and a follow-up study of those 39 in three months showed that two had stopped and seven requested further help - they were given the address of the nearest anti-smoking clinic. The small number who would be identified (compared with blood pressure measurement described in Chapter Five where none hesitated to give their names) revealed the shame people have of smoking. The large numbers who were screened (though some were non-smokers) equally shows their fear of the consequences. Shame and fear are not

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5. This small number (39) in a period of two weeks when approximately 1000 people were screened, suggests pharmacists did not seriously try to obtain details, after indications that their customers were disinclined to give them. It might be argued that this shows conflict in the dual role of businessman and health educator, but equally might be the pharmacists assessment that to insist would ensure the machine would not be used.

feelings compatible with the view of smokers as people beyond reason and impervious to help.

For the pharmacist, the difference between this machine and blood pressure measurement was that the latter was done in private and by appointment and so a finite amount of time could be allotted to the project. For the ecolyser, no such time limit could be guaranteed and some of the most enthusiastic pharmacists found they did not have the time available to meet all requests. Several made the point that the most effective time to give anti-smoking advice is when people present with smoking related symptoms (for example coughs and cattarrh) and the use of the machine at that point had an optimum effect. A logical extension of this would be to use the machine in situations where many people present with such symptoms (e.g. in chest clinics) or with people in whom smoking is most to be deplored (for example antenatal clinics). The pharmacy is a good place for opportunistic help, but the customer needs to know which pharmacy to visit and the pharmacist needs time or trained staff to use it. "Secret" smokers (those who smoke but deny that they do, and who never smoke in public) are likely to use such a machine in a pharmacy since they need not identify themselves. (Warner, 1978).

One advantage of the ecolyser was that it attracted a good deal of publicity to the anti-smoking campaign. In one small town the mayor "blew into the bag" and recorded a very high reading. He admitted that he smoked, but claimed only ten

cigarettes a day. Both he and the pharmacist were very concerned with this result and on further investigation it was discovered that the tailgate of the mayor's car was damaged and carbon monoxide was being sucked in from the car exhaust. Hence rather spectacular headlines were obtained "Pharmacist saves mayors life" which resulted in an upsurge of customers who wished to participate. The carbon monoxide machine was a novelty and invitations for interviews were received from national newspapers and radio programmes. A possible danger in such coverage is that the subsequent demand may be excessive, though it was considered that the involvement of 110 pharmacists would ensure most people would locate a participating pharmacy. The Code of Ethics of the Pharmaceutical Society precluded us from identifying them on the radio or in newspapers - decidedly not in the patients interests (see page 20) but we provided stickers for shop windows and doors so people knew which were taking part.[6.] The blood pressure measurement programme described in Chapter Five showed that many people were prepared to ask in any pharmacy for the address of participants and this was confirmed in this study. One result was that several pharmacists requested to join the campaign in view of the interest it had aroused, but there was no time to brief them on its objectives or to explain the levels of involvement and these requests had to be refused.

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6. The largest multiple allows no material to be placed on doors which added to the problem.

3. The Pharmacist as Counsellor

Most pharmacists had chosen only the first level of participation (displaying posters and giving out booklets) but of respondents to the questionnaire (Appendix 14) nearly all 62 (82%) had also counselled customers on how to stop smoking and 52 (69%) said their staff had also offered advice. They were able to do so with confidence having read the booklets and WMRHA publications and following the written guidelines (see page 172). This counselling role was confirmed during the researcher's visits when many discussions between staff and customers were observed.

Ten million people have now stopped smoking in this country since 1955 - a minor social revolution which is largely unrecorded. This study revealed ex-smokers are very proud of stopping and are prepared to tell how and why they did so with little encouragement . This was true for both pharmacists and customers - a reminder that the proselysing zeal of the convert should not be underestimated. In pharmacists with a prescription waiting area, the general question from the author "Have you noticed our campaign?" would very often result in spontaneous accounts of how people had stopped. These stories were very analogous to case histories from Alcoholics Anonymous or "Born Again " Christians where a great shock had made the narrator see the error of their ways and break the habit of years. Such behaviour changes are very difficult to achieve but a sharp shock which forces reassessment may achieve success. Two examples of such shocks are illustrated.

My daughter and her husband came round to tell us she was expecting. We were really pleased but I could see she had something to say. 'Mum we are going to tell you now, we won't be bringing the baby here, you will poison him, with your cigarette smoke.' I was that shocked I threw the packet on the fire and I haven't touched any since. I smoked 30 a day since I was a kid.

(Customer, aged 50)

We go to Barbados every winter for two months and you can't buy my favourite cigarettes there - so I got them from the Cash and Carry and took them with me. The customs bloke opened the case and saw these 2,000 fags. 'Have you come to Barbados for a holiday Sir, or to smoke yourself to death?' I looked at them all and told him to throw them away. I have never smoked since, but there isn't a day of my life when I don't long for a cigarette."

(Pharmacist, aged 45)

The pharmacy situation, where people sit together waiting for prescriptions, proved remarkably effective for such expositions of how people had stopped smoking. The pharmacist and his staff were able to offer the booklets and advice to those who said they wanted to stop. The situation was often observed in which the pharmacy assistant would join such discussions and give a resume to the pharmacist as he came out with the prescription. For example, "Mr - said he has tried to stop dozens of times, but hasn't succeeded." This gave the pharmacist the clues he needed

for appropriate suggestions - in this case perhaps , to suggest planning a campaign of stopping before actually trying to do so.

Conversely, the study revealed many smokers who were ashamed of smoking and wanted to stop but didn't know where to turn for help. This inability to seek help may be for various reasons, from not being able to admit smoking to feeling that to seek help is to waste professional (i.e. the doctor's) time. The first group were exemplified in this study by teenagers in boarding schools and young Muslim men. Many of the former visited participating pharmacies in a Worcestershire town noted for its preponderance of boarding schools, while the latter sought help in the inner city pharmacies. Both were in a "Catch 22" situation where for the young people to admit that they smoked meant instant expulsion and for the Muslims admitting it (to families who did not know they smoked) meant acknowledging the breaking of a religious vow. For both these groups of secret smokers the anonymity of the pharmacy provided a way of obtaining help without anyone else becoming involved and hence the fear of retribution was removed. One of the pharmacists explained her system.

> "I spent hour with the fifth and sixth forms of local boarding schools - no yellow forms as we started out with an agreement of no forms , no names, no information to the school as the penalty for smoking is expulsion. The pharmacy was a good catchment for them as they can't admit they smoked to anyone else and get help."

Many people did not consider smoking to be something about which they should consult the doctor, but feel that the informality and anonymity of the pharmacy made it an appropriate place to ask for help. A remarkable example of this occurred when a medical practitioner happened to be in the dispensary of one of the participating pharmacies . This dispensary is in a separate room and unseen from the shop. A worker from Longbridge came in, bought some cough linctus and on seeing the campaign display material hesitated and remarked that he wouldn't need the Benylin if he could stop smoking. Questioning from the pharmacist revealed that this man smoked only on "nights" out of a sense of boredom and because nearly everyone else did so. He smoked a packet a night and had repeatedly and ineffectively tried to stop. He went on to say how he hated shiftwork - there was little to do, the boredom was intense, and it disrupted his family and social life. He and the pharmacist agreed that by expressing the problem he had sorted out why he smoked and he left, with the booklets , saying it was about time he "got out of that place." The doctor, who had overheard all this, was astonished: "He's been a patient for years and he hasn't told me half of that."

The pharmacist concerned suggested that one reason for this was the lesser social distance between him and the customer.

> "he can come in here in his boiler suit and stand on my linoleum and tell me he wants to stop smoking but he has got to change his clothes for your fitted carpets and smart seats."

To this the author would add that the anonymity of the pharmacy meant the patient did not have to make an appointment and be labelled as a patient in order to discuss what he perceived to be a social problem rather than a medical one.

The findings of the small scale study were confirmed that when help is offered for a problem which is perceived by the individual, greater interest is shown in promotional material and further acceptance is obtained of offered services (see page 112). Pharmacies using the carbon monoxide machine proactively to accompany sales of medicines to relieve smoking related symptoms found their advice was listened to attentively. This might be incorporated into the planning of self-selection literature to target specific groups , eg "do you suffer from catarrh and bronchitis?" and relate them to smoking.

4. Pharmacists' Views of the Campaign

A questionnaire was sent to each of the participants at the conclusion of the campaign (Appendix 12) to measure their views and involvement in the campaign, to which there was a 69% response. This was supplemented by further questions to those measuring carbon monoxide and also by recording conversations during visits. Selected results of the questionnaire are shown in Appendix 14. 82 (out of 110) pharmacists had given a commitment only to display posters and booklets (and all branches of the largest multiple had this decision made for them) but 62 (82%) of respondents had counselled their customers. 20 (26%) said they had taken part because of a Head Office directive, (and were thus identifiable as a group) but their answers showed most

to be personally committed to the project. One exception was an addicted smoker who strongly resented being expected to know how to counsel others in the same plight. This must be a real dilemna and for subsequent campaigns it has been requested that employees be allowed to choose participation.

54 (71%) considered it to be part of a pharmacists job to try to help people to stop smoking and 43 (56%) added to this a personal dislike of the habit. These statements were proved by observing the amount of time pharmacists were prepared to spend counselling on stopping and the use made of all the promotional material of useable size.

16 (21%) considered the organisers should have been more aware of the space available in a small pharmacy and promotional material should be designed with this in mind. More local publicity would have been welcomed by those who recognised it had an excellent and instantaneous result. Many respondants believed that an anti-smoking policy should be continuous so pharmacies would always be seen as anti-smoking areas and stated their intention to retain the promotional material on display. Thus, they had incorporated the ideas of a short term campaign into an extension of practice.

Having obtained the views of participants, the views of those who did not take part were sought (see Appendix 13). Fifty pharmacists in the Birmingham area who could have taken part, but had chosen not to do so, were then interviewed. Selected results are shown in Appendix 15. Twelve (24%) said they had not heard

of the campaign and four of those added they would have taken part. Of those who had heard of it, nearly all (37 (74%)) had done so either through the initial letter or the local press.

They were offered a choice of reasons for their non-participation and while their replies showed no single dominant factor, four might be collectively judged.

- did not think it would be effective
- not interested
- meant to but didn't get round to it
- don't know.

Adding these together as "lack of interest" 26 (52%) of our respondants came into this category. The hypothesis that their refusal was related to the conflict in the role of businessman and that of health educator gained litle support - in their replies only two pharmacists giving the reason as lack of time. Eleven (22%) however cited lack of space, borne out by 38 (76%) of their shop areas being under 40 square metres. They had anticipated the problem that some of our participants discovered, i.e. that posters and display material were difficult to fit into a confined space.

Rather more non-participants were in a younger age group - 25 (50%) were under 34 years compared with 27 (36%) of participants. (Appendix 16). 29 (58%) were independent contractors, as were 30 (40%) participants. This suggests young people building up a business, which might account for lack of interest in role development. Only one respondant thought it wrong to persuade

people to stop smoking and the supposition that non-participants are more likely to be smokers themselves was also unfounded since only five (10%) did so. Only nine (18%) had ever smoked compared with 27 (36%) of participants - perhaps a factor of age, younger people being now more informed of the dangers before they start. They may be less motivated to encourage others to stop if they cannot really envisage a problem in doing so.

There are ten million ex-smokers in Britain now and if they could be selected as counsellors for wide based health education anti-smoking programmes, rather in the way Alcoholics Anonymous is run, their message might be better received. This has particular significance if target groups are, for example schoolchildren who smoke. If they were counselled by teachers and parents who had smoked and given up,, the goal might seem more attainable, and from the evidence of the study ex-smokers are highly motivated to demonstrate that it can be done.

Both groups had a far smaller number of smokers than one would expect - three (4%) for participants and five (10%) for non-participants, so markedly different from the expected smoking rate (20% for professional class 1) that one questions whether some may be in the ranks of the secret smokers. If it is becoming seen to be unprofessional to smoke people are less likely to admit that they do so. (Warner 1978).

More non-participants were likely to be the only pharmacists on the premises 42 (84%) compared with 50 (66%) of participants and

employed fewer assistants.[7] If only one person is available to check all dispensing there must be less time available for counselling. The Pharmaceutical Society proposes that in the near future every pharmacist after the pre-registration year will complete a further year in their specialist area (for example hospital or community practice) before registration. (PSGB, 1984 : 494-508) Thus a greater number of pharmacies will have second pharmacists and their counselling and health educating roles will have better conditions in which to develop. Both participants and non-participants had the same gender distribution - 80% being male. Owners or managers were interviewed and clearly women are under represented at this level in a profession which now has a 50% female intake. The locations in which they worked were roughly the same as were their classification of their customers into social groups - although many pointed out the irrelevance of the term, "working class" in a city of high unemployment. Both these studies were successful, measured by the uptake of screening by customers, and advisory services when they dealt with problems of current concern. The pharmacists knowledge was updated at the study day preceding each project, and necessary training provided.

Large numbers of people accepted the invitation to have their blood pressure measured and could have requested this of their doctor but had chosen not to do so. The pharmacy confers no

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7. This large number of second pharmacists reflects the fact that many were employed by the largest multiple, in many of whose shops there is both a shop and dispensary manager.

"labelling" as a patient or concern of "bothering" health professionals if the service is offered. Anonymity could be retained in the anti-smoking project - particularly important when punishment could result if smoking was detected.

The allocation of pharmacists time was of importance. The more time they spent in the shop area, then the greater was the success of these campaigns. Their involvement was reflected in the greater interest shown by their counter staff, who were more aware of the objectives of the programmes and listened to the discussions between the pharmacist and customers. Communication skills were of great importance in establishing an appropriate counselling role, both by seeming approachable by being present in the shop area and the ability to advise rather than to tell people what to do.

All participants welcomed the ability to choose their level of involvement - and the best communicators chose the highest one offered. Nearly all committed more time and became more closely involved than they had originally stated, suggesting that innate caution was overtaken by enthusiasm.

Care was taken to establish the correct level of publicity - the material had to be of the right size and the messages compatible with the pharmacists beliefs It was important that material purchased for the campaign (e.g. HEC booklets) had inserts urging the customer to return to the pharmacist for help, since the usual exhortation is to "ask your doctor for further help". Features on local radio acted as a great morale booster for

participants, especially if those interviewed were community pharmacists.

A network of relationships was essential for smooth running with the minimum amount of inter-professional jealousy. Each group (medicine, pharmacy, health education) worked better when the objectives were agreed before the programme started and when each understood what the other could be expected to achieve.

The hypotheses were proved that: The pharmacists' education and professional awareness enables them to offer both advice and recommendations for action on health promotion. The services proved acceptable to their customers and met identified health needs and pharmacists were competent to measure blood pressure and to refer high readings to medical practitioners.

A logical extension of this work would be to examine customers attitudes to a range of health promotion advice offered in the pharmacy, to see which are most readily accepted. Allied to this, the gender and age groups of customers, cross-referenced to their attitudes would enable health advice to be targetted to those who would willingly accept it. Funding has been obtained for this, and further research will be conducted in these areas. These findings will be developed in the concluding chapter, with recommendations for their implementation at national level. The general conclusions to be drawn from this study, and necessary changes in pharmacy teaching and practice to develop the pharmacists role in counselling in health promotion, will also be discussed.

C H A P T E R S E V E N

DEVELOPING THE PHARMACIST°S HEALTH PROMOTION ROLE

In this Chapter, the ways in which future campaigns might be organised are discussed, building from the results of this study and those in the same field. The next section focusses on pharmacists - their ability and willingness to adapt to change and the practicality of incorporating health promotion into the work of a community pharmacy. Finally, changes in pharmacy practice are proposed which would make pharmacists better able to act an advisors and counsellors on health promotion and the pharmacy a resource centre for health education material. These include an examination of the inter personal and social skills necessary for such development of the pharmacist's role.

1. The Organisation of Future Campaigns

Publicity and Display Material

Much was learned about the organisation of health promotion campaigns for future projects. Good media coverage (particularly in professional journals, local newspapers and on local radio) helps to ensure success and the greater the amount of such publicity then the greater is the uptake of the services being offered. While the code of ethics of the Pharmaceutical Society prohibits pharmacists from advertising professional services it is fairly easy to identify participating pharmacists by providing them with window and door posters. Many participants were pleased to hear community pharmacists being brought to the forefront of local interest in newspapers and on radio to hear their colleagues being interviewed about the aims and objectives of the campaigns. While it was difficult to persuade more than one or two pharmacists to speak on local radio their involvement raised the level of consciousness of the campaign in other participating pharmacies[1] and is recommended for future studies. For local radio and television programmes which state "chemists in your area are taking part" it is important to ensure the majority of pharmacies are doing so, or false hopes may be raised.

The particular requirements and restrictions of designing advertising material for a small area have to be observed

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1. Hence the "observability" of the campaign was raised - one of the criteria for successful change listed by Rogers and Shoemaker (see page 139).

or the material is not used. Most small businesses make use of all available space (understandable when they face an increasingly difficult battle to survive in the face of competition from large buying chains) and it is important that display material does not intrude into selling areas. Many had "dead space" on the back of the till and immediately underneath it which was utilised by designing stickers and posters which would fit. For future campaigns funding has been obtained to provide each participating pharmacy with a display rack, a suggestion made by many of those who took part.

The initial supply of display materials was delivered to each pharmacy by the author (apart from those where the pharmacists attended the study day and who collected them on that occasion). Their content was discussed as were the optimum sites for display. "Top-up" material was posted, or delivered during the author's visits.[2.] When the display materials were appropriate to the pharmacy, and when the message they contained accorded with their personal views then the pharmacists enthusiasm and willingness to promote better health was unbounded. It had not been anticipated that many would be prepared to give up valuable window display space to advertise the campaign but many did so

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2. The Pharmaceutical Society's Health Education project involves direct mailing to every pharmacy. Inevitable results must be that some of the "messages" are offensive to recipients (eg on religious grounds for family planning), and the fixed numbers supplied cannot match particular needs.

(unasked) and often the organisers would not have known of these displays apart from finding them on visits. This enthusiasm was also demonstrated by the great majority of those who had agreed to take part in the anti-smoking campaign initially by simply displaying booklets actually participating by counselling those who asked for their help. They were provided (in the displays of booklets, posters and stickers around the shop) with conversation triggers which customers used to discuss health problems, some of which the pharmacist had been ignorant of until the campaign was in operation. In this sense the promotional material was saying to customers "This is an area of expertise which the pharmacist has and you may be unaware of." For any development of practice it is essential that the intended receivers of the information or education should have it made clear that their questions are invited. This was noted by Astill (1984) and confirmed in this trial.

The slide tape presentations, when correctly adjusted to remove the monotony of the commentary, offered such invitations, "Talk to the pharmacist about this" for example, resulted in many discussions. Such presentations, conversely, have been found unsuccessful in surgery waiting rooms where there is no one to ask for further information. The latest Consumers Association report (1985) shows that people do not expect to receive advice on health education from pharmacists, reinforcing the point that if it is to be offered then the recipients must be clearly aware that their questions are invited. Care was taken to incorporate

the message "Ask the pharmacist for advice" in all publicity material and this should be observed in subsequent studies. Most H.E.C. material routinely says "for further information, ask your doctor" - a disincentive for people to return for help to the pharmacy.

Positive publicity material and counselling prove much more effective evidenced by the campaign which showed how to store medicines safely and the importance of child resistant containers. Such positive counselling stimulated 300 comments many of which moved onto the pharmacist giving advice. Conversely, the smaller response to material showing the consequences of uncared for teeth, shows people do not wish to hear such a message.

Pre-Campaign Training and Support Material

The higher the level of participation then the greater is the knowledge base required of the pharmacist and this may be provided both on training days and by literature supplied to each pharmacist. Each training day for these studies focussed on the behaviour changes whch were sought, the ways in which they could be modified and the extent of the health problems which were related to them. This was followed by an explanation of the technicalities of the screening procedures and every pharmacist who screened patients was given a protocol which was always observed.

Since the measuring of blood pressure is a new field for pharmacists there was awareness that mistakes could be made while

the trial was in progress with consequent concern for patients. The equipment chosen was very easy to operate and in the event there was no occasion in which the pharmacist's reading was mistaken (there were three occasions when the doctor disagreed with the reading but at these outcomes the equipment used was carefully checked and found to be accurate).

The protocol included details of what the pharmacist was required to tell the customer at each outcome. For carbon monoxide monitoring they were given a leaflet which explained the findings and encouraged them to come back for a subsequent reading emphasising that immediate benefits are obtained from stopping smoking as well as reducing long term hazards. The ethical considerations of any screening programme (outlined on page 124) must be observed in any subsequent programmes as they were in these studies.

Levels of Involvement

The pharmacists who started by choosing to participate at the highest level retained their enthusiasm and nearly all welcomed the counselling role which it offered. They observed that they had casually known many of their customers for years but had never had the opportunity to discuss particular health problems with them. When this discussion developed to identifying the patient as being hypertensive the pharmacist subsequently felt a much more personal interest in the progress of these patients who returned with prescriptions. They felt a bond had been forged and the pharmacist was highly motivated to encourage these

patients to comply with their drug therapy and to offer help if this proved difficult. The perceived benefits for the pharmacist, in such cases, include an increase in prescriptions for appropriate drug therapy.

This atmosphere of inviting conversation on health matters shows pharmacists defects which prevail in their current practice. Many had not realised the problems encountered by older people with child resistant containers and after the campaign they adopted a policy of invariably asking older people whether or not such containers were required. They were chastened to find on how many occasions the reply was a thankful "no thanks" and the patients then volunteered horrendous stories of how they had previously managed to use their tablets and where they were stored - one old lady volunteering that she used a sledge hammer and consequently spent some time taking care to pick out the pieces of splintered plastic.

All the pharmacists who took part at the level of physiological measurements were prepared, quite remarkably, to give one to three hours daily to screening. However, the second screening service (carbon monoxide monitoring) could not be offered by appointment and it proved difficult to find the time in busy pharmacies, so much so that some pharmacists were obliged to remove the machine and to offer it only at quieter periods. Without an appointment system the conflict between the pharmacists role as a professional (and they were highly motivated to help their customers) and that of a businessman became quite impossible. The pharmacy is not a suitable place

for spontaneous screening procedures and the professional role o the pharmacist as a health educator will best be developed by using the pharmacy as a resource and advice centre and in screening by appointment. Some such appointments may be immediate, at a quiet time, and publicity for such a service should take work flow patterns of each pharmacy into account. The main thrust of the involvement of pharmacists should relate to their opportunistic ability to respond to questions and to volunteer advice related to symptoms. For both screening procedures, initial training and education, followed by continuing support from the organiser are essential to ensure success. This will be discussed more fully later.

Social Relationships

It was anticipated that the best communication between a pharmacist and his customers would be when each knew the other on a social scale and when the difference was not too great. Social distance should also be less in receiving information across a counter than in the restricted atmosphere of a consulting room. Both were true with the exception of pharmacies where the customers language was other than English. The only help that could be offered was by leaflets in the hope that some family member would be able to read them. The pharmacy is not the place of choice for the dissemination of health education for such patients who be better served by the employment of a community worker who speaks their language. On the evidence of this study, there is, however, an urgent need for both information leaflets on medication and health education to be printed in the four main

Indian languages.

Difficulty in communicating across wide gaps of experience is well known to teachers who recognise that pupils from deprived backgrounds cannot be expected to adopt a work ethic and set of standards which are alien to them. So in health education when the singular success of the counselling offered by ex-smoker pharmacists demonstrated the ways in which barriers can be broken by using as counsellors people who understand the problem at first hand. On the evidence of this study, the Pharmaceutical Society is undertaking a survey of the smoking habits of pharmacists for use as potential counsellors.

Relationships with Other Health Workers

There was some conflict at the interface between medical and pharmaceutical practice when the desired aim to extend the latter into the measurement of blood pressure was seen by some medical committees as a direct threat to the role of the medical practitioner. While these fears were allayed on this occasion the fact is anyone may measure blood pressure and this study showed that for pharmacists to do so is a cheap and accurate way of identifying people with high blood pressure and was a role extension welcomed by pharmacists.

Pharmacists should be encouraged to include such measurements in routine practice i.e. at the presentation of repeat prescriptions for anti-hypertensive therapy for which the compliance rate is low because of the incidence of side effects. At such outcomes

an occasional blood pressure measurement supported by encouragement to continue with the therapy or suggestions for the alleviation of the side effects (such as changing the dosage regime) could be very productive in ensuring the medication continues to be taken. Where group medical practices have age/sex registers and routinely screen patients in the danger ages then such involvement from pharmacists is less needed but this is far from being a standard state of affairs. Until it becomes so the involvement of the pharmacist can only be helpful to the patient.

Relationships with health education officers proved sometimes to be a source of tension since neither group clearly understood what the other had to offer. Health education is an expanding area of work and its practitioners come from varied academic backgrounds from which they are attempting to create a professional role (see page 2). In so doing each sees their function in different ways and have a varying number of support staff. Their perception of their function varies from some who see themselves primarily as resource centres to others who decry such a role and who work more directly as health scientists.

This created problems in some health districts since the role initially required by pharmacists was a source of supply for health education materials. This tension lessened when each group understood more of what could be expected of the other, for example, health education officers that pharmacists are independent contractors and must be allowed a wide latitude of freedom in a campaign and for pharmacists that health education

officers have much more to offer than that of supplies of material. Any future campaigns should ideally be planned to include district health education officers from the outset with an awareness of their local facilities.

Development of these studies should recognise the growing professional jealousy in the whole field of health education. General medical practitioners stress that they are the most reliable source of advice on health matters to their patients and wish to develop this role. They note the privacy of a consultation and the way in which they can identify people most at risk by the use of age/sex registers. While these are true the fact remains that people see themselves as patients when they visit a medical practitioner and many people choose not to take up options for screening for this reason.

Health education officers see that health education is their domain and they should have the controlling voice in any initiatives that are undertaken in their health district. An understandable view and one with which the author has much sympathy but it should be recognised that the most important people are those it is wished to reach. The average citizen will be best served if the whole health message, counteracting that of the mass media and government decisions, is disseminated on as many fronts and by as many people as possible. This will inevitably mean that some campaigns run concurrently in the same health district but the author cannot see any fundamental danger in this since such messages together are small compared with mass advertising of, for example, alcohol on television. It is

however desirable to work in harmony with other health groups in this development of practice. These studies developed many relationships between pharmacists and other groups. The materials were welcomed by doctors (many of whom made special visits to see them), health visitors, nurses and teachers and there were many requests for materials to be taken to surgeries, clinics and schools. Several pharmacists received requests to speak to schools on smoking and these, and the other requests, showed the "observability" of the projects were welcomed by other concerned groups. The pharmacy prove an excellent focal point for a resource centre on health education material and the promotion of health education material created a new interface between pharmacists and other health workers (notably doctors, see page 98).

Campaign Management

Central management is essential from initiation of interest among community pharmacists to organising the distribution of promotional material to each pharmacy. The law requires every community pharmacist to be on the premises all the time that they are open and campaigns must provide an organiser who can visit each pharmacy on a regular basis. Most pharmacists work in isolation from their peers, and it is difficult for them to conduct practice research, or role development, since they have no point of comparison. This difficulty is recognised in general medical practice which increasingly employs "facilitators" (Fullard, 1985) who regularly visit practices to advise on ways of using age/sex registers to screen patients (largely by

training practice nurses) for lifestyles which may impair health. Such organisers can deal with problems as they arise and offer reassurance where necessary. Regular visits from the researcher were welcomed by all participants who felt they were involved in an activity they saw as being both useful and rewarding. During these visits they heard how other pharmacists were faring and were pleased to be involved with their profession in an activity where commercial competition had no part to play. If all that is required is a passive display of material, then such support is not needed. But if the pharmacist is to offer pro-active advice and counselling he needs information and training. The service offered must also be independently evaluated, for replication in other pharmacies. It is of note to read of organisers regret that pharmacists merely show display material while offering little support themselves other than as suppliers of material. (Howie, 1985 : 144-5)

2. The nature of Pharmacy Practice and the Health Education Role

Pharmacists are independent contractors to the National Health Service and as such are "their own bosses". When pharmacists choose to adapt their practice to share their knowledge and experience with their customers, then a role as health educator follows. The availability of their premises in every shopping street makes them ideal sites as resource centres and the pharmacist's education means appropriate advice may be offered.

Advice and screening procedures in a pharmacy are received outside the National Health Service framework of appointments and

referrals and can be anonymous. The latter was an important factor in the use of the carbon monoxide monitoring machine, and in both screening procedures the public welcomed the easy access. The catalyst in changing a passive display to a centre where health risks may be assessed and discussed is the pharmacist, who is able to offer advice and, in screening, to refer the patient for further investigation. When pharmacists adopt this role, they perform a vital primary health care service acting as a half way house between the patient and his doctor. These factors will be further explored in this section.

Of the large numbers of people who selected information booklets and/or took advantage of the screening facilities during these trials the most frequently given reasons for so doing were ease of access to the local pharmacy and its anonymity. Pharmacists are increasingly urged to keep records of their customers so they may collate information about dispensed and over the counter medication. While it makes every sense to do this (to ensure that their customers do not continue with regimes which result in overdoses) these studies have shown that record keeping is not invariably a good policy. Where there is any measure of shame attached to the problem soliciting personal details may negate the object of the exercise. This was so in the anti-smoking trial and it may be assumed that shame would surround other diseases. Alcohol related problems, venereal disease and, possibly, obesity should be considered in this light. A negative effect of health promotion is that those who cannot achieve desired behaviours are seen as being weaker, and deserving of

their fate which ignores the reality that personal behaviour is only part of health status.

The success of the blood pressure measurement service (measured by the number of people who took advantage of it) and of carbon monoxide monitoring shows such facilities are widely accepted when offered in a pharmacy. All those screened for hypertension could have requested this service of their medical practitioner and had chosen not to do so usually because they had not wished to make an appointment or felt it was bothering the doctor unnecessarily. There is growing awareness among medical practitioners of their rather neglected role of health promoters (Fullard, , 1985) but years of publicity from the medical establishment suggesting that doctors are overworked must be overcome before patients will routinely request screening procedures. This extension of service in the pharmacy exactly matched the needs of customers and as is often the case when these coincide success follows. When the service offered met a problem identified by regular customers their success was assured, confirming Parson s view that if a profession adapts to meet the changing needs of society it will survive (see page 112). Customers of pharmacies have traditionally been to a disproportionate extent older people and mothers of young children but this is changing in a society with high unemployment and a greater number of men are now regular customers. This should be considered in any further studies.

There is one aspect of community pharmacy practice which must be

treated carefully in any health promotion project. The great majority of pharmacists are self-employed and health education staff need to be aware of this. Though most pharmacists were highly sympathetic to the aims of the campaigns, as has been shown, some aspects of the studies impinged on their practice in a problematic manner. When pharmacists disagreed with the manner in which the message was presented, then their independence of action was demonstrated by their refusal to participate. The irritation caused by a continuous voice on the tape resulted in the machine being switched off for large parts of the day and they disliked some posters on dental care. These outcomes were a forcible reminder that community pharmacists have independence of choice and no campaign can demand specific action from them.

This is different from the situation in a district general hospital when a health education campaign could require every patient to be given anti-smoking booklets. No such uniform action can be expected from independent contractors and this should be borne in mind in any extension of this work. Some health education officers in whose health districts the studies were conducted found this concept hard to understand, some even "reporting" pharmacies where none of the booklets were on display (the pharmacists in these cases having chosen to supply the booklets only after counselling). Groups such as health education officers need clearer explanations of the contractual arrangement of the pharmacist to the NHS and consequent understanding that participation can only reasonably be expected at the level and in the manner that each contractor chooses to

follow. An anti-smoking study conducted in Fife (Howie, 1985 - 144-5) was deemed a failure since not all pharmacists took part at the required levels of practice - showing the organisers were unaware of this consideration.

The channels of communication were recognised to be important (see page 137). Invitations to participate were from a high source - the Regional Chairman of Health Promotion and the Regional Pharmaceutical Officer. Initial letters offered both professional development and retention of freedom of choice and the practical expedient of offering each participant different levels of involvement proved very successful. If people understand what is expected of them they are much more likely to take part (ie they know the change is compatible with their practice) thus confirming Rogers and Shoemakers hypotheses (see page137). Most then participated at a level higher than that agreed - another benefit of this procedure.

Many of the best motivated pharmacists had already identified the wind of change blowing through pharmacy and that a role they wish to develop is that of adviser on dispensed and "over the counter" medication. They spent a considerable amount of time in the shop area and checked medication as it was given out rather than counting the tablets themselves. They, and the pharmacists who participated at lower levels but who also found the campaigns to be "very successful", had adapted their practice to spend more time being available to those who sought their advice.
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Conversely, in shops where the pharmacist remained in the dispensary all day it was sometimes so that the counter staff

were not informed a campaign was in progress. Consequently (in the small scale study) results were returned showing "no interest" where reality was people had requested information but the pharmacist was unaware of this.

3. Developing the Pharmacist's Advisory Role

These recommendations fall into three main sections and it is proposed to deal with each in turn. The changes will require modification in the usual layout of pharmacies, new legislation to ensure the patient is best served and finally changes in the education of pharmacists at undergraduate and postgraduate level.

Layout of Pharmacies

Communication is easier without physical barriers and in this study four out of five pharmacists worked behind glass screens, or in separate dispensing areas. One of the respondents in the survey of pharmacies commissioned by the NPA graphically described her view of the approachability of pharmacies as:

> you see a hatch, a flash of white and occasionally an arm comes out.
>
> N.P.A. Survey, 1982 : 54

This is a state of affairs in which it is well-nigh impossible to discuss problems and pharmacists should be actively encouraged to convert dispensing areas to an open plan layout, reserving a small area of consultations, screenings and office work. A detailed research project is needed to evaluate the relationship between the physical layout of pharmacies and the time which pharmacists have available for giving advice to customers. Once

people are aware of the range of advice they can receive from a pharmacist, the greater use they will make of such services - as was shown in the ethnographic study where one pharmacist had no physical barriers and his advice was continuously sought. Public enthusiasm for blood pressure measurement in pharmacies makes sound economic sense for the NHS and can identify those "at risk" - shown by the 7% referral rate. Those pharmacists who include such screenings in their practice should be paid for this as an item of service.

Pharmacies where customers see the pharmacist and where extra information and guidance are volunteered were observed often to be concomitantly commercial successes, ie people were receiving a service for which they were prepared to queue, rather than taking prescriptions to pharmacies where they see and speak only to shop assistants. This finding too is worthy of a further investigation to demonstrate to the profession, if these findings are confirmed, that open-plan premises very often equate with higher financial returns. A detailed study of the relationship between the availability of the pharmacist and the services asked of him would be of great help to those wishing to change their practice.

If the role of the pharmacist as a health educator and adviser on the safe handling of medicines is to be developed then it is essential that a suitable counselling area should be provided. This need only be of modest dimensions and does not preclude the rest of the pharmacy from being designed as open plan. Two "open plan" pharmacies in this study each have a small office sceened from the shop and both used this for counselling sessions. Such

an area would ensure that the patient's anonymity might be preserved but at the same time he could receive private consultation on matters which he would not wish to have bruited abroad. It was a requirement of our blood pressure measurement service that such an area be provided and this regrettably meant that one pharmacist who wished to do so could not take part. It must be that some patients are deterred from using the advisory services offered in a pharmacy by the lack of privacy. An ideal arrangement would be a small half-screened area such that seated patients would be unobserved by other customers.

Pharmacists should be actively encouraged to keep patient medication records. It makes little sense to urge people to buy their medicines in a pharmacy if neither they nor the pharmacist knows what other medication the customers are taking when they ask for "over the counter" remedies. Such records would encourage patients to visit the same pharmacy regularly and ensure that interactions between prescribed and over the counter medications become rarer and also to identify potential adverse reactions to drugs, although these then need to be reported to the doctor since pharmacists may not report directly to the committee on the safety of medicines. It has been shown (Marplan, 1982) that people put great merit on the fact that their medical practitioner keeps records and it seems rather surprising that many pharmacists have computers but rarely use them to store medication profiles. Such records would not diminish the anonymity which is possible in a pharmacy since there is no requirement for any customer to use one particular outlet. One

study (Schulman, 1985) conducted by a community pharmacist who maintained such records gave results which merit a much wider trial. One pharmacy in this project adopts the simple expedient of recording all medication on a card which the patient keeps. A large percentage of customers produce these cards on each visit, but the pharmacist does not record the numbers who do so.

On visits to participating pharmacies it was not clear to the author which of the staff behind the counter was in fact the pharmacist. This was particularly true if the pharmacist was a young woman since the majority of counter staff are young women. A simple label giving the pharmacists name and title would ensure that customers would be able to identify the pharmacist and address any questions appropriately.

Changes in Legislation

If, as is argued by the professional body, the pharmacist is the health professional whose presence is vital to ensure that patients receive appropriate advice with prescribed and "over the counter" medication, then it must ensure that the public are routinely offered such advice in all circumstances where it is merited, to ensure a uniform service. Legislation already exists in Australia and parts of the United States to ensure that each prescribed medicine is handed to the patient by a pharmacist, thus giving the patient, at each transaction, the possibility of questioning the pharmacist about the drugs he is taking. An increasing number of pharmacists add extra labels to medicines - those with microcomputers are particularly likely to do so - and it is not uncommon in such pharmacies to see up to four different

instructions on the same bottle. However well-meaning, the result is often confusing and such instructions should always be repeated verbally, with a check to see that the patient has understood.

There must be a limit upon a maximum number of prescriptions that can be supervised by one pharmacist. This investigation found many pharmacies where the volume of work in the dispensary was such that the sole pharmacist was fully employed in checkin the accuracy of labels. No professional advice was given in these "prescription factories" with the exception of extra instructions added to the bag. No doctor is allowed to take on limitless numbers of patients, and yet pharmacists may do just that. Such "de-skilling" (discussed in Chapter Two) has serious implications for the professional role of pharmacists, whose professional body should address itself to this problem. Pharmacists should be financially rewarded for the service they perform, rather than for the number of prescriptions they dispense.

Changes in Undergraduate Education

University pharmacy departments have exactly half the number (228) of qualified pharmacists as full-time staff as were employed in 1977. None have joint appointments with community practice and many must have lost touch with practice needs and the changes in practice that have occurred in recent years. Awareness of such changes are required not only by those involved in teaching the professional parts of courses but also by those

responsible for structuring undergraduate syllabuses in their entirety. The central strength of medical clinical teaching is that it is taught by practitioners, and pharmacy departments should learn from this. It should be a requirement of a pharmacy practice lecturing post that some time should be spent in the practice of pharmacy (in any branch) in each academic year. The Pharmaceutical Society has published the first report of the working party on pharmaceutical education and training (P.J., 1984 : 495-508) which recognises that there must be changes to enable future pharmacists to meet the different needs of society and develop their professional role.

The Society's committee regrets that so few pharmacists wish to enter the academic field and urges that they should be encouraged to do so. This will happen only when practice research is seen to be as important as is purely scientific study, and when funding is provided for it. The oft-repeated argument that pharmacy should hold on to its own unique knowledge base of pharmaceutical sciences is of course true, but should be tempered by recognition of the fact that any profession must adapt to what society requires of it. A minority of pharmacists work in industry, and therefore need all their science based pharmaceutical training, while the vast majority (75%) urgently need to know how to respond to their customers questions. The latter rarely wish to know how to formulate medicines, or of which class of drugs they form part. Customers need information about the medication as it relates to their disease state, how to use it and its possible side-effects. During this study, one

young community pharmacist summed this up saying:

> I've spent three years learning all about drugs and how to make them, but all people ever ask is what they are for - and often I don't know enough about the disease to answer.

Practice research, properly conducted and recognised, would mean university departments being staffed by people who understand the problems of community pharmacists and could ensure that this will change. As it stands, pharmacists are assured that they are "experts on drug therapy" but they know singularly little about patient-orientated questions. They have been taught formulation, but only rarely do new graduates know how to use an inhaler, insert a suppository, or simple terminology for the likeliest side-effects of the most commonly used drugs. The teaching of therapeutics varies widely, the best offering comprehensive courses integrating disease states and their drug treatment which should be the standard of all.

Undergraduates must learn at an early stage what patients want to know about both medication and general health, to ensure they understand the role they will be required to fulfil as pharmacists and what they need to learn to achieve it. This relates directly to an extended role as a health educator - if new graduates realise they cannot answer drug related questions, they must feel little confidence that they can extend their role. University departments should have a minimum percentage of staff who are pharmacists, who should work in community and hospital pharmacy on a regular basis, to bridge the increasing gap between them and practice.

The Pharmaceutical Society's Report on undergraduate education report recommends that selection of undergraduates should assess interest in patient care and that communication skills should be taught as part of the undergraduate course. These suggestions confirm the evidence of this study that such skills are essential if the role of the pharmacist is to develop as a counsellor. A counselling and communicating role requires much more than role playing sessions and behavioural sciences should form a proportion of the undergraduate course of pharmacists, so they understand the place of pharmacists in society and the way in which they can offer help.[3] From the results of this thesis pharmacists would be helped to understand the framework they work in and hence to communicate better with their customers if their undergraduate syllabus included the following components, taught largely by behavioural scientists as an integral part of the course.

> The sociology of health and illness, which would encompass the reasons why people become ill, and the distribution of illness in society (placed in a historical perspective.) Human behaviour as a cause of disease and the variation in use of health services throughout different sectors of society and the reasons postulated for this would form part of this section.[4]

---

3. Such courses are now included in most medical colleges and also in some law schools.

4. Aston University has initiated a short option third year course based on these studies which commenced in May 1986. Out of a year of 70 students, 26 students selected this option.

Theories of education, with particular reference to the role of counselling in situations such as pharmacies. This would include study of the ways in which people learn and unlearn behaviour patterns; factors for success in seeking to change behaviour; and an examination of counselling techniques and the ways in which their success is evaluated.

A social study of the practice of pharmacy with an examination of its interface with medicine and its position as a para-medical grouping. This would be integrated with the effect of these historical relationships on any potential role development for pharmacists and would include sociological assessments of the changing role of "professions" in society.

An understanding so gained of the relationship between ill health and social factors and the part "medicine" has to play in health promotion would give pharmacists greater awareness of their cultural identity and increase their interest in developing the practice of pharmacy.

Business skills matter in pharmacy as they do in any other small business but it seems most pharmacists have learned by trial, error and experience how to run a business and that their most valuable asset is their own knowledge, training and ability to communicate. Undergraduate education should abandon its contempt for the teaching of business skills and offer final year option courses. An awareness of marketing would ensure that young pharmacists recognise their knowledge and advice are needed and

welcomed in the shop as well as the dispensary. The undergraduate course would thus reflect the reality of pharmacy practice in the late 20th century.

Postgraduate Education

Pharmacists are given little sense of professional ties or "role-models" while at university and in practice most work single handed and have little contact with their peers. This study has shown they are highly motivated to develop their professional practice by offering advice on health promotion which offers the opportunity to work together with their colleagues towards a common goal. Such opportunities are rare and the evidence of these studies is they are welcomed by pharmacists. Postgraduate education should develop this interest by offering courses on the epidemiology of disease states and the pharmacists role in health promotion.[5] They should also ensure that pharmacists are kept up to date with current thinking and research findings in this field.

It is unreasonable to expect the pharmacist (and confusing for his customers) to become expert on a different aspect of health education at regular intervals. This was shown in the small scale study. Rather, the long term aim should be to educate the pharmacist (on a national scale with learning material) on one aspect of health. When this is integrated in his practice, and

---

5. Such courses are being integrated into continuing education courses (funded by the DHSS) provided for community pharmacists in the West Midlands.

supported by courses in continuing education, another aspect of health promotion may reasonably be added, thus ensuring competence in the extended role. A postgraduate diploma course in health education should be developed by schools of pharmacy and once established extra payment should be made available for those who obtain the qualification. Such a course must require that pharmacists are taught counselling techniques.

Each health region needs a pharmacist "facilitator" such as those employed to work with general medical practitioners to integrate community pharmacies in district health promotion projects. The way in which such a facilitator would work in shown in Appendix 3. and the range of activities would include identification of training needs of pharmacists, collation of briefing material, organisation of a study day and monitoring each project by regular visits, advice-giving and interviewing of pharmacists and their customers. The employment of such co-ordinators ensures pharmacy contribution and would develop the undoubted desire of many pharmacists to meet the changing needs of the community. Thus they could develop their professional role and forge an identity as health professionals with abilities developed to meet changes in their practice and in the community.

As this thesis was being typed, the Nuffield Commission Report on Pharmacy was published. The Commission was appointed in October 1983 with the following terms of reference:

"To consider the present and future structure of the practice of pharmacy in its several branches and its potential contribution

to health care and to review the education and training of pharmacists accordingly".

The Committee was chaired by a former permanent secretary at the Department of Trade (Sir Kenneth Clucas) and its 12 members included five pharmacists, four doctors, the Deputy Director of the Consumers Association and a Professor of Economics.

The main recommendations for community pharmacy which relate to this thesis, were that greater use should be made of the pharmacists traditional advice-giving role which should be extended beyond the dispensing process. Greater use of the pharmacists knowledge should be made by General Medical Practitioners to assist them in arriving at better prescribing decisions and it should be offered to individuals most at risk in the handling of their medicines. These steps, the Report suggests, would result in fuller exploitation of the pharmacists skills in the promotion of better health care and should be supported by a change in the renumeration system so pharmacists are paid for an extended advisory role rather than for the number of prescriptions dispensed.

It recognises the potentially valuable role pharmacists have to play in health education and notes that if changes in practice are envisaged, consumers have to be made aware that new services are being offered. Pharmacists are encouraged to work together with Health Visitors, Midwives and in community clinics which provide treatment and give advice.

Such recommendations are wholly to be welcomed and, if adopted,

will halt the tendency of pharmacies to become prescription factories. While the present renumeration pertains there is every incentive for pharmacies to "leap-frog" each other and to ensure the quickest turnover of the maximum number of prescriptions. The increased advisory and counselling roles and developed service suggested would have to be measured. This could easily be accomplished by the definition of extended services which would include: The employment of a second pharmacist and technicians with recognised qualifications: The provision of a counselling area and maintenance of medication records for prescribed and "over the counter" medication (to include the facility for voluntary registration with one pharmacy for older customers); and the provision of health education material supplemented by an offer of further help.

The initial response to the Nuffield Report from the Pharmaceutical Society is of welcome, with one or two reservations. They applaud the suggestion of payment for the service offered but note the negotiations for such a change are the province of the Pharmaceutical Services Negotiating Committee. This would appear rather to avoid the issue, since the Report urges the Pharmaceutical Society should concern itself with professional standards. If the standards listed above were demanded by the professional body they would offer a greatly extended professional role for pharmacists and give strength to the negotiating body for such standards to become recognised items of service.

HEALTH PROMOTION EVALUATION FORM

PLEASE TICK THE APPROPRIATE BOX FOR EACH QUESTION BELOW:-

1. Has the poster/display led to any comments?

   (a) Favourable

   (b) Unfavourable

2. If (a), has it led to a discussion of patient(s) family problem with this area of health care?

   (c) Yes

   (d) No

3. Has this discussion led to:-

   (e) A recommendation to seek medical help.

   (f) Response to symptoms by counter sale

   (g) Advice from Pharmacist

4. If (e), did it result in:-

   (i) A prescription brought to you

   (ii) Other positive comments

   (iii) Negative comments

or If (f), did the patient return to report:-

   (i) Favourably

      (a) 'It worked'

      (b) 'It worked and saved a visit to the Doctor'

   (ii) Unfavourably

or If (g), did the patient return to report:-

   (i) Favourably

      (a) 'It worked'

      (b) 'It worked and saved a visit to the Doctor'

   (ii) Unfavourably

Protocol for Blood Pressure Screening

(1) Local Medical Committees will be informed of dates of campaign.

(2) Local Pharmaceutical Committee will be informed of dates of campaign.

(3) Pharmacists taking part will attend a study day on

The Physiology of Blood Pressure
The dangers of hypertension

(4) Nurses will demonstrate the use of electronic equipment to each pharmacist and remain until they are confident of their ability to use the machine.

(5) A notice will be placed in each Pharmacy announcing that this facility will exist, by appointment, and will give the dates.

(6) Each Pharmacist will be given a table of normal ranges of BP.

(7) The patients we seek to refer will be males 40-55 with a diastolic pressure $>$ 100mm, taken as below, but see (13).

(8) The patient will be seated in a quiet area out of the main shop for at least 5 minutes before BP is taken.

(9) They will be asked if they have ever/recently had BP taken. If not, they will have the process explained carefully.

(10) They will be asked if they are being treated for high BP and, if so, how long the treatment has continued, and whether they are taking the tablets.

(11) If the answer is 'Yes' to both, and the diastolic pressure is $>$ 100mm they will not be referred if treatment $<$ six months as the doctor may well be bringing the pressure down slowly. If treatment longer than six months follow (13).

(12) If they say they are not taking the tablets and the diastolic pressure is $>$ 100mm, they will be referred.

For Untreated Patients

(13) The diastolic pressure is $>$ 100mm the pressure will be re-taken after 10 minutes. If $<$ they would not be referred.

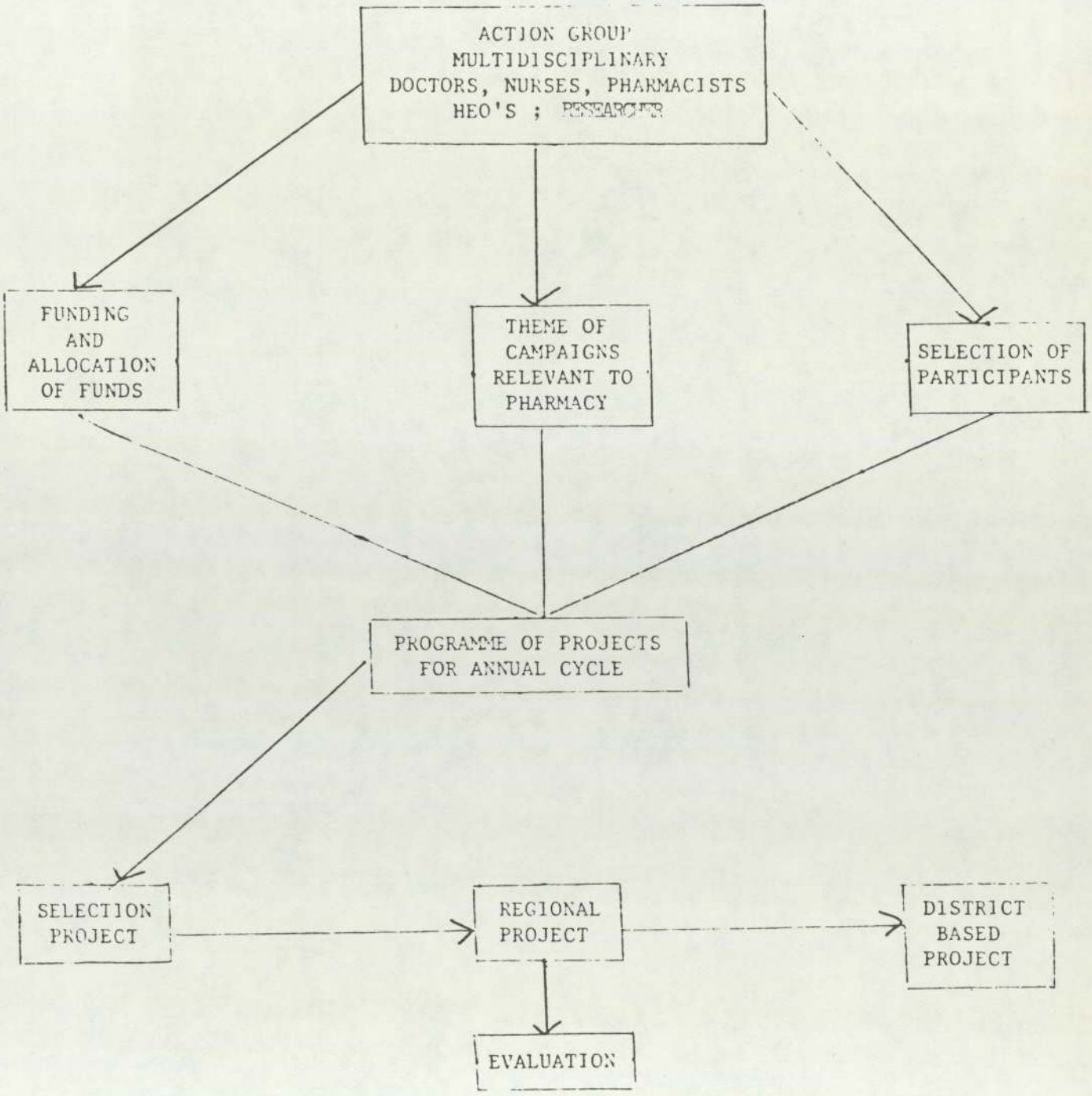
(14) If $>$ they will be asked to return in one week.

(15) They will be seated for 15 minutes and then the pressure taken. If $>$ 100mm they will be asked to take a record of this fact to their GP

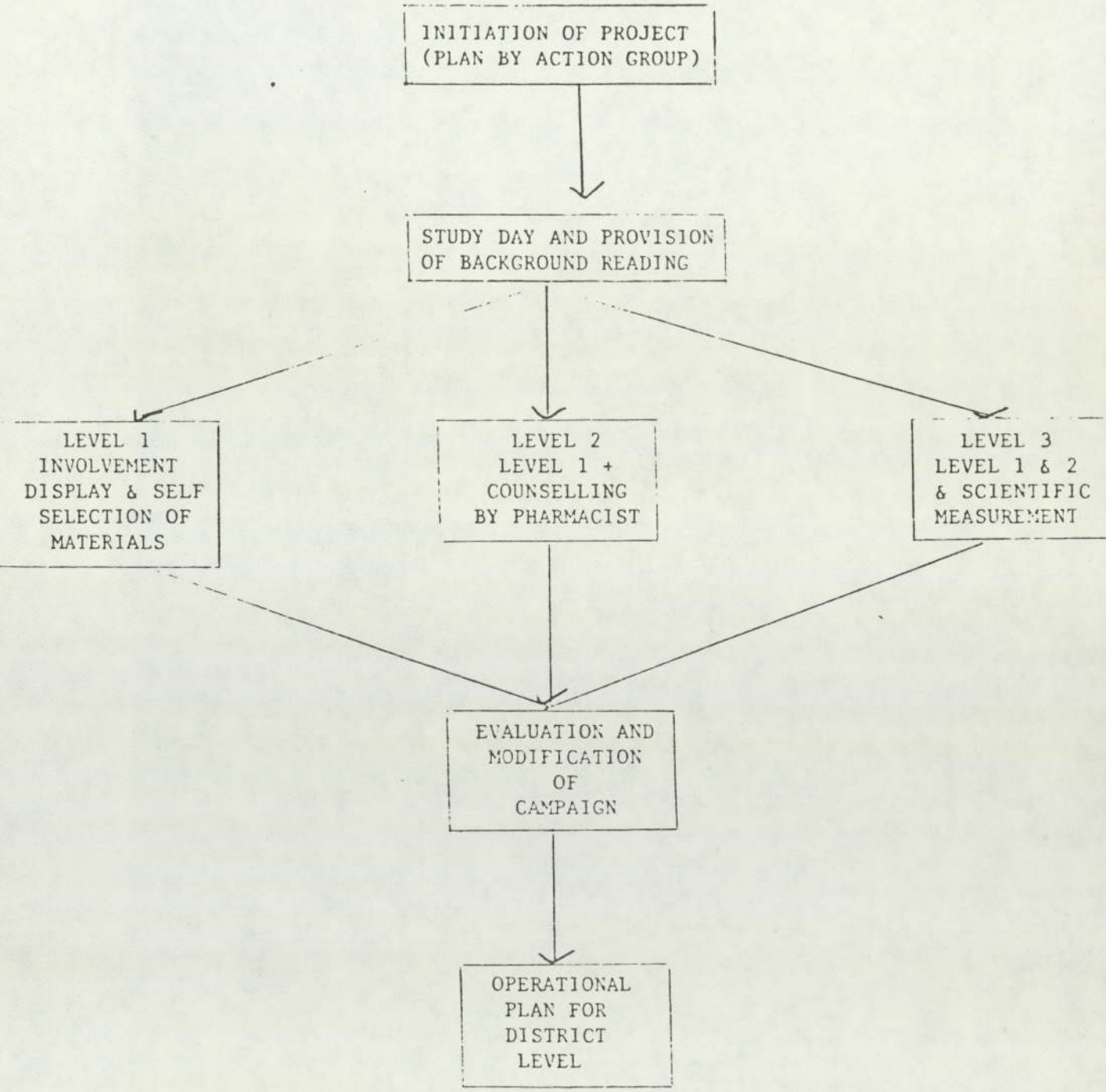
(16) A record will be kept (a) of the total number of patients divided into sex and approximate age range (no names) (b) of the number of patients who are referred, (c) of the response to referral.

(17) Each patient in normal range will be assured that his/her BP is normal.

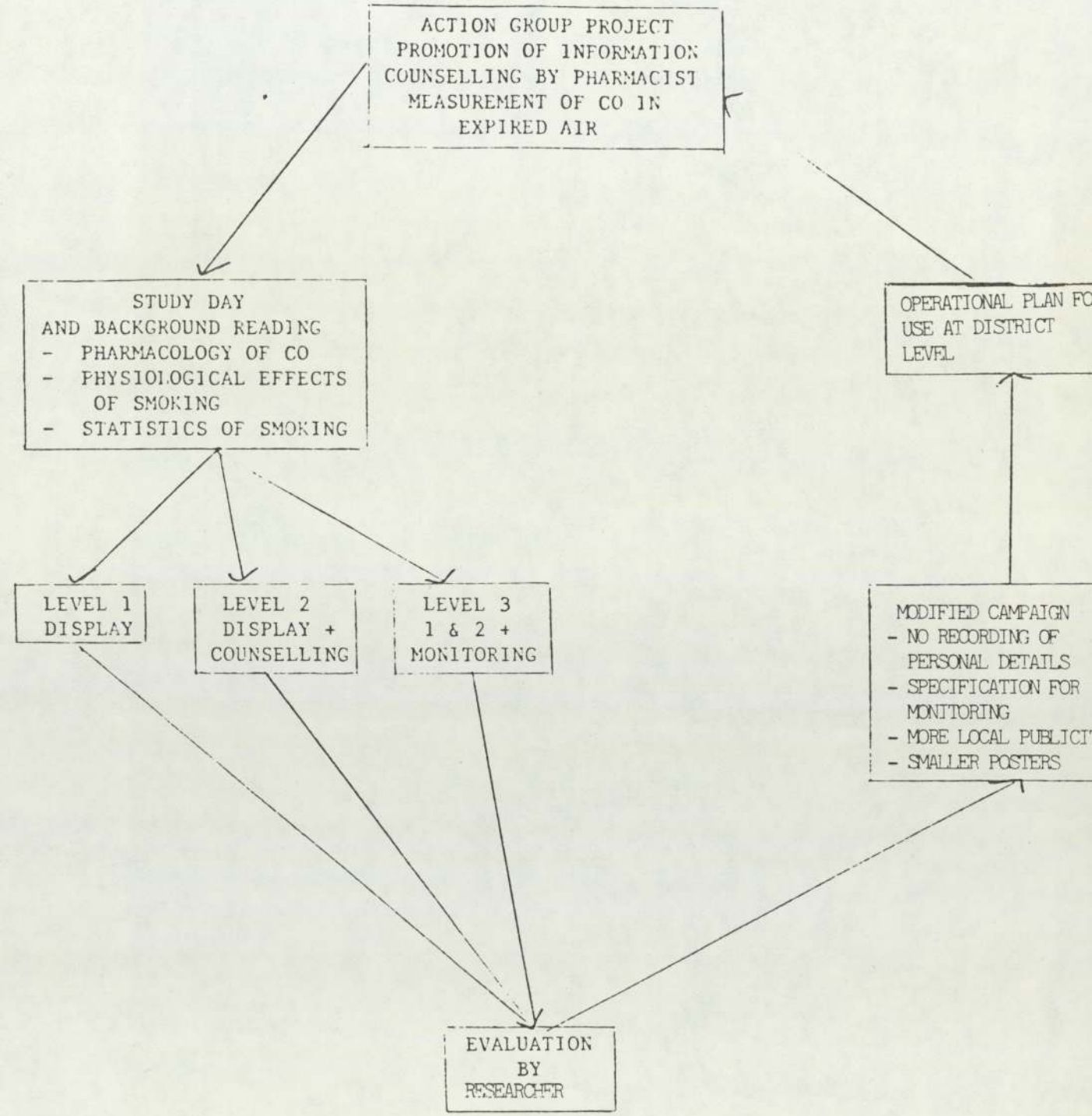
STRATEGY FOR HEALTH PROMOTION
PROMOTION THROUGH COMMUNITY
PHARMACIES



MECHANISM FOR ACHIEVING DISTRICT BASED CAMPAIGNS



EXAMPLE ANTI-SMOKING CAMPAIGN



West Midlands Regional Health Authority

Newland House
139 Hagley Road
Birmingham B16 8UA
Telephone: 021-455 7411
Telex: 339973

Appendix 4.

BRIEFING LETTER TO LOCAL MEDICAL COMMITTEES

Your ref:

Our ref TJB

Date: 14th August, 1981

ear Doctor

E ROLE OF THE GENERAL PRACTICE PHARMACIST IN HEALTH PROMOTION

e West Midlands Regional Group on Health Promotion has agreed to support a udy to evaluate the role of the GP Pharmacist in promoting health care. he evaluation will cover four themes each of one month and in consecutive der. Each campaign will have an audio visual display, posters, leaflets and nd-outs on the topic covered. An evaluation sheet will be given for each mpaign and the pharmacist concerned and his staff will fill in one such sheet. he study will start with an introductory day examining in some depth the themes the campaign. These are:-

1) Safety of Medicines

The HBC will mount a campaign in the autumn on the Prevention of Accidents in Childhood. One programme will deal with accidents involving poisons and the local pharmacies will emphasize this aspect by reminding of the dangers.

2) Dental Health

There is a RHA Policy on the use of fluorides in the prevention of dental caries. This campaign will analyse the role of the Pharmacist in promoting all round dental hygiene and the role of fluoride supplements.

3) Prevention of Coronary Diseases

The display material will emphasize the dangers of smoking, obesity and insufficient exercise - and will run at the same time as the HBC anti-smoking campaign in January. A Regional investigation is under way to examine the possible role of GP Pharmacists in monitoring blood pressure, using electronic equipment, within the framework of this pilot study.

4) Patient Compliance

An investigation into the rational taking of drugs which will encourage patients to report the reasons for non-compliance.

e are informing you as a pre campaign briefing and further details will be vailable in the autumn.

ours sincerely

J. J. Bradley

r T J Bradley
egional Pharmaceutical Officer

David F. Scott

Dr D Scott
Regional Adviser in General Practice

Appendix 5

LETTER TO LOCAL MEDICAL PRACTICE

Dear Dr.

Health Promotion Campaign

The enclosed briefing letter was sent to your local Medical Committee for information. The part of the investigation which involves the monitoring of Blood Pressure by selected Pharmacists is about to start. I should emphasize that it is a pilot study, and will last for one month.

The protocol to be followed by the Pharmacist is included. The electronic equipment to be used has been evaluated in the University of Birmingham - found to be satisfactory. The equipment measures diastolic pressure at the K5 point.

The Pharmacist who is to take part in the study in your area is:-

Dear

REFERRAL LETTER

Appendix 6

West Midlands Regional Health Authority
Health Promotion Pilot Study

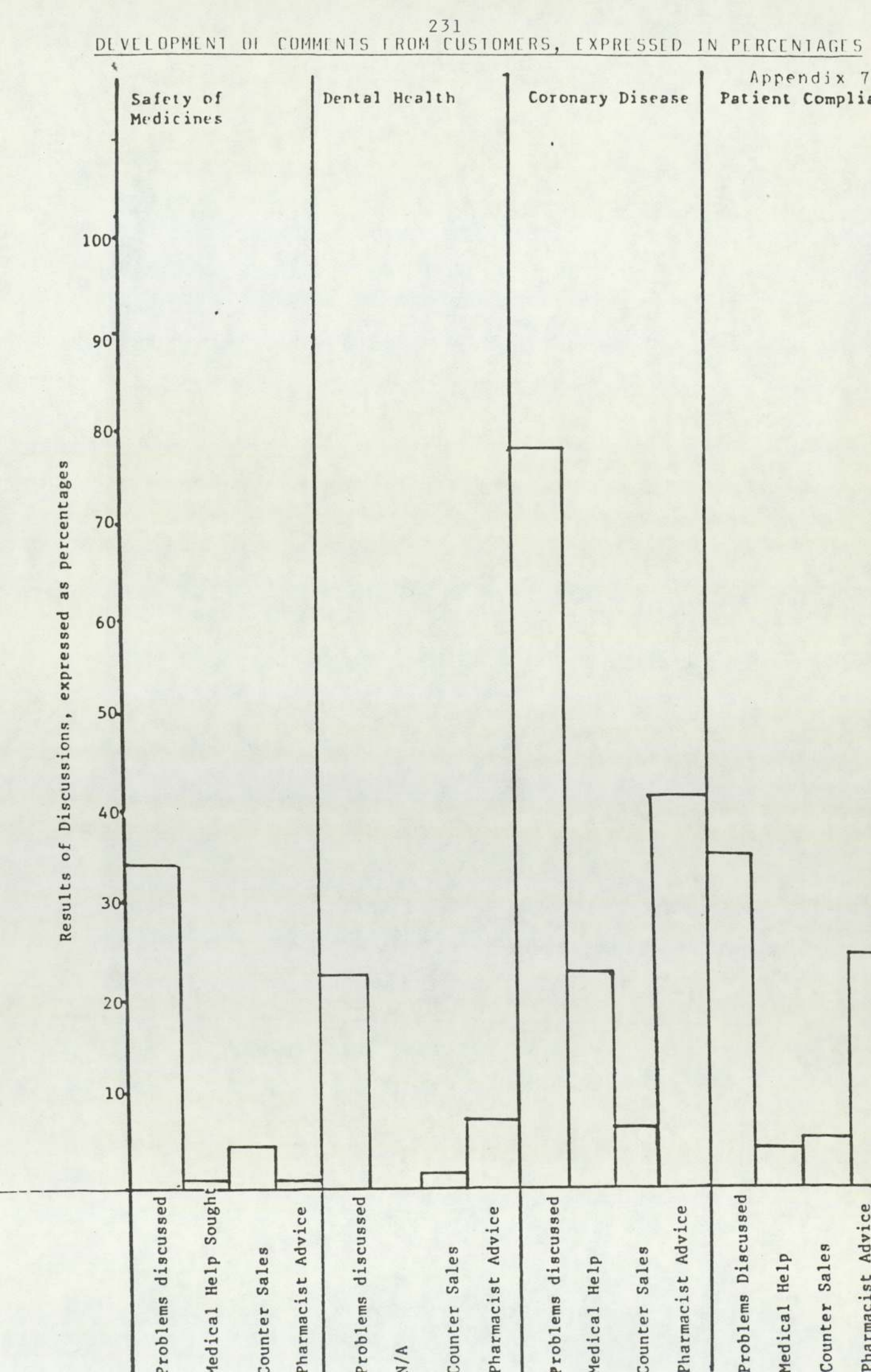
Your patient has had his blood pressure measured by me on two separate occasions. The results have been and

I have advised him to visit you that you may assess the situation.

READING WAS TAKEN AT THE K5 POINT

PHARMACIST.....

DEVELOPMENT OF COMMENTS FROM CUSTOMERS, EXPRESSED IN PERCENTAGES



BLOOD PRESSURE MONITORING RESULTS

Pharmacist No.	No. Of Tests Done	Sex		Found Hypertensive At 1st Visit But Did Not Return		No. Referred To GP	Sex		Drug Treatment Initiated By GP		Regular Monitoring Initiated By GP		a) GP Disagreed with Reading b) No Treatment		Percentage Referrals	
		M	F	M	F		M	F	M	F	M	F	M	F		
1	26	9	17		2	3	1	2	1	1				1(b)	11.5	
2	18	11	7		1	3		3		2			-	-	16.6	1.
3	10	1	9	-	-	-	-	-	-	-					-	2.
4	23	9	14		2	1		1	-	-					4.3	
5	26	12	14	1	4	3		3		1					11.5	
6	22	7	15	-	-	1	1								4.5	
7	27	9	18	-	-	1	1						1(a)		4.0	
8	13	5	8	-	2	6	2	4		1				1(b)	46	1.
9	74	34	40	2	2	7	4	3		2	2		1(a)		9.5	
10	45	35	10	1	-	3	2	1	1	1		1			6.6	
11	12	4	8	-	-	1	1		1						8.3	
12	133	53	80	-	1	4	2	2	1					1(a)	3.0	
13	140	40	100	-	-	4	1	3		1		2	1(b)		2.8	
14	60	35	25	1	-	10	5	5	4	2	1				16.6	1.
15	38	14	24	2	2	2		2	-	-					5.3	
TOTAL:	665	276	389	7	16	49	20	29	8	11	3	3	3	3		

1. These pharmacists recorded only results which were borderline or above.
2. This pharmacist worked near a group medical practice which screens for hypertension.

Analysis of "No Response Pharmacies"

One pharmacy had been a highly successful and professionally run shop two doors from a large branch of the biggest multiple chemist. It was long established and offered excellent service including the keeping of patient medication records, a domiciliary service for patients unable to collect their medication and only medicines were sold. It was open plan and all prescribed medicines were given out personally by the pharmacist with appropriate advice and supplementary labels.

A health centre had opened in this town two months previously. A pharmacy was included in the centre and each pharmacist who already had a practice in the town had been offered shares in the pharmacy, i.e. a pharmacist would be employed by the consortium of pharmacists and the profits from the dispensing business divided among them. This pharmacist had declined to take part, believing that the service he offered would ensure "his" patients would continue to patronise him. This proved to be unfounded - the convenience offered by having a pharmacy in the health centre outweighed any sense of loyalty or appreciation of the safety offered by patient medication records. Since prescriptions were not brought here, his customers had less reason to visit the shop and, perhaps out of embarrassment, no longer came to seek his advice or to buy other medicines. The shop received only four customers during an hour long visit, and the "no interest" recorded in our pilot study was actually a situation where there were virtually no customers. Time might have modified the

situation but this business was sold shrtly afterwards.

In five pharmacies the owners remained in their dispensaries throughout the working day and prescriptions were received and handed out by counter staff. In discussion with the latter it transpired there had been many comments but none had been passed on to the pharmacists since they had made no such request. Public awareness of the problems were being stimulated but unmet since the staff had not been appropriately briefed. On discussion with the pharmacists, they had assumed any comments would have been referred, but agreed he had given their staff no instructions to this effect, or explained the intention of the study.

Another "no response" pharmacy had mounted an excellent display for each part of the study in a very professionally run establishment. This pharmacist had refused to fill in the evaluation sheets feeling them to be irrelevant, but had stated that there had been no response. He was often in the shop, to give our medicines personally, but was observed during visits to "tell" patients about their medication, rather than to offer advice or to open a dialogue. It seemed probable that the distance between this manner of giving advice and the reality of health promotion (where one cannot successfully "tell" people to stop smoking) is too great to b compatible with his practice.

The final shop in this category was long, narrow and divided into three, the first being the sales area, then an office and the third (screened from the shop) the dispensary. No posters were

displayed and the staff had been instructed to place the leaflets in bags with all purchases. They had no idea of the objectives of the campaign, and since no promotional material was visible had received no comments. One was reminded of the smuggling of notes by the French Resistance rather than a health promotion study.

ANTI SMOKING CAMPAIGN

INITIAL LETTER

WEST MIDLANDS HEALTH SERVICES ANTI-SMOKING CAMPAIGN IN COMMUNITY PHARMACIES

Dear Pharmacist,

You are needed if we are to control cigarette smoking in the West Midlands. Smoking is a serious problem leading to heart and lung diseases, and 90% of all cases of lung cancer are attributable to smoking.

We have developed a programme that will easily fit into your pharmacy practice to encourage people to stop smoking and show them how. This will start in early May and will run for six weeks. You may participate at any level you choose - from simply displaying posters and leaflets to checking carbon monoxide levels in expired air, and showing audio-visual programmes. In addition to the personal satisfaction of being part of the campaign, you will have the benefit of increased awareness of your professional services by your customers and other health professionals.

Please indicate on the tear off slip whether you are willing to consider participation. Saying "yes" puts you, or your employer, under no obligation.

After receiving more information you may decide to take part or not. If you take part in the campaign you are free to drop out at any time.

Please return the slip today.

Yours sincerely,

Dr. T.J. Bradley
Chairman,
Pharmacy Sub Group of the RAG on
Health Promotion

Dr. J. Harrison
Chairman,
West Midlands Regional Advisory Group
on Health Promotion.

WEST MIDLANDS HEALTH SERVICES ANTI-SMOKING CAMPAIGN IN COMMUNITY PHARMACIES

Yes, I am interested, please tell me more.

Name .....

Address .....

.....

West Midlands Regional Health Authority

Newland House
139 Hagley Road
Birmingham B16 8UA

Telephone: 021-455 7411
Telex: 339973

Appendix 11.

Your ref:

Our ref: RSP/SF

Date: 4th April, 1983

ANTI SMOKING CAMPAIGN

SECOND LETTER

-SMOKING CAMPAIGN

Colleague,

k you for your interest in our Anti-Smoking Campaign, and we look forward to active involvement.

Campaign will run for six weeks from May 8th, 1983, and there will be 3 levels articipation. None will involve you in any cost, we shall provide the notional material plus the equipment needed. Could you please indicate which el would best suit your pharmacy?

A display of posters and leaflets for distribution. One leaflet suggests ways of stopping smoking and the other lists ways in which people have stopped, put together in an amusing format. There will also be a 'Superman' comic for children.

As before, with the addition of an audio/visual machine (available in your pharmacy for one week of the campaign) telling an anti-smoking story for young children by means of slides and a tape (tape is optional). There will also be a colouring sheet for the children to take away, and prizes will be given for the best returned pictures. You will also be provided with a short tape - for the pharmacists ears only - suggesting ways you can counsel your customers to stop smoking.

As before and we shall provide you with a machine which measures the carbon monoxide in expired air. You will be given the machine for one or two weeks during the campaign, and shown how to use it. This will be linked with local publicity and should generate a great deal of interest. Smokers will see, by blowing into a bag, how much carbon monoxide they are absorbing and the harmful effects pointed out.

shall run a study day at the Cobden Hotel on May 8th, to outline the campaign, show you the equipment to be used. There will be a lecture on the dangers of king and how to give up.

Con't.....

e hope to make a strong impact with this campaign, and to show the professional ole that the pharmacist plays in Health Education. Its effectiveness will be valuated and we hope to publish the results.

look forward to meeting you, and meanwhile will you please indicate on the tear ff slip as soon as possible which level of participation you would like?

ours sincerely,

Mona Panton

.S. PANTON (MRS)
DUCATION STAFF PHARMACIST

NTI-SMOKING CAMPAIGN

should like to participate in the campaign at level [1] [2] [3]

shall/shall not be able to attend the Study Day at the Cobden Hotel on Sunday, th May, 1983, at 11.00 a.m.

.B. Those pharmacists who wish to participate at levels 2 or 3 must attend the Study Day, so that the equipment used may be explained to them.

A buffet lunch will be provided.

QUESTIONNAIRE TO PARTICIPANTS
G.P. Pharmacists Anti-Smoking Project

We would be most grateful if you would complete the following questionnaire as part of the evaluation of the effectiveness of using G.P. Pharmacists for distributing Anti-Smoking information to members of the public. All information is strictly in confidence.

Which of the project materials did your pharmacy actually use?

	Please tick approp. box
Posters.....	
Leaflets.....	
Booklets.....	
Audio-Visual Material.....	
CO Machine.....	
Other.....	
.....	
.....	

see Q 1a & 1b below.

If you used the booklets, please answer a, and b, below

a) Did you receive these booklets in time for the start of the Project?

Yes.....	
No.....	

b) Did you order replacement stocks of the booklets?

Yes.....	
No.....	

Where was the display area for the poster/ leaflets/booklets?

Near the till(s).....	
In the prescription Waiting Area.....	
In the front window..	
In the dispensary....	

More than one box can be ticked.

If applicable.
Where was the audio visual machine?

In the office.....	
In the front shop....	
In the window.....	
In the prescription Waiting Area.....	
Other.....	

If applicable.
Where was the CO Machine situated?

Please tick Approp. Box

In the Office	
In the front shop ...	
In the window	
In the Dispensary ...	
Other	

Did you counsel customers about giving up smoking?

Yes	
No	

Did any of your staff counsel customers about giving up smoking?

Yes	
No	

What extra work was involved in running this campaign?

.....

.....

.....

Why did you want to take part in the project?

Pharmacists should try and persuade people to stop smoking	
Personal dislike of smoking..	
Relatives died of lung cancer	
Head Office directive	
Other	

.....

.....

In your opinion how effective do you feel this project has been?

Please tick Approp. box

Very effective	
Quite effective	
Not very effective	
Not at all effective	

Do you think the project could have been better organised ?

Yes		Please Specify How.
No		Go to Q.9.

How could it have been better organised ?

.....

.....

.....

What age are you?

16 - 24	
25 - 34	
35 - 44	
45 - 54	
55+	

Sex

Male	
Female	

For how many years have you been qualified?

1 or less	
1+ to 2 years	
2+ to 5 years	
5+ to 10 years	
10+ to 15 years	
15+ to 20 years	
Over 20 years	

Do you smoke cigarettes nowadays?

Yes		
No		...Go to Q.13

(Continued).

Please tick Approp. box

If Yes.
How many do you smoke a day?

1 - 5	
6 - 10	
11 - 15	
16 - 20	
21+	

Do you smoke a pipe?

Yes	
No	

Do you smoke cigars?

Yes	
No	

If you do not smoke at present and have answered no at questions 12, 13 and 14

Have you ever smoked regularly?

Yes, but given up	
No, never smoked	

Where is your pharmacy located?

Inner City	
Suburban	
Estate	
Rural	

For statistical purposes only, would you class your customers as:

Working Class	
Lower Middle Class	
Middle Class	
Mixture	

Is this outlet owned independently or is it part of a multiple group?

Independent	
Multiple 2 - 14 branches	
Multiple 15+ branches	

How many qualified pharmacists work in this pharmacy? .....

How many unqualified assistants work in this pharmacy? .....

Approximately how many customers per day come into this shop? .....

What is the approximate floor space of the shop, including the waiting areas? .....

Thank you for your co-operation.

All Information is strictly confidential.

--

/DMT
April, 1983

QUESTIONNAIRE TO NON-PARTICIPANTS

G.P. PHARMACISTS ANTI-SMOKING PROJECT

NON PARTICIPANTS

1. Have you heard of the West Midlands Pharmacy Anti-Smoking Capaign?

Yes ☐ If yes, g to Q3

No ☐

2. If (No) - would you take part in such a campaign?

Yes ☐

No ☐

3. Where did you hear of it?

Pharmaceutical Society newsletter ☐

Pharmaceutical Society branch meeting ☐

Articles in press/journals ☐

Mentioned on T.V. ☐

Word of mouth ☐

Mentioned on Radio ☐

Hospital ☐

Don't know ☐

4. Why did you not feel able to take part?

Lack of time/staff ☐

No space to display materials ☐

Did not think it would be effective ☐

Wrong to persuade people to stop smoking ☐

Smoker myself ☐

Not interested ☐

Sent for literature, but none received ☐

Meant to, but didn't get round to it ☐

No personal approach ☐

4 Con't/

Not member of Birmingham branch of Pharmaceutical Society

Other Reasons

Don't know

5. Age:- (Alison - watch - you guess)

16 - 24

25 - 34

35 - 44

45 - 54

55+

Sex:-

Male

Female

6. For how many years have you been qualified?

1 or less

1+ to 2

2+ to 5

5+ to 10

10+ to 15

15+ to 20

Over 20

7. Do you smoke cigarettes nowadays?

Yes ☐
No ☐

If no go to Q1

If yes, how many do you smoke a day?

1 - 5 ☐
6 - 10 ☐
11 - 15 ☐
16 - 20 ☐
21+ ☐

	Yes	No
8. Do you smoke a pipe?	☐	☐
Do you smoke cigars?	☐	☐

If you do not smoke at present and have answered "no" at question 7.

9. Have you ever smoked regularly?

Yes ☐
No ☐

ALL RESPONDENTS

10. Where is your pharmacy located?

Inner City..... ☐
Suburban..... ☐
Estate..... ☐
Rural..... ☐

11. For statistical purposes only, would you class your customers as:-

Working class... ☐
Lower middle class..... ☐
Middle class... ☐
Mixture..... ☐

12. Is this outlet owned independently or is it part of a multiple group?

Independent....	☐
Multiple 2-14 branches	☐
Multiple 15+ branches	☐

13. How many qualified pharmacists work in this pharmacy? .....

14. How many unqualified assistants work in this pharmacy? .....

*15. Approximately how many customers per day come into this shop? .....

16. What is the approximate floor space of the shop, including the waiting areas? .....

Thank you for your co-operation.

*ALL INFORMATION IS STRICTLY CONFIDENTIAL - STRESS

RSP/SF
6/9/83

RESULTS FROM PARTICIPANTS

ALL RESULTS ARE EXPRESSED AS PERCENTAGES

76 replies obtained (69% response)

	Percentage
Siting of display materials: (More than one possible answer)	
Near the till(s)	69
In the prescription waiting area	78
In the window	42
In the dispensary	14
Pharmacists who counselled customers giving up smoking:	
Yes	82
No	17
No answer	1
Pharmacists whose staff counselled about giving up smoking:	
Yes	69
No	30
No answer	1
Reasons for taking part:	
Pharmacists should try and persuade people to stop smoking	71
Personal dislike of smoking	56
Relatives died of lung cancer	6
Head office directive	26
Other	14
Respondents view of the effectiveness of the campaign:	
Very effective	8
Quite effective	53
Not very effective	36
Not at all effective	3
Could it have been better organised:	
Yes	21
No	68
No answer	11
Age of participants:	
16 - 24	5
25 - 34	31
35 - 44	22
45 - 54	29
55+	13

Gender of participants:	
Male	80
Female	20
Respondents who smoke cigarettes:	
Yes	4
No	95
No answer	1
If, the answer to last question was no, those who have smoked cigarettes in past:	
Yes	36
No	56
No answer	8
Number of unqualified assistants:	
1	1
2	6
3	12
4	25
5	9
6	22
7	1
Over 7	26
Approximate numbers of customers daily:	
Up to 200	19
200 - 299	22
300 - 399	18
400 - 999	12
Over 1000	11
No answer	18
Approximate floor area of shop:	
Up to 40 sqm	30
Up to 80 sqm	17
Up to 100 sqm	6
Over 100 sqm	35
No answer	12

Number of customers daily:	
Up to 199	32
Up to 299	28
Up to 499	14
Over 500	12
Missing Value	14
Approximate floor area of shop:	
Up to 40 sqm	74
Up to 80 sqm	10
Up to 100 sqm	12
Over 100 sqm	4

RESULTS FROM NON-PARTICIPANTS

ALL RESULTS ARE EXPRESSED AS PERCENTAGES

The first source of information of the campaign	
Regional letter	56
Pharmaceutical Society Branch meeting	8
Articles in press/journals	12
Mentioned on T.V.	-
Word of mouth	-
Mentioned on radio	-
Hospital	-
Don't know	-
Other	2
Had not heard of it	24
Reasons for not taking part:	
Lack of time/staff	4
No space to display materials	24
Did not think it would be effective	24
Wrong to persuade people to stop smoking	4
Smoker myself	-
Not interested	16
Sent for literature, but none received	8
Meant to, but didn't get round to it	16
No personal approach	8
Not member of Birmingham Branch of Pharmaceutical Society	16
Other reasons	16
Don't know	20
Respondents who smoke cigarettes:	
Yes	10
No	90
If, the answer to last question was no, those who have smoked cigarettes in past:	
Yes	18
No	70
N/A	12
No of unqualified assistants:	
1	18
2	26
3	30
4	14
6	4
Over 7	8

COMPARISON TABLES OF PARTICIPANTS AND NON-PARTICIPANTS

EXPRESSED AS PERCENTAGES

1. Age Range

	Participants	Non-Participants
16 - 24	5	0
25 - 34	31	50
35 - 44	22	18
45 - 54	29	21
55+	13	10

2. Location of Premises

	Participants	Non-Participants
Inner City	22	34
Suburban	56	55
Estate	13	8
Rural	8	3
No answer	1	

3. Area of Premises

	Participants	Non-Participants
Up to 40 sq m	30	74
Up to 80 sq m	17	11
Up to 100 sq m	6	11
Over 100 sq m	35	4
No answer	12	

COMPARISON TABLES OF PARTICIPANTS AND NON-PARTICIPANTS

4. Number of Pharmacists Employed

	Participants	Non-Participants
1	66	84
2	27	16
3	7	-
Over	-	-

5. Ownership

	Participants	Non-Participants
Independent	40	58
Multiple 2 - 14 branches	17	16
Multiple 15+	42	26
No answer	1	

6. Gender of Participants

	Participants	Non-Participants
Male	80	82
Female	20	18

CHECKLIST FOR PHARMACISTS IN USE OF CARBON MONOXIDE MACHINE

1. HAVE YOU EXPLAINED WHAT THE MACHINE DOES AND HOW IT WORKS?

2. IF THE CUSTOMER WISHES TO BE TESTED, HAS HE/SHE PRACTISED THEIR 'INHALE/EXHALE' SEQUENCE BEFORE BLOWING INTO BAG?

3. HAS THE CUSTOMER HEARD OF CARBON MONOXIDE GAS BEFORE? DOES HE/SHE UNDERSTAND HOW IT CAN BE PRODUCED AND WHERE IT CAN BE FOUND (EG CAR EXHAUST FUMES, TOBACCO SMOKE.)

4. IF THE RESULT OF THE TEST IS POSITIVE, HAVE YOU EXPLAINED THE POSSIBLE REASONS FOR THIS:

   (i) CUSTOMER IS A SMOKER: HEAVY
   MODERATE
   LIGHT

   (ii) CUSTOMER IS A 'PASSIVE SMOKER'/HAS EXPERIENCED OTHER POLLUTION.

   (iii) CUSTOMER HAS CONSUMED ALCOHOL IN PREVIOUS 24-36 HOURS, RESULTING IN "FALSE" READING.

5. IF THE CUSTOMER IS A SMOKER OR PASSIVE SMOKER, HAVE YOU EXPLAINED HOW CARBON MONOXIDE GETS INTO THEIR BLOOD?

6. DOES THE CUSTOMER UNDERSTAND THE HARMFUL EFFECTS OF CARBON MONOXIDE ON THE BODY OVER LONG PERIODS OF TIME - ESPECIALLY THE HEART AND BRAIN AND DURING PREGNANCY.

7. HAVE YOU EXPLAINED HOW TO GET RID OF CARBON MONOXIDE FROM THEIR BLOOD AND HOW LONG IT WILL TAKE FOR THE READING TO RETURN TO NORMAL (IE. ABOUT ONE WEEK).

8. HAS ADVICE BEEN GIVEN ON HOW TO STOP SMOKING, AND THE CUSTOMER INVITED TO RETURN FOR RETESTING?

9. LASTLY, HAS A LEAFLET EXPLAINING THE CARBON MONOXIDE MACHINE BEEN ISSUED FOR THE CUSTOMER TO TAKE AWAY?

BASIC FACTS ABOUT THE CARBON MONOXIDE MACHINE

1. WHAT IS CARBON MONOXIDE?

Carbon monoxide is a colourless, poisonous gas which is given off when certain substances burn. Most people know about the dangers of breathing in car exhaust fumes, but very few realise that tobacco smoke also contains this gas.

2. WHAT DOES THE MACHINE SHOW?

Basically, the machine will tell you whether or not carbon monoxide is present in your blood.

It works in almost the same way as the "breathalyser test" for alcohol, except that it detects carbon monoxide in the air you breathe out.

The more the arrow on the machine moves, the more carbon monoxide you have in your blood.

3. HOW DOES CARBON MONOXIDE GET INTO YOUR BLOOD?

The most common reason is that you are a smoker.

When you light a cigarette, the smoke which you inhale contains small amounts of carbon monoxide gas, which then dissolve into your blood stream.

Naturally, if you are a heavy smoker, the more carbon monoxide will be present in your blood.

Another reason is that you might have been sitting near people who smoke, even though you weren't smoking yourself. If so, you may have breathed in some of their tobacco smoke. This is sometimes known as "passive smoking". Or, you may have recently been exposed to traffic pollution, or car exhaust fumes.

In this case, the machine may show a positive result but the level of carbon monoxide which it reads will normally be much less than that found in a true smoker.

If none of the above reasons apply to you, it may be that you have had an alcoholic drink in the last 24-36 hours in which case, the machine may give you a false reading.

4. WHAT ARE THE HARMFUL EFFECTS OF CARBON MONOXIDE?

All parts of your body need oxygen to work properly and to stay alive.

If you breathe in carbon monoxide, there is less room in the blood for oxygen to be carried.

Over long periods, active organs such as the heart and brain are slowly starved of the air that they need. Eventually, this may lead to a heart attack ot a stroke.

For the same reason, a pregnant woman who smokes will also 'starve' her unborn baby, so that it weighs less than it should.

5. WHAT CAN YOU DO ABOUT IT?

If you are a smoker:- the best way to avoid carbon monoxide is to stop smoking completely, or, if you really find this impossible, then cut down to less than 5 cigarettes a day.

Your local chemist can help you with this.

If you are a "passive smoker":- the best way to help you and your smoking friends is to ask them (politely, of

6. HOW SOON WILL MY BREATH TEST RETURN TO NORMAL?

Within 5 days - 1 week of giving up smoking, the machine should show that you have no carbon monoxide gas at all remaining in your blood.

If you simply cut right down on your smoking, then the machine reading should show a fall from the first reading.

You will also begin to notice some of the other benefits of giving up smoking, better personal freshness, improved taste and smell, and less shortness of breath.

SO, DO COME BACK FOR FURTHER

HELP AND ADVICE!

You will be most welcome.

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