PUBLIC HEALTH PAST AND PRESENT

Community pharmacy and public health in Great Britain, 1936 to 2006: how a phoenix rose from the ashes

Stuart Anderson

This paper is freely available online under the BMJ Journals unlocked scheme, see http://jech.bmj.com/info/unlocked.dtl

J Epidemiol Community Health 2007;61:844-848. doi: 10.1136/jech.2006.055442

Correspondence to:
Dr Stuart Anderson,
Department of Public Health
and Policy, London School of
Hygiene and Tropical
Medicine, Keppel Street,
London WC1E 7HT, UK;
stuart.anderson@lshtm.ac.uk

Accepted 21 March 2007

The pharmacy profession in Great Britain has identified public health as a key area for future development; at the same time the government has been keen to make full use of pharmacists in pursuing its public health goals. To date, pharmacy has focused on microlevel activities such as health promotion, medicines management and prescribing advice, rather than on wider public health issues such as health inequalities. The role in health promotion has its origins in the traditional advisory role of the pharmacist, which largely died out following the establishment of the National Health Service in 1948, and was resurrected only following ministerial intervention in 1981. This article traces the origins of the pharmacist's role in public health, illustrating both shifting definitions of public health and changes in pharmacy practice. It describes how the profession was able to re-establish its advisory role and to develop it into a wider contribution to public health, indicating that this process came about as a result of convergence between a professional imperative to develop its role, on the one hand, and state recognition of the need to draw a broader range of health professionals and lay people into public health activities, on the other.

Convergence required the securing of government support, confirmed in policy documents; the recognition by pharmacy's professional body that embracing public health is a desirable activity; incentives for community pharmacists to carry out such activities; and support from the wider public health community. This article describes how each of these was achieved.

Recently, the pharmacy profession in Great Britain has embraced public health as a key area for development, and the government has been keen to make full use of pharmacists in pursuing its public health goals. This activity has its origins in the traditional advisory role of the pharmacist, which largely died out following the establishment of the National Health Service (NHS) in 1948, and was resurrected only following ministerial intervention in 1981.

A critical assessment of pharmacy's response to the new public health agenda, based on a review of key policy documents, has recently appeared. The authors aimed to provide a critical context for the profession to develop its public health strategy. They assessed pharmacy's contribution to public health using a micro- and macro-framework and concluded that, to date, pharmacy has focused on microlevel activities such as health promotion, medicines management and prescribing advice, rather than on wider public health issues such as health inequalities.

This article outlines the historical context of current policy debates in this area. It describes how the profession attempted to re-establish its advisory function and to develop it into a wider public health role. It demonstrates that the process occurred as a result of convergence between a professional necessity to develop its role and state recognition of the need to draw a broader range of health professionals into public health activities.

Community pharmacy and public health before 1948

The modern history of pharmacy in Great Britain can be traced to the foundation of the Pharmaceutical Society in 1841.² The nineteenth century was a period of gradual professionalisation for pharmacy, with the introduction of examinations and registration. Pharmacy practice largely involved the making and selling of medicines, and occasionally dispensing prescriptions;

but for people unable to afford a doctor the local pharmacist was a ready source of advice about a whole range of issues.

At that time public health was also in its infancy.³ It largely meant sanitation and housing, with its focus on clean water and efficient sewers. These were areas where there was little scope for involvement by the pharmacist. But by the early twentieth century public health was developing a broader definition concerned with the establishment and maintenance of health, and by the end of that century it had come to embrace individual lifestyle and advice.⁴ These areas offered far greater scope for pharmacy involvement.

By the 1930s the role of the community pharmacist was still much as it had been for generations. Pharmacists usually spent much of their time dealing with customers and giving advice. They often spent their working lives in the same place, and became respected members of the community. A pharmacist who owned a shop in Nottingham in the mid-1930s recalls that "we became father confessors, giving advice on all sorts of subjects. The public expected a great deal from myself and my contemporaries."

This advisory role was both informal and unpaid, and was to change significantly over the following decades. Post-war changes in the pharmacist's education led to different expectations by newly qualified pharmacists; and the founding of the NHS in 1948 led to significant changes in practice. Key events in the historical development of community pharmacy and public health are shown in table 1.

Community pharmacy after 1948

The NHS greatly increased the workload of most community pharmacists. In 1937, 65 million doctors' prescriptions were dispensed from 13 000 pharmacies; by 1950, the figure had reached nearly 250 million.⁸ Most pharmacists welcomed the extra business, and many expanded their dispensaries into the

shop area. Initially, most prescriptions needed to be made up individually, and many pharmacists spent much of the working day dispensing. The result was that the pharmacist effectively became "invisible".

The therapeutic revolution of the 1950s and 1960s brought in many new drugs in ready-to-use form, mainly as tablets or capsules. The need for the pharmacist to make up each prescription individually gradually diminished. At the same time pharmacy education moved from an apprenticeship-based training to a graduate-entry profession from 1967, but there was little evidence of pharmacists using their extended knowledge for public benefit. By the late 1970s doubts were arising about just what the role of the community pharmacist was.

The Vaughan intervention 1981

The conservative government, newly elected in 1979, took a close look at pharmacy. At the British Pharmaceutical Conference in 1981, the Minister of Health, Dr Gerard Vaughan, observed that "one knew there was a future for hospital pharmacists, one knew there was a future for industrial pharmacists, but one was not sure that one knew the future for the general practice [community] pharmacist". Reflecting on the statement a year later, the president of the Pharmaceutical Society noted that "at best, it had sounded like a suspended sentence; at worst, it had sounded like a death penalty". Let the president of the Pharmaceutical Society noted that "at best, it had sounded like a death penalty". Let the president of the Pharmaceutical Society noted that "at best, it had sounded like a death penalty". Let the president of the Pharmaceutical Society noted that "at best, it had sounded like a death penalty". Let the president of the Pharmaceutical Society noted that "at best, it had sounded like a death penalty".

Pharmacy's response to the Vaughan intervention was immediate. Discussions were held between the Pharmaceutical Society and key figures from other national pharmacy organisations. The Society's president declared that every effort must be made to ensure that "every community pharmacy, by its appearance, inspires confidence, and by the nature of the professional service provided leaves the public, and particularly the decision makers, in no doubt that

community pharmaceutical services are an essential part of primary health care". ¹³ The challenge was how to demonstrate it

Just 1 week after the president's address, the National Pharmaceutical Association (NPA), representing independent community pharmacists, announced its plans for a corporate advertising campaign. It focused on the pharmacist's role as the expert on medicines, and its draft advertisements carried the slogan "Ask your pharmacist: you'll get the right answer". This was hastily changed following recognition that, as the NPA director readily conceded, "it was asking for trouble". Later versions read "Ask your pharmacist: you'll get the help you need". 15

A role in health promotion

The profession looked for other ways of increasing its public profile. One of the first was a more active role in health promotion. There had in fact been calls for a greater role in this area some years earlier. Pharmacists were called upon to display health education literature, and a conference on the role of the pharmacist in health education was held in 1970. In 1978, a working party on general practice pharmacy concluded that health education and diagnostic testing were important roles. The But for the most part these calls fell on deaf ears.

October 1981 saw the start of a project to explore the role of community pharmacies as sites for the provision of health care information and advice, run jointly by the Family Planning Association and the Pharmaceutical Society. A survey found that many pharmacists were already involved in giving advice on contraception and related problems, and were keen to extend this role further. A year later 800 pharmacies began distributing free family planning information.

Pilot schemes in which pharmacists offered a variety of supplementary services began in late 1981. One of the earliest

Year	Policy context	Pharmacy initiative	Implications for pharmacy
1948 1970	Introduction of NHS		Community pharmacists become ''invisible''
		Conference on role of pharmacist in health promotion	
		1978 Working party on future of community	Health education an important role
		pharmacy	risami sassansi an imperiani rois
1981	Ministerial statement at British	1	Future of community pharmacy in doubt
	Pharmaceutical Conference		
1982		"Ask your pharmacist" campaign	Raised public awareness of the role of pharmacist
1986		Nuffield Report on pharmacy	Pharmacy considered capable of further developme
1986		Launch of Health in the High Street	First national distribution of health education leafle through pharmacies
1987	Promoting better health white paper	Programme for improving primary care	Support for pharmacies to display health education and promotion material
1989	P-0-1	Pharmacy Healthcare relaunched	First government funding for pharmacy health promotion scheme
1990	Acheson Report on public health		· ·
1991	'	Barnet Health Scheme launched	Training to develop pharmacists' knowledge and ski in health promotion
1992	Health of the nation white pape	er	Little recognition of a role for pharmacy
1992	• •	Pharmaceutical care report	Proposes range of extended roles for pharmacists
1996		Pharmacy in a new age	Health promotion considered second most importar role to be expanded
1998	Our Healthier Nation white paper	Related to England only	Led to review of pharmacy-related evidence
2001	Chief Medical Officer's report on public health workforce		Identifies different roles in public health for different members of the workforce
2004	Choosing health white paper	Programme for improving public health	Substantial reference to pharmacy
2005	Choosing health through	Specific to pharmacy	Pharmaceutical public health recognised
2005	, , , ,	Resolution by Council of Royal Pharmaceutical Society	Pharmacy's public health role to be increased still further

846 Anderson

was an initiative by the West Midlands Regional Health Authority. The role of pharmacists in safety of medicines, dental health, prevention of coronary diseases and patient compliance was studied. ¹⁹ Information was conveyed to patients using posters, leaflets and audiovisual displays. Some pharmacists were trained to monitor blood pressure.

Nuffield Report 1986

Despite these high-profile initiatives it was widely recognised that what was needed was an independent and far-ranging inquiry. In October 1983, the Trustees of the Nuffield Foundation commissioned one with 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 of Inquiry was chaired by Sir Kenneth Clucas, a former Permanent Secretary at the Department of Trade.

The committee's report, *Pharmacy: a report to the Nuffield Foundation*, appeared in 1986.²¹ Of its 96 recommendations, 26 related to community pharmacy. Its tone was positive: "we believe that the pharmacy profession has a distinctive and indispensable contribution to make to health care that is capable of still further development". The committee was keen to see full use of pharmacists' education and training by their making the most effective possible contribution to health care.

Promoting better health 1987

Public health rose steadily up the government's agenda during the 1980s. The Black Report, focusing on health inequalities, was published in 1980, and provoked a much broader debate around the future of health care.²² In November 1987, the government published its programme for improving primary health care, *Promoting better health*.²³ The chapter on pharmaceutical services included a recommendation that pharmacies be used to display health education and health promotion material. The government considered that "pharmacies are well placed for this task, since large numbers of healthy people visit them each day".

Such support followed a number of further initiatives by pharmacists, who were becoming increasingly involved in smoking cessation services, services to drug users and sexual health issues. A Healthcare in the High Street scheme was launched in 1986, involving the first national distribution of health education leaflets through pharmacies. Topics covered included contraception, smoking cessation, prevention of heart disease and drug abuse. Evaluation of the scheme demonstrated a high utilisation of the material by the public, and a high level of commitment by community pharmacists to health education.²⁴ The first government funding came in 1989; the scheme was renamed Pharmacy Healthcare, and continues as PharmacyHealthLink.

A further significant development was the Barnet High Street Health Scheme, introduced in 1991.²⁵ This initiative trained pharmacists to develop their health promotion knowledge and skills. It consisted of a 2-day course on communication skills and the principles of health promotion, followed by short courses on selected topics. The scheme received publicity in both the pharmaceutical press and the national media, and as a result similar schemes were introduced elsewhere. A survey in 1994 found that nearly 60 per cent of family health services authorities had some sort of health promotion activity in their pharmacies, and that most had been influenced by the Barnet scheme.²⁶

The 1990s saw a greater emphasis on the pharmacist's role in harm reduction. Pharmacists have had a longstanding relationship with tobacco products, which has evolved into one

focusing on smoking cessation services.²⁷ Their involvement with alcohol has also evolved, into one promoting sensible attitudes to drinking. Pharmacists have also had a role in relation to the use of illicit drugs for many years. A system of pharmaceutical control of substances such as opium emerged in the mid-nineteenth century, only to be marginalised following passage of the 1920 Dangerous Drugs Act. But this role re-emerged in the 1980s, following recognition of the "drug problem", and changes in policy leading to a greater focus on de-medicalisation and services available in the community.²⁸ Current pharmacy activities include dispensing methadone and needle and syringe exchange services.

Official recognition for greater involvement of pharmacists in health promotion activities was at first patchy. A joint working party of the Department of Health and the pharmacy profession recommended in 1992 that pharmacists should participate in health promotion campaigns.²⁹ However, when the government's white paper *The health of the nation* was published, also in 1992, there was little connection between its recommendations and the emerging plans for pharmacy.

Our healthier nation 1998

Whilst until this time health policy related to the whole of Great Britain, from 1997 political devolution meant that it differed in Wales, Scotland and England. The contribution of community pharmacy to public health evolved in different ways, as Wales and Scotland produced their own policy statements. Department of Health publications related solely to England.

For pharmacy, publication of the government's public health white paper *Our healthier nation* in 1998 created the impetus to rebadge a number of activities that had entered mainstream pharmacy as "pharmaceutical public health". ³⁰ This was "the application of pharmaceutical knowledge, skills and resources to the science and art of preventing disease, prolonging life, promoting, protecting and improving health for all through organised efforts of society". ³¹

Some 22 pharmaceutical public health roles were identified. These ranged from core pharmacy activities, such as providing advice on how medicines work, to supplementary pharmaceutical roles such as maintaining patient medication records, and more general public health activities such as participating in health promotion campaigns. Most were to be provided from community pharmacies.

Our healthier nation also provided the impetus for a major review of pharmacy health promotion, commissioned by the Pharmaceutical Society and the Department of Health. The review appeared in 1998; it included guidance for the further development of health promotion by community pharmacists.³²

The profession also took the opportunity to consolidate the evidence base for the role of the pharmacist in public health. PharmacyHealthLink commissioned a review and published two reports: one examined the peer-reviewed literature published between 1990 and 2002³³ while the other considered the non-peer-reviewed literature.³⁴ Systematic reviews demonstrated the effectiveness of pharmacy-based interventions in reducing high-risk behaviours and risk factors for coronary heart disease,³⁵ and of pharmacy involvement in smoking cessation initiatives, sexual health services and services for drug users.³⁶

Choosing health 2004

Further government support for pharmacy's role in public health came in the white paper *Choosing health: making healthy choices easier.*³⁷ The key to a greater role for pharmacies was, as always, their location.

For community pharmacies, their location in the heart of communities provides opportunities for community involvement and leadership (e.g. through school and workplace initiatives) and for supporting individuals to take control of their lives, their health and (if applicable) self-management of their long-term condition.

Choosing health included a commitment to publish a strategy for pharmaceutical public health which would "expand the contribution that pharmacists, their staff and the premises in which they work" could make to improving health and reducing health inequalities. In April 2005, the Department of Health published Choosing health through pharmacy to provide a framework for doing so.³⁸

Choosing health also allowed for a new category of public health worker. Specialists in pharmaceutical public health (SiPPHs) would make important contributions to analysing medicines use across populations, and communicate with the public about how to protect health and effectively treat illness. This approach represented a very different model to that envisaged in the Nuffield Report, which had proposed that community pharmacists undertake this role. The creation of SiPPHs turned it into a specialist one, requiring a separate workforce with additional training and qualifications.

For pharmacy it was important to be recognised as a legitimate part of the public health workforce. The Chief Medical Officer's Report in 2001 referred to three categories of employee: wider contributors, public health practitioners and specialist advisors.³⁹ Pharmacy sought to demonstrate that its workforce contained employees at all three levels.⁴⁰ However *Choosing health through pharmacy* concluded that "most pharmacists and their staff will be part of the wider public health workforce. Over time, we expect more pharmacy staff in all settings to become public health practitioners."

The pharmacy contract

An important element in engaging community pharmacists in public health was to build it into their contract. At the time of the Nuffield Report, NHS remuneration was entirely based on the number of prescriptions dispensed. Nuffield recommended that at least some of the funding should be linked to a range of professional practices, which might include health education.

The new community pharmacy contractual framework, announced in 2005, identifies three levels of service: nationally agreed essential services, to be provided by all community pharmacy contractors; nationally specified advanced services, requiring pharmacists or their premises to be accredited for the purpose; and enhanced services to be commissioned and funded by primary care trusts. ⁴¹ Public health activities were to be integral to all three levels, and one of the essential services was to be the promotion of healthy lifestyles and involvement in national and local campaigns.

Amongst the new services to be available under the new contract were smoking cessation services, the supply of emergency hormonal contraception and services to drug users. Some pharmacy chains have since contracted to provide additional services, for example Boots offers a chlamydia screening service and Lloyds provides a diabetes screening service.

Despite these initiatives, progress in developing the role of the pharmacist in public health beyond the micro, practitioner, level has been slow. A review of the role of pharmacists across Europe in 2003 found that progress in England had been fragmented, and had fallen behind that achieved in Scotland and Wales. However, pharmacists are increasingly involved in public health at the more macro, strategic, level. Several pharmacists have taken the defined specialist route, and have registered with the UK Voluntary Register for Public Health

What this paper adds

The current emphasis on the community as a key location for public health initiatives in Great Britain suggests that a review of involvement in this activity by relevant professional groups might be illuminating. Community pharmacists have been engaged in such activities to varying degrees for many years. Today they are a significant player in public health, although so far this has largely been at the micro-level in activities such as health promotion rather than on wider public health issues such as health inequalities. This paper uses a historical perspective to explore how this situation came about. It argues that this was the result of convergence between, on the one hand, the pharmacy profession's pressing need in the early 1980s to develop its role and, on the other, state recognition of the need to draw a broader range of health professionals and lay people into public health activities.

Policy implications

Government is keen to engage a wide range of both health professional and lay stakeholders in contributing to its public health goals. The process of achieving this is not always straightforward. This paper provides a case study of how this engagement was achieved over a period of years in relation to the pharmacy profession. Its offers insights into how this might be achieved with other key groups, which may themselves wish to engage with government as to how they might make a greater contribution to public health, and to draw lessons from pharmacy's experience.

Specialists.⁴³ Others have registered as generalists in public health with the Faculty of Public Health, and have become Directors of Public Health.

CONCLUSIONS

This article has illustrated how the separate and distinct priorities of the pharmacy profession and the government in the late twentieth century converged to reach an accommodation benefiting both. Whilst other groups have sought to capitalise on the rise of public health up the political agenda, no other had as great a need to reinvent itself as community pharmacy had in the early 1980s.

At its meeting in October 2005, the Council of the Royal Pharmaceutical Society of Great Britain resolved to increase pharmacy's public health role further,⁴⁴ following a presentation suggesting that current interactions between pharmacists and the public were not maximising the opportunities that existed to improve public health. Reasons included a poor understanding of pharmacy's role in public health, little emphasis on public health in pharmacy training and difficulties in coming to terms with the multidisciplinary approach of public health initiatives.

Pharmacy has traditionally been an isolated profession: its ability to break out of its isolation will largely determine the success or otherwise of its public health role in the future. This will test both its adaptability and its flexibility. Although pharmacy is changing fast, so too is public health.

Initiatives to develop the pharmacist's role are taking place in most developed countries, which are following progress in Britain with great interest. More recently, there have been moves to develop the pharmacist's public health role in some developing countries. Whether pharmacy is up to the challenge remains to be seen.

848 Anderson

REFERENCES

- 1 Jesson J, Bissell P. Public health and pharmacy: a critical review. Critical Public Health 2006;16:159-69.
- Anderson SC. The historical context of pharmacy. In: Taylor K, Harding G, eds. Pharmacy practice. London: Taylor & Francis, 2001:3–30.

 Porter D. The history of public health and the modern state. Amsterdam: Rodopi,
- Welshman J. Municipal medicine: public health in twentieth century Britain. Bern:
- Peter Lang, 2000.

 5 Anderson SC, Berridge VS. The role of the community pharmacist in health and welfare 1911 to 1986. In: Bornat J, Perks RB, Thompson P, Walmsley J, eds. *Oral history, health and welfare*. London: Routledge, 2000:54.
- Anderson SC. Community pharmacy in Great Britain: mediation at the boundary between professional and lay care 1920 to 1995. In: Gijswijt-Hofstra M, Van Heteren GM, Tansey EM, eds. Biographies of remedies: drugs, medicines and contraceptives in Dutch and Anglo-American healing cultures. Amsterdam: Rodopi, 2002:81.

- Rodopi, 2002:81.
 7 Anderson SC. Community pharmacy and the rise of welfare in Great Britain 1900 to 1986. Pharmaceutical Historian 2006;36(2 Suppl):S10-S17.
 8 Pharmacy: the report of a committee of inquiry appointed by the Nuffield Foundation. London: The Nuffield Foundation, 1986:19.
 9 Anderson SC. Community pharmacy in Great Britain: mediation at the boundary between professional and lay Care 1920 to 1995. In: Gijswijt-Hofstra M, Van Heteren GM, Tansey EM, eds. Biographies of remedies: drugs, medicines and contraceptives in Dutch and Analo-American Healing Cultures. Amsterdam: contraceptives in Dutch and Anglo-American Healing Cultures. Amsterdam: Rodopi, 2002:83.
- Anderson SC. From bespoke to off-the-peg: community pharmacists and the retailing of medicines in Great Britain 1900 to 1970. In: Curth LH, ed. Physick to Pharmacology: five hundred years of British drug retailing. Aldershot: Ashgate, 2006:105-42.
- Anderson SC. The historical context of pharmacy. In: Taylor K, Harding G, eds. *Pharmacy practice*. London: Taylor & Francis, 2001:21.
- Advancing the image of pharmacy. Pharmaceutical J 1982;229:282.
- 13 Is there a role for the community pharmacist? Pharmaceutical J 1982;**229**:582-5.
- 14 Pharmacists must be conspicuous. Pharmaceutical J 1982;229:329.
- 15 NPA's infallible catchline to go. Pharmaceutical J 1982;229:366.
- A pharmacist in every chemist. Pharmaceutical J 1982;229:533.
- Anderson SC. The Changing Role of the Community Pharmacist in Health Promotion in Great Britain 1930 to 1995. *Pharmaceutical Historian* 2002;**32**(1):7–10.
- Pilot scheme for extending pharmacists' advisory role. Pharmaceutical J 1982:229:409
- Blenkinsopp A, Panton R, Anderson C. Health promotion for pharmacists, 2nd edn. Oxford: Oxford University Press, 1999.
- Pharmacy: the report of a committee of inquiry appointed by the Nuffield Foundation. London: The Nuffield Foundation, 1986:52.
- Pharmacy: the report of a committee of inquiry appointed by the Nuffield Foundation. London: The Nuffield Foundation, 1986.
- 22 Black D. Inequalities in health: the Black Report. Harmondsworth: Penguin, 1980.
- Promoting better health: the government's programme for improving primary health care. London: HMSO, 1987.
- 24 Todd J. The High Street Health Scheme: promoting health in the community pharmacy. Health Educ J 1993;52:34-6.

- 25 Anderson C. Community pharmacy health promotion activity in England: a survey of policy and practice. Health Educ J 1996;55:194-202
- Anderson C, Greene R. The Barnet High Street Health Scheme: health promotion by community pharmacists. Pharmaceutical J 1997;259:223-5.
- 27 Anderson SC. Community pharmacists and tobacco in Great Britain: from selling cigarettes to smoking cessation services. Addiction 2007;102:704–12.
- Anderson SC, Berridge VS. Drug misuse and the community pharmacist: a historical overview. In: Sheridan J, Strang J, eds. Drug misuse and community pharmacy. London: Taylor & Francis, 2003:17–35.
 Department of Health and Royal Pharmaceutical Society of Great Britain.
- Pharmaceutical care: the future for community pharmacy. London: Royal Pharmaceutical Society of Great Britain, 1992
- 30 Secretary of State for Health. Our healthier nation: a contract for health. London: Stationery Office, 1998.
- Walker R. Pharmaceutical public health: the end of pharmaceutical care? *Pharmaceutical J* 2000;**264**:340–1.
- 32 **Anderson C**. Guidance for the development of health promotion by community pharmacists. *Pharmaceutical J* 1998;**261**:771–5.
- 33 Anderson C, Blenkinsopp A, Armstrong M. The contribution of community pharmacy to improving the public's health. Report 1: Evidence from the peer reviewed literature 1990–2001, Pharmacy HealthLink and Royal Pharmaceutical Society of Great Britain, 2003.http://www.pharmacyhealthlink.org.uk/ (accessed 24 January 2007).
- 34 Blenkinsopp A, Anderson C, Armstrong M. The contribution of community pharmacy to improving the public's health. Report 2: Evidence from the UK non pharmacy to Improving the public s results. Report 2. Evidence from the oper-reviewed literature 1990–2002, PharmacyHealthLink and Royal Pharmaceutical Society of Great Britain, 2003.http://www.pharmacyhealthlink.org.uk/ (accessed accessed 24 January 2007).
- 35 Blenkinsopp A, Anderson C, Armstrong M. Systematic review of the effectiveness of community pharmacy-based interventions to reduce risk behaviours and risk factors for coronary heart disease. J Public Health Med 2003;25:144-53
- 36 Anderson C, Blenkinsopp A, Armstrong M. Pharmacists' perceptions regarding their contribution to improving the public's health: a systematic review of the United Kingdom and international literature 1990–2001. Int J Pharmacy Pract 2003;11:111-20.
- Secretary of State for Health. Choosing health: making healthy choices easier. London: Stationery Office, 2004.
- Choosing health through pharmacy: a programme for pharmaceutical public health 2005–2015. London: Department of Health, 2005.
 Department of Health. The report of the Chief Medical Officer's project to
- strengthen the public health function. London: Department of Health, 2001.
- Public health: a practical guide for community pharmacists. London: Royal Pharmaceutical Society of Great Britain, 2003:14.
- 41 Implementing the new community pharmacy contractual framework: information for primary care trusts. London: Department of Health, 2005.
- 42 Taylor D, Carter S. Realising the promise: community pharmacy in the new NHS. London: School of Pharmacy, 2003.
 43 UK voluntary register for public health specialists. London: Royal Institute of Public
- Health, 2006.
- 44 Council resolves to increase pharmacy's public health role, News release. London: Royal Pharmaceutical Society of Great Britain, 19 October, 2005.

International Forum on Quality and Safety in Health Care

23-25 April 2008 Le Palais des Congrès de Paris

Call for Abstracts: Submission deadline 3 October 2007

Why submit an abstract?

- Your achievement showcased to key international opinion leaders
- Communicate your organisation's work
- Enhance your organisation's profile
- Network with others in your area/field
- Share your success, learn from your failures For more details and to submit your abstract online visit international forum.bmj.com