For debate
Public health in hospitals: the missing link in health improvement

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Summary
Traditionally, public health professionals have scorned hospitals as the antithesis of community health. Secondary care remains notably distant from public health practice and policy. Yet hospitals consume over 50 per cent of the health budget and over a quarter of the population have contact with hospital services every year. There is an important public health agenda in hospitals for promoting health and an environment that encourages community partnership and a healthy place to work and be. Public health skills have a key role in ensuring high-quality, safe and evidence-based health care. Epidemiological support for hospitals can promote a much-needed culture of monitoring and evaluation of health services. A public health approach to planning of secondary care services can encourage a more objective and strategic assessment of health needs and how these are best met. We argue that public health hospitals should not be an oxymoron, but an essential component of a public health strategy. Different approaches to putting public health into hospitals are discussed.

Keywords: public health hospitals, quality improvement, health promotion, evaluation of health care

The public health agenda in hospitals
Hospitals dominate medical development and innovation. From the 18th century, and particularly after 1850 and the introduction of anaesthesia, the marrying of surgery to hospitals took the scalpel from the kitchen table and battlefield into an institution capable of exploiting the advances that industrialization and technological advance were to bring. The pace of advance increased as the 20th century progressed and the impact of medicine on the health of the population increased with it.3 At the start of a new millennium, hospitals remain icons of altruism over which elections can be won or lost4 and which political parties strive to adopt. They are at the forefront of improving public health through the organization of services to combat the major causes of mortality, such as cancers and coronary heart disease. How they respond to these challenges and strengthen their public health function will, in part, determine their long-term role in 21st-century health care systems, particularly in a political environment where the role of primary care is being emphasized.
Components of a public health hospital

Promoting health

Users of secondary care services represent a high-risk group. Patients with chronic diseases such as heart disease and cancers will be over-represented compared with the general population. Targeting health promotion for secondary and tertiary prevention of disease is likely to be more effective than community-wide programmes in reducing cardiovascular risk for these individuals or groups of patients. For example, trials in the United Kingdom and internationally have demonstrated that brief advice by appropriately trained health professionals during routine consultations can promote smoking cessation and reduce alcohol intake.

Health professionals in secondary care may be powerful messengers for opportunistic health promotion advice on smoking, diet, exercise and other risk factors. As opinion leaders and empowered experts they also have an important and yet often unharvested role as advocates for local public health initiatives raising awareness of health issues and good practice. They have a valuable part to play in campaigning for local and national policies on issues such as transport to reduce accidents, and the provision of smoke-free leisure and work environments. With appropriate training in health promotion they can also act as authoritative sources of health-related information – for example, midwives and obstetricians discussing teenage pregnancy in schools or dermatologists raising awareness of skin cancer in a community.

A much broader concept of health-promoting hospitals has been previously described in the United Kingdom and internationally. The intended ethos of health-promoting hospitals is essentially value-based and person-centred, with the aim of humanizing the process of health care service provision. It acknowledges differences in needs and cultural conditions for individuals and different population groups. Rather than narrowly focusing on acute clinical episodes, the responsibility of the hospital is widened to co-operate with the community to promote concepts of cure, care and prevention. Health-promoting hospitals could therefore provide an opportunity and mechanisms to re-orient health services and their resources towards the promotion of health.

The concept of a health-promoting hospital should also encompass better health for staff and a healthier workplace. Workplace programmes can be effective in reducing risk factors and given the fact that nearly one million people are employed in secondary care in the United Kingdom the potential impact is significant. Health-promoting hospitals can encourage such programmes, support healthy catering, provide opportunities for exercise in gymnasiums or adequate shower facilities for cyclists; offer disease-prevention services such as influenza immunization and good occupational health facilities. As good employers and investors in people they can support staff and minimize work-related stress.

Ensuring quality of health care

With the rising prominence and advocacy of a rational, evidence-based approach to clinical practice, the skills and science of epidemiology have become increasingly a part of the process of clinical decisions about individual patients in contrast to their use in the planning and commissioning of services.

Public health skills of epidemiology, critical appraisal and statistics are essential for all clinicians to understand and interpret research evidence. Better awareness of the clinical and cost effectiveness of interventions comes from better understanding about the underlying reasoning and principles.

Changing clinical practice to improve quality of care in a hospital can require generic skills such as access to and dissemination of knowledge, cross-specialty working, and a local and national population perspective. For example, clinical guidelines are effective in improving quality of care. The majority of clinical guidelines originate from secondary care and public health input can ensure they are evidence-based, valid and generalizable to the health needs of the local population. Understanding about the science of guidelines and the science of change management of individuals and organizations is not unique to public health professionals. However, this knowledge with the additional skills of project management and evaluation of processes and outcomes of change is currently lacking in most hospital practice and is needed from somewhere.

At the level of treated populations robust clinical audit and monitoring of adverse health care events based on aggregated individual data benefits from epidemiological expertise in design, collation and analysis of outcomes; public health expertise can contribute to the monitoring of health care quality in a hospital through the development and analysis of health and health service indicators for hospitals and for the wider community to describe performance, appropriate use and efficiency of local health care provision. This can provide a comparison of the distribution of quality in health care between providers and recipients of care.

Monitoring and evaluating health and disease

Disease surveillance, particularly of communicable disease, is a core public health function. Some communicable diseases such as tuberculosis and HIV are managed predominantly in the secondary care sector. Historically, a major hazard associated with hospital admission was the risk of acquiring infection, which was often a greater threat to well-being than the disease that had led to admission. The current concern about both the health impact and cost of hospital-acquired infection indicates that the problem has not gone away; the responsible organisms are just different. The challenge of monitoring, controlling and treating MRSA, Clostridium difficile and other hospital-acquired infections is arguably best addressed by combining the special knowledge of the hospital environment with the public health skills of communicable disease control.
Encouraging a culture of evaluation in hospitals is essential in a health service that is changing rapidly and having to cope with frequent medical advances and new therapies. Epidemiological support for the methods and application of health services research can provide a valuable resource for different secondary care specialties to evaluate local developments in health service provision. Such opportunities for evaluation are currently rarely undertaken.

**Assessing need and planning services**

The key issue in the provision of health services, both curative and preventive, is that they are reflective of, and responsive to, the particular pattern of needs of the local population. Yet hospital services seem to develop with little connection to the systems that are concerned with estimating the health needs of the local population. More often, it is the political pressures exerted by influential clinicians, managers working with limited resources and vested interests that guide hospital service planning.

A public health approach to planning and development could support a more open and objective, strategic rather than incrementalist model of decision-making. This would start with determining local health needs and then planning services to meet them. Fundamental issues of good public health practice would include exploring equity of access to secondary care services, addressing inequalities and promoting access to services for vulnerable groups.

Lessons can be learnt from hospital care in developing countries, where the experience of the 1960s and 1970s was one of inequity between urban-based élites with access to high-technology medical services either funded by the former colonial power or staffed by doctors trained by the former colonial power. This contrasted with the poor access of the majority of the (usually rural) community, whose needs were equivalent but would best be met by basic primary care services encompassing infant nutrition, maternal services and vaccinations. This model has progressively shifted to one with a recognized concentration by hospitals on the needs of a community and it is more frequent to find that community services are now co-ordinated with, and run by, the higher-technology medical centres. This is the way that connection and continuity between various levels of need can be maintained, and this is a public health role.

The separation of acute and secondary care from preventive and community services reflects not just the current organization of health services but also the distribution of interest within the relevant professions in most hospital specialties. It is the exception rather than the rule for doctors to perceive their responsibilities for the provision of care as extending from home through hospital, rehabilitation and back to home. Although it is true that these various ‘stages’ are managed by a range of professions each concentrating on a particular section, the lack of continuity in service provision both mirrors and serves to reinforce patterns of training. The challenge is not solely to provide a service of a different type but to staff it with health professionals of a different mindset.

A hospital provides a setting in which it is possible to obtain an overview of the major health needs of a population from patterns of referral. A change in mindset from monitoring as part of the commissioning process to monitoring as a part of the assessment of community health needs could make a valuable contribution to planning and the development of strategies to reduce health inequalities. This can only be achieved by having a competent public health function that is based in hospitals, but charged with expanding the view with which those hospitals conduct their business, to include the other local stakeholders in the health system.

**Putting public health into hospitals**

Many large hospitals exist in splendid isolation from wider health policy or even from the health of the communities they service. Their size and autonomy limits any stimulus towards inter-agency working or partnership, with a resulting tendency towards introspection. A public health perspective of the wider determinants of health would allow greater understanding of the need for collaboration. Public health skills of management and facilitation may increase the effectiveness of such liaison.

A number of possibilities exist for introducing a wider public health agenda in secondary care.

1. Greater input from public health expertise based in health authorities or primary care trusts. However, the traditional focus of this expertise has been in working with primary care and local authorities. Their geographical separation also hinders collaboration and partnership with hospitals, and their roots in commissioning organizations can create conflict and distrust, which was apparent in the purchaser–provider split of the 1990s.

2. Establishing public health professionals in trusts. Experience in the Northern and Yorkshire region with Medical Care Epidemiologists provides a model of public health specialists working on the same side as all clinicians. Their roles have included promoting clinical governance; providing epidemiological support; education and training; evaluation of service developments; and as ‘honest brokers’, encouraging collaboration and inter-specialty working. With the forthcoming mergers of health authorities, the majority of public health professionals will move to primary care trusts. However, the opportunity for establishing and developing public health practice in secondary care trusts should not be missed.

3. Developing public health skills for clinical staff. Experience of this comes from two contrasting contexts. In developing countries hospital staff such as district medical officers and hospital public health teams are actively engaged in tackling the wider public health of a district. They combine their roles as secondary care clinicians with that of public health practitioners as they look beyond the hospital parapets to the wider health needs of the communities within their district, implementing child and maternal health programmes,
immunization programmes and outreach services. In North America, dual accreditation in public health and a clinical specialty enables clinicians to widen their horizons and influences beyond their often highly specialized clinical spheres.

(4) Encourage the development of public health skills in managers or provide clearer career pathways from public health into management. The growing (but still small) numbers of public health practitioners in senior management roles, and the increasing interest being shown by managers in acquiring the skills of public health (through attending evidence-based practice workshops, or obtaining public health qualifications) indicate that this is an underdeveloped potential. However, this would undoubtedly be the most sustainable strategy for promoting public health hospitals.

The model of a public health hospital described above requires much more than the presence of a token individual with a job title that includes ‘public health’. It involves a fundamental acceptance at the highest level that part of the role of the hospital is as part of a public health system. A public health hospital would encourage all its staff to step outside their increasing sub-specialization to a greater understanding of the wider health agenda. It would require senior managers to consider public health implications of decision-making and encourage health-promoting practice within clinics and wards. We argue that public health is the missing connection in the complex networks that exist in secondary care and that the latest health service reorganization in the UK provides an obvious opportunity to correct this.

References

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