

Promoting integration of the health and built environment agendas through a workforce development initiative

Paul Pilkington (1), Marcus Grant (2), Judy Orme (3)

(1) Senior Lecturer in Public Health, Centre for Public Health Research, University of the West of England, Bristol, UK.

(2) Senior Research Fellow, WHO Collaborating Centre for Healthy Cities and Urban Policy, University of the West of England, Bristol.

(3) Reader in Public Health, Centre for Public Health Research, University of the West of England, Bristol.

Abstract

There is a renewed and growing recognition of the links between public health and the built environment, which has underlined the need for improved joint working between public health and built environment professionals. However, currently there is little engagement between these two sectors. This paper outlines a workforce development initiative that aims to increase capacity for such joint working, through shared learning and reflection between professionals from the built environment sector and those from the specialist public health workforce. This paper outlines how shared learning through facilitated learning sets and other activities has identified issues that both hinder and potentially help the greater integration of health into built environment thinking. The paper documents a number of responses to the issues that have arisen, as well as suggesting ways forward and future work that can help to bring public health and built environment professionals closer together for the benefit of society.

Key Words

Public Health; Built Environment; Workforce development; Shared learning

Correspondence address

Dr. Paul Pilkington
Senior Lecturer in Public Health
University of the West of England, Bristol
Glenside Campus, Blackberry Hill, Bristol, BS16 1DD

Tel: 0117 32 88860

Email: paul.pilkington@uwe.ac.uk

Introduction

There is a renewed and growing recognition of the links between public health and the built environment, which has underlined the need for improved joint working between public health and built environment professionals. However, currently there is little engagement between these two sectors. This paper outlines a workforce development initiative that aims to increase capacity for such joint working, through shared learning and reflection between professionals from the built environment sector and those from the specialist public health workforce. The work documented here offers examples as to how built environment professionals can once again be engaged in the public health agenda, and vice versa. It suggests ways forward and outlines future work.

Background

Many of the most important advances in public health have come through improvement of the built environment, whether that be the sanitary reforms of the eighteenth century or air quality laws in the mid 1900s. [1] [2] Built environment professionals, such as town planners, recognised the impact they could have on health and were a key stakeholder in the health improvement process. [3] However, as cities became seemingly healthier, the link between the built environment and the health of the population became less obvious. In developed countries, public health took an increasingly biomedical approach to health improvement, while in planning, political forces led to the dominance of a purely economic rationale. These trends contributed to a severing of the connection between public health and the built environment, with different professions going their own way during the latter part of the twentieth century. [3]

Recently, with the rising relative significance (and costs) associated with public health problems such as obesity, there has been an increasing recognition that the built environment has an important impact on the health and well-being of populations. [4] [5] [6] [7] A recent comprehensive literature review found evidence of multiple associations between many factors in the built environment and health, including the design, planning and quality of streets, neighbourhoods and green space. [5] Certainly, the increase in childhood obesity being observed in the UK and other developed countries is considered in part to be the result of an "obesogenic environment", where opportunities for physical activity are hindered through the built environment. [8] [9] [10]

As such, transformation of the built environment to promote health is one of the responses to the growing challenge of obesity. The Foresight report, *Tacking Obesities: Future Choices*, modelled scenarios where health became integrated into the planning process, concluding that this would see positive impacts on obesity trends. [11] Subsequent reports from the National Institute of Clinical and Health Excellence (NICE), and the Department of Health, stress the importance of built environment professionals such as designers, architects, and spatial, town and transport planners for encouraging physical activity through careful design of the built environment. [12] [13] These followed calls from the Royal Commission on Environmental Pollution to better integrate health concerns into the design and management of urban areas. [7] Also, as recent evidence suggests, careful urban design can encourage sustainable and health promoting modes of travel, through the provision of safe routes to schools and work, hence the built environment has an important role to play in the sustainability agenda. [4] [14]

Despite this wealth of recognition, there continues to be a lack of engagement between public health and built environment professionals. [15] The specialist public health workforce, defined by the Chief Medical Officer as those who work at senior levels in public health with specific expertise in areas such as epidemiology, research methods and health promotion, generally have not worked alongside their built environment colleagues. [16] Meanwhile, the built environment sector engages only marginally with the health and well-being dimensions of their work. Little is known about whether current built environment professionals recognise their role in determining the health and well-being of the population. Sir Derek Wanless, in his report *Securing Good Health for the Whole Population*, recognised that engagement with the wider public health workforce is crucial for achieving the desirable "fully engaged scenario", which would seek to maximise the preventative approach to tackling important health issues. [17] This is certainly needed in the case of built environment professionals, who are indeed part of this wider public health workforce.

Work has begun to address this issue. Bodies such as the Commission for Architecture and the Built Environment (CABE), Natural England, the UK Public Health Association, the National Heart Forum and the Department of Health (DH) and the World Health Organisation (WHO), through their Healthy Cities programme, are working to bridge the gap between the built environment and public health sectors. This paper now outlines how one workforce development initiative is seeking to bring public health and built environment professionals together through shared learning and reflection.

Aims and approach of the work programme

The primary goal of the programme of work is to increase capacity for joint working between the public health and the built environment sectors. The methodology takes the project beyond research or training. Through embedding an action learning paradigm at the heart of the approach, the project provides an immediate interface between research into professional practice and developing better practitioner awareness.

Recent years has seen a rise in the quantity of partnership working on public health issues, initiated just over a decade ago by 'joined-up government' policies dictating partnerships through funding regimes such as Single Regeneration Budgets and New Deal, and now taken forward through Local Area Agreements. [18] Partnerships between local authorities and public health have been accelerated with the many joint appointment and co-terminus boundaries stemming from the last round of health re-organisation in the NHS. However, the partnerships rarely go beyond a limited trading between funding sources or trading-off of outcomes. Little attention is paid in these traditional programmes to the quality of the partnership interaction. The philosophy underpinning this programme is to generate a higher degree of synergy between the professions involved. An action learning research approach is being adopted to enable the two professional groups, public health (initially focusing on members of the specialist public health workforce, including Directors of Public Health and Consultants in Public Health) and the built environment (with a focus on planners and architects), to connect through better understanding of the ethics, philosophy and core values of each profession.

To address the primary goal, of increased capacity for joint working, two strands of work are being developed. Firstly, action learning sessions, designed as enquiry workshops,

are being undertaken with specific groups of stakeholders. These have been deepening understanding and are slowly revealing insights into misconceptions on each side of this professional divide. Secondly, the project is developing a stable of flexible Public Health / Built Environment learning packages, informed by the action learning workshops.

Organisations involved

This programme is led by the WHO Collaborating Centre for Healthy Cities and Urban Policy, which is based in the Built and Natural Environment School at the University of the West of England, Bristol (UWE). It was designated by WHO in 1998 in order to better integrate public health and settlement planning, design and development. The WHO Collaborating Centre has planners, architects and landscape architects as core staff as well as colleagues drawn from the Faculty of Health and Life Sciences at UWE. The Centre is responsible for advising the WHO on healthy urban planning and is at the forefront of the worldwide movement to create health-giving neighbourhoods, towns and cities. It has a track record of supporting and embedding inter-professional working into all its activities.

Funding for the programme has been provided by the South West Teaching Public Health Network (SWTPHN). The Teaching Public Health Network (TPHN) initiative, funded by the Department of Health, is a means of responding to the need for improved access to and provision of public health education and training. [19] There is a recognition that knowledge and understanding of health determinants is vital not just for the traditional public health workforce, but for all those whose work can impact on the health of the population. [20] Launched in 2006, nine regional networks – which are partnerships between academic and service public health organisations - exist across England.

The programme outlined here is co-ordinated by a small steering committee drawn from the members of the SWTPHN and the WHO Collaborating Centre. It is accountable to the regional steering group of the SWTPHN.

Initial Scoping Activities

At the outset of the project, two events sought to shape the direction of the work. An initial workshop at the University of the West of England, Bristol, brought together academics from public health and built environment backgrounds. The workshop was designed to support enquiry into the understanding and misunderstandings about each other's disciplines. Each group, public health and built environment professionals, was invited to examine their own core values, professional competences and stakeholders, then to set out their understanding of those of the other group. Through sharing the outcomes of this exercise the groups were able to reach a richer understanding of each other and also how their own profession was being portrayed. With 'public health' and 'built environment' both being collective terms for groups of disciplines with a common interest but a blurred boundary, the room for misunderstanding of positions and interests is great.

This workshop identified some key barriers. The different languages being used and different professional realms are leading to a lack of alignment of objectives and goals. It also became apparent that there was an ignorance of the benefits, perceptions of

adverse costs and also unrealistic thinking around changes that would be required to build closer relationships. The key strategic barrier is that the evidence coming from the public health disciplines is not visible enough; it is not presenting itself in a way that can easily be assimilated into the built environment design and planning processes.

A learning set, involving representatives from all of the regional Teaching Public Health Networks was also co-ordinated in the initial phase of the project. At this event only public health professionals were present. Using a scenario technique, participants were placed in various roles to consider how to 'lever-in' more health benefits to the planning of a new primary school. Participants explored the motivations and constraints behind stakeholders in such a planning project, and considered what added value public health input could really bring to a planning situation. This is another powerful technique in better understanding the underlying dynamics in these multi-professional situations.

Both these events were designed to 'surface' the hidden issues that can get in the way of progress when bringing public health and the built environment professionals closer together. These events assisted in the development of the work programme.

Resulting Activities

Following the initial scoping activities, the project focused on two events taking place in the South West of England. The Bristol Planning Law and Policy Conference is an annual event for planning and legal professionals across the South West of England. It is attended by key figures in the planning and law profession, from both the private and public sector. In November 2007, assisted by funding from the SWTPHN, the conference focussed for the first time on the links between health and planning, with several keynote speeches to delegates on this issue. Following this, a workshop asked delegates to consider the links between planning and a wide variety of health issues. As a stimulus to discussion, the workshop used the "Health Map", a new model of health determinants applied to the planning of human settlements (Barton and Grant, 2006). The Health Map had been designed to be a dynamic tool to provide a basis for dialogue and to provoke enquiry. [21] The group of planners were surprised and enthused by the extent of the relationship between health and planning. However, there was a general feeling that as planners they did not have the requisite knowledge of health issues to be able to engage fully with the health implications of their work.

The second event was the South West Public Health Residential School. This annual event attracts public health workers from across the South West Region. At the 2007 event a workshop examined the links between the built environment and public health. This was attended by both public health and built environment professionals. The workshop encouraged both sets of professionals to consider their own and each other's perspectives in terms of territory defended, core values and professional interests - with the aim being to identify shared stakeholders, concerns and values between built environment and public health professionals. The workshop participants found that there was common ground. Both professionals have a focus on populations and their environment; also the built environment values of 'creating sustainable and eco-friendly neighbourhoods' is compatible with the public health values of 'tackling health inequalities and improving overall health'. The professional 'territory defended' as articulated by the participants in public health revolved around skills and expertise in

health needs assessments, epidemiology, health protection and health services evaluation. In the case of the built environment professionals, control of the planning process, and building design and aesthetics were identified. The professional interests of the health professionals, including evidence based interventions, statistics, evaluating effectiveness and engaging with wider agencies, surprised the built environment professionals who were present. The professional interests cited by the built environment professions that gave the public health fraternity a surprise were shaping communities, protecting well-being, taking an overview and balancing vested interests. A number of core values were explored by both groups, and this is where theory would predict that there would be the closest convergence; notions of social justice, improving quality of life and serving the community were common to both groups. The public health participants brought scientific rigour uniquely to the table, whilst the built environment professionals held the core value of functionalism in the creation of structures and neighbourhoods. The two groups were then brought closer together, through this identification of common ground, whilst recognising potential barriers to greater partnership working. The session ended with a constructive dialogue about possible ways forward to improve partnership working - a key question being the relative merits, and differences between, training built environment professionals in public health or training public health practitioners in planning and design.

Responses

The lack of visibility of evidence for how the built environment, and more specifically urban form, affects health, was one of the key barriers identified in the workshops. Within the project a remedy was sought. This was to start to compile an annotated bibliography of publications that would be of most use to practitioners and their educators in explaining the links. This database comprises mainly of systematic reviews and meta-studies as well as some well-argued commentaries. The plan will be to develop the project so that the selected publications can be made available on the web and disseminated to its intended audience.

The discussion of public health impacts is sporadic and disparate in the professional press in planning and architecture. It is important to raise awareness within these professions of how their activities impact on public health. In order to stimulate debate, pairs of built environment professionals have been given the role of 'public health champions'. Each pair consists of a lecturing professional at UWE and one in an external higher education institute in both planning and architecture. Using the evidence base referred to above, they are currently preparing material to be published in a range of professional journals.

A new series of short courses in Healthy Urban Planning has been designed to help health and planning/design professionals to integrate their thinking and develop coherent spatial health promotion strategies. Eight one-day courses on a variety of topics are now being offered across the country in locations including Bristol, York, Cambridge, and Loughborough (Box 1). It is hoped that this programme will not only increase knowledge and understanding of the links between public health and the built environment, but will also act as a networking opportunity for professionals from both sectors.

In addition to the short course, to increase flexibility and access to learning materials, an initial stable of six health-related topics are being developed using distance learning computer based delivery (Box 2). These are one day learning packages to be

undertaken in the workplace. They focus on filling some of the knowledge and training gaps being identified as the enquiry workshops proceed.

Discussion

The work reported here represents only the initial steps to help skill up and bring together the built environment and public health workforce. This early work has been successful in identifying issues that both hinder and potentially help the greater integration of health into built environment thinking. This includes a lack of knowledge about health issues generally amongst built environment professionals, and a lack of easily available evidence, in the correct form, to advise built environment policy makers and practitioners of how the built environment (and in particular the urban form) affects health. This paper has outlined some of the responses to the issues that have arisen as part of this work programme. As well as these responses, a series of next steps are proposed, intended to develop the work further. At a national level, it is proposed to develop a network of Built Environment Faculties across the country, with the aim of better integrating (public) health understanding into built environment teaching and professional development. At a regional level, learning sets across the South West, with Directors of Public Health paired with built environment colleagues in their local area, may be a valuable way of developing further shared learning between public health and built environment professionals. It is envisaged that holding such a series of events will help to deepen understanding and promote close working relationships, especially important set against the background of the Government's current housing growth agenda. [22]

This work represents the beginning of a dialogue between public health and built environment professions, that seeks to bring the two professions back together. The programme of work has sought to create inter-professional spaces where issues relevant to both professions can be explored. Often this is the first time that such professionals have been in the same room as one another. However, the work is more than about creating a shared space. It is a facilitative process, using tools such as the Health Map and other task-oriented approaches to generate discussion and self-analysis. Such reflection is difficult in the day-to-day work environment.

Conclusions

As already outlined, the programme of work outlined here is only the beginning of a process that seeks to better integrate the public health and built environment agendas. The work programme aims to be part of a dynamic, reactive process. In practice this means that in parallel with further workshops, learning sets and the development of training, the researchers and participants will continually explore and challenge the barriers to progress and respond to issues as they arise. Bringing together the public health and built environment professionals is likely to be challenging. However, this area of workforce development activity is crucial if major public health challenges such as obesity and climate change are to be tackled.

Authors' Contributions and Acknowledgements

PP drafted the first version of the paper and revised the paper following contributions and edits from MG and JO. MG leads the work programme described in this paper and

organised the learning sets and other activities. PP and JO are members of the Steering Group of the South West Teaching Public Health Network.

Competing Interests

PP is currently the Co-ordinator of the South West Teaching Public Health Network, a Department of Health funded initiative. MG is lead of the work programme to promote integration of the health and built environment agendas, funded in part by the South West Teaching Public Health Network.

Box 1: Healthy Urban Planning Short Course Content

Assessing the health impacts of projects
Climate Change: Implications for the human and natural environment
Greenspace: Promoting health and well being
Linking health and planning: a health map for urban planning
Neighbourhood planning for physical activity
Planning and designing healthy outdoor spaces for young people
Planning for an aging society
Understanding spatial planning for public health professionals

Box 2: Distance learning health-related topics

Health impact assessment
Healthy sustainable communities
Designing and developing the healthy neighbourhood
A built environment approach to public health using the health map.
Sustainability threshold analysis: The Spectrum approach
Plan making in health

References

- [1] Ashton J and Seymour X. *The New Public Health*. Open University Press, 1988.
- [2] Rosen G. *A History of Public Health*. Johns Hopkins; 1993.
- [3] Orme J, Powell J, Taylor P and Grey M. Mapping Public Health. In: Orme J, Powell J, Taylor P and Grey M (eds) *Public Health for the 21st Century*. Second Edition. Open University Press. McGraw Hill; 2007.
- [4] Barton H. Healthy urban planning: setting the scene. *Built Environment*; 2005; 3(4):281-287.
- [5] Croucher K, Myers L, Jones R, Ellaway A, and Beck S. *Health and the physical characteristics of urban neighbourhoods; a critical literature review*. Glasgow Centre for Population Health; 2007.
- [6] Frumkin H, Frank L, and Jackson R. *Urban sprawl and public health: designing, planning and building for healthy communities*. Island Press, Washington DC, USA; 2004.
- [7] Royal Commission on Environmental Pollution. *The Urban Environment: Twenty-sixth Report*; 2007 [online] <http://www.rcep.org.uk/urbanenvironment.htm> Last accessed 01.02.08.
- [8] Booth KM, Pinkston MM, Carlos Poston WS. Obesity and the Built Environment. *J Am Diet Assoc* 2005; 105: S110-S117.
- [9] Hill JO and Peters JC. Environmental contributions to the obesity epidemic. *Science*; 1998; 280(5368): 1371-1374.
- [10] Larkin M. Can cities be designed to fight obesity? *Lancet* 2003; 362: 1046–1047.
- [11] Foresight *Tackling Obesities: Future Choices*, 2007 [online] at: <http://www.foresight.gov.uk/Obesity/Obesity.html> Last accessed 30.01.08.
- [12] Department of Health. *Healthy Weight, Healthy Lives. A Cross-Government Strategy for England*. London: The Stationary Office; 2008.
- [13] National Institute for Health and Clinical Effectiveness. *Physical activity and environment: Quick reference guide*; 2008 [online] at: <http://www.nice.org.uk/guidance/index.jsp?action=download&o=38989> Last accessed 30.01.08.
- [14] Frank LD, Engelke PO, Schmid TL. *Health and community design: the impact of the built environment on physical activity*. Island Press, Washington DC; 2003.
- [15] Cave B, Bond A, Molyneux P and Walls V. *Reuniting health and planning: a training needs analysis. Research into developing a skills base for sustainable communities in the east of England*. Ben Cave Associates; 2005.

- [16] Department of Health. *Report of the Chief Medical Officer's project to strengthen the public health function*. Department of Health, London; 2001.
- [17] Wanless D. *Securing Good Health for the Whole Population*, London: HMSO; 2004.
- [18] Peckham S. Partnership working for public health. In. Orme J, Powell J, Taylor P and Grey M (eds) *Public Health for the 21st Century*. Second Edition. Open University Press. McGraw Hill; 2007.
- [19] Sim F. Teaching Public Health Networks: connecting with Shaping the Future. *The Journal of the Royal Society for the Promotion of Health*. 2007; 127(5): 215-218.
- [20] Rao, M. *Editorial. ph.com. newsletter of the Faculty of Public Health*. June. London: Faculty of Public Health; 2006.
- [21] Barton H and Grant M. A health map for the local human habitat. *Journal of the Royal Society for the Promotion of Health*; 2006; 126(6): 252-261.
- [22] Department for Communities and Local Government. *Housing: New Growth Points*. [online] at: <http://www.communities.gov.uk/housing/housingsupply/growthareas/newgrowthpoints/> [last accessed 04.02.08]