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THE INGREDIENTS OF HEALTHY CITY POLICY: DRAWING THE LESSONS OF GOOD PLANNING PRACTICE FROM AROUND THE WORLD

ABSTRACT

The importance of built environment as a determinant of health is both accepted in the literature and reflected in a myriad of aspects including design of towns, travelling patterns, quality of housing, of urban greenspace, water supply, air quality. Evidence is increasing to prove the relationship between healthy behaviour and quality environment, a range of health outcomes (physical, mental, equality, safety...) can be gained from quality environments.

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outcomes are manifold including the stages of planning processes and related processes. The way health issues and well-being strategies are being pursued through spatial planning are different in a wide variety of countries and settings. The paper will analyse and reflect on good practice of uniting health and planning, drawing examples from Europe, India, Australia, New Zealand, USA and Canada. The focus can be on spatial solutions and/or effective processes. We will reflect on the way obstacles have been negotiated and healthy urban environments achieved drawing out general principles and potentially transferable policy approaches.

keywords: Public Health, urban planning, determinants of health, comparative practice

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INTRODUCTION

The importance of built environment as a determinant of health is both accepted in the literature and reflected in a myriad of aspects including design of towns, travelling patterns, quality of housing, of urban greenspace, water supply, air quality. Evidence is increasing to prove the relationship between healthy behaviour and quality environment, a range of health outcomes (physical, mental, equality, safety...) can be gained from quality environments.

Planning as a determinant of the built environment can be potentially a key driver of change: Processes and approaches linked to planning and the ability to shape the built environment so it delivers healthy outcomes are manifold including the stages of planning processes and related processes. The way health issues and well-being strategies are being pursued through spatial planning are different in a wide variety of countries and settings. The paper will analyse and reflect on good practice of uniting health and planning, drawing examples from Europe, India, Australia, New Zealand, USA and Canada. The focus can be on spatial solutions and/or effective processes. We will reflect on the way obstacles have been negotiated and healthy urban environments achieved drawing out general principles and potentially transferable policy approaches.

THE BUILT ENVIRONMENT AS A DETERMINANT OF HEALTH

The body of international evidence demonstrating that the built environment in which we live has a direct impact on a range of non communicable diseases as well as on health inequalities is growing (Jackson, 2003; Dannenberg et al. 2011; Rydin et al., 2012a and b). Research now looks at how individual decisions affecting health

are actually influenced not simply by individual or social factors but by the web of social and physical contexts in which we live our lives. The framework for research is very much based on a combination of social and environmental factors of human behaviour or socio-ecological framework (Sallis and Owen, 2002). Barton (2009) developing on this approach, placed the determinants of health approach (Dahlgren and Whitehead, 1991) within an urban environment setting, identified key areas where the physical environment can influence key determinants of health including healthy lifestyle (physical health through for instance physical activity and diet), sense of community (mental health through for instance social networks), local economy and income (wellness through employment and income for instance), adequate infrastructure (health through social inclusion and provision of adequate services and infrastructure), thriving bioregion (health through air and water quality for instance) and global ecology (health through resilience and adaptation).

PLANNING AS A KEY DRIVER FOR HEALTHY CITY

Processes and approaches linked to planning have the ability to shape the built environment so it delivers healthy outcomes. The way health issues and well-being strategies are being pursued through spatial planning are different in a wide variety of countries and settings, but universally, in order for planning to deliver healthy settlements, it is important that public health and urban planners should work together. Public health and planning have common roots and the reforms to the urban environment brought about by pioneering public health practitioners and town planners led to dramatic improvements in health and life expectancy. However, as planning

and public health have evolved into two separate disciplines in the 20th century, evidence suggests that planning and health professionals do not always fully understand each other's language, assumptions and processes (Carmichael et al., 2012). Furthermore, set within different policy and institutional structures, urban planning and public health have evolved in policy silos with different evidence base. Today non communicable diseases (NCD) represent 63% of annual deaths in the world (WHO, 2014), levels of obesity present new challenges, and the two professions need to work again together to confront them.

The paper will analyse and reflect on good practice of uniting health and planning, drawing examples from Europe, India, Australia, New Zealand, USA and Canada. The focus can be on spatial solutions and/or effective processes. The first part of the paper will describe examples following the three levels of integration of health and planning identified in Barton and Grant, 2013 as part of their experience working with the Healthy Cities movement. Some of the examples highlighted will be part of a forthcoming book by Barton, Burgess and Grant (Planning for health and well-being: Shaping a sustainable and healthy future, London: Routledge). The author of this paper has also come across a number of examples of health integrated planning tools and strategies in various parts of the world as part of various projects for the National Institute for Health and Care Excellence (NICE) in the UK, evaluation of WHO Healthy Cities programme and in other commissioned or research work. The second part of the paper will draw out the lessons for general principles and potentially transferable policy approaches.

PART 1: HEALTH INTEGRATED PLANNING: THE THREE LEVELS OF INTEGRATION

BASIC LEVEL OF HEALTH INTEGRATED PLANNING: THE IMPORTANCE OF LIFE-SUPPORT ROLE OF SETTLEMENTS

At a basic level, urban planning must facilitate the life-support role of settlements. The focus will be on eradicating the spread of disease through badly designed and overcrowded urban settlements, ensuring acceptable levels of environmental health as well as delivery of essential services such as sanitation, clean water, air quality, adequate and basic standards of housing in towns and cities. The pace and scale of urbanisation today presents much more challenges than ever before in these respects: low income countries face the fastest urban growth as well as high levels of urban poverty. With a fifth of the world population, 40% of which predicted to live in cities by 2030, Indian cities must plan for the future. In Hyderabad city planners have used a variety of methods and evidence to inform the Master Plan for the city. In particular, methods included the collection of a wide range of primary and secondary data, field surveys, base maps, cross-sectoral data collected through inter-departmental projects and engagement with key stakeholders and civil society groups. This demonstrates how processes and strategic approaches to reduce urban sprawl, improve infrastructure, create open space that will improve the quality of life of residents must be supported by reforms in urban planning, governance and management structures to ensure cross sector working and public engagement (Thapar and Rao, forthcoming).

SECOND LEVEL OF HEALTH INTEGRATED PLANNING: QUALITY OF LIFE PROJECTS

Once essential services are up and running, then local authorities can develop quality of life projects, moving to consider how urban planning and settlements can contribute to physical and mental health and develop projects that will target specific constituencies of residents. Infrastructure for physical activity and active travel offers a variety of opportunities to integrate healthy outcomes into urban design while promoting low carbon environment too in very different contexts. For instance, since the mid 2000s with the support of the Healthy Cities programme, Turkish cities have been actively promoting pedestrianisation, active travel and public transport as well as the development of urban green spaces which have enhanced urban and historic centres of cities like Bursa. A key lesson for city planners has been to build up cooperation with outside organisations from the private and community sectors (Fidal, forthcoming).

In the area of transport planning, a more strategic approach to transport infrastructure to secure connections between city neighbourhoods has been made in Kuopio, Finland. City planners have developed a model combining healthy urban planning and design to integrate three major modes of transportation, walking, mass transit and car. The model meets the need of the city, linking neighbourhoods around the city as well as addressing traffic and emission challenges. While this is a good example of technical solution at the level of masterplanning, one of the challenges remains to convince policy-makers that a car city is unsustainable and to secure resources and investment into cycling and walking infrastructure. Another challenge includes the unintended consequences of national policies promoting shopping centres, car dependant

housing and fast roads for commuters that can undermine a local model such as that of Kuopio (Kosonen, forthcoming).

Policy innovations and integration in urban or transport planning need to be supported by political leadership and partnerships. This is demonstrated in North America where a key ingredient for developing a variety of active travel measures (such as protected bike lane, cycle streets, reappropriation of on-street car parking or street planting) has been political leadership and the vision of strong mayors in cities such as Chicago, Detroit, Montreal, New York, Portland, Seattle, Vancouver and Washington to address contentious issues and secure the speedy delivery of large projects (McVean and Saunders, forthcoming). In Taiwan as well, the development of a healthy ageing programme (Chao, forthcoming) brings key stakeholders together and involve citizens: these are seen as a crucial aspect for successfully building age-friendly cities that will respond to the needs of an ageing population.

THE THIRD LEVEL OF HEALTH INTEGRATED PLANNING: FULL INTEGRATION OF HEALTH INTO THE PLANNING SYSTEM

Finally, integration of health into planning practice can be at a much deeper and overarching level through local plans and strategies. This section will illustrate different approaches taken to addressing societal challenges and put health at the core of planning and urban design and environment in Oregon, England, Australia, Germany and New Zealand. It requires involvement of a broad range of stakeholders in policy-making and its assessment as well as clear implementation mechanisms.

The importance of the right institutional and cultural context to deliver a whole city or

metropolitan spatial strategy is illustrated by the city of Portland, Oregon. The progress made by Portland since the 1970s in planning a healthy city were driven by the prevention orientated ethos of public health that led to the integration of public health concerns into urban and transport planning, and the successes of a rigorous urban growth management policy led by Metro, the only elected regional government in the USA. There are challenges to this model, for instance the equity analysis required for planning for health adds both layers of bureaucracy to the planning process as well as a political dimension to resource management (Abbott, forthcoming). However, the ability for Portland's decision-makers and planners to shape the city with rigorous public regulations and programming has not prevented land owners and private sector stakeholders to develop and implement their private sector vision for the Pearl District, a mixed used neighbourhood in an old rail yards near central Portland and its business district (Tillett, forthcoming).

The importance of the right local context is also a central theme in England (Kurth, forthcoming) where the English planning system offers new opportunities for local authorities to embed health into planning practice. Since 2013, local authorities in charge of urban planning have been reinvested with public health responsibilities, giving renewed institutional opportunities for cross-sector working. However, practitioners from both sectors in the Midlands region of England consider that success in delivering results on the ground is left to "a dogged and pragmatic pursuit of the art of the possible" at local level. Their own practice (Kurth et al, forthcoming) emphasises the importance of networks of practice and pragmatism but also demonstrates how an assessment tool, an integrated impact assessment, can support cross-working between planning and

public health professionals and the creation of a shared understanding of key local health issues. Integration of health into planning in New Zealand goes beyond such appraisal or impact assessment mechanisms, but literature on the Health Impact Assessment (HIA) of Greater Christchurch Urban Development Strategy (a community-based collaborative project to manage the impact of urban development and population growth within the Greater Christchurch area.) has demonstrated how HIA was used as a tool to support the integration of health considerations into planning through strong emphasis on community engagement, and contribution to the evidence base.

With the exception of Environmental Impact Assessment (EIA) regulations, health is not well or evenly integrated into the planning process in the U.S. A. but San Francisco presents some good practice in the use of HIA to ensure the integration of health into planning that was facilitated through the good working relationships between the department of public health and city planners. Community participation was strongly encouraged. The result is that the public health department has created a tool using indicators to ease integration (i.e. the healthy development monitoring tool) that has been used in a number of projects across the San Francisco Bay area.

Beyond the use of assessment tools, it is possible for cities to have multi-dimensional approaches to quality of life and environmental sustainability that will support healthy urban living, integration of transport and land planning combined with the delivery of quality urban environment. Often, however this is also complemented by the use of HIA mechanisms.

In Bristol, close collaboration between public health and planning has developed along the years well before the English 2013 reform took

place, with new appointments expressly bridging the public health/planning divide. Bristol City Council has instituted a number of measures to address health and health inequalities. In particular the Director of Public Health (a joint appointment between the local public health authority and the planning authority before the reintegration of public health functions into Bristol, City Council) funded health professionals to be embedded within the Council's departments and provide input into planning in the field of healthy living/health improvement, transport, climate change and peak oil and physical activity. Structures were also put into place for a public health practitioner to carry out a rapid HIA of large planning applications. Key benefits are emerging in collaboration, knowledge transfer and relationship building already, as long as resources fund the cross-sector working. The Bristol case study provides evidence that capacity building through institutional adaptation/development and intersectoral partnerships between public health and planning bodies and authorities can facilitate integration through the development of intersectoral strategies and policies.

In the State of Victoria, Australia, involvement of government, health and planning stakeholders has taken place in the development of policy and techniques to integrate health. It has included developing a policy HIA as a way to ensure that health is built in into spatial planning and other sectoral policies at all levels of government. Techniques in the area also include institution building, cross-sectoral working and good urban design to fully incorporate health into the planning process. These techniques are interrelated and complement each other. In addition, local government in Victoria has emerged as a key public health player since its responsibilities have broadened beyond the realm of hard

infrastructure provision to include spending on social services such as health, welfare, safety and community amenities (e.g. Victorian Planning and environment Act 1978; Municipal Public Health planning, 1988; The Victorian Local Government Act 1989).

In the case of Freiburg, sustainable planning is facilitated by strong community engagement and a competitive housing market preventing big developers to dominate housing delivery (Grant and Barton, forthcoming). Health is not explicitly integrated with planning, yet the focus on sustainability and quality of life, and effective community management of the development process, has resulted in a healthy city - Freiburg is an interesting good practice example that has focused on sustainability rather than health, yet provides a number of key approaches to integrating health into planning, in particular both in terms of the spatial planning system and the development planning process. While energy efficiency in buildings and their ecological design are a key feature of Freiburg's innovative approach to sustainable planning, some of the other sustainable features of the spatial and transport planning offer some key health outcomes in areas including physical activity, wellbeing, environmental health, unintentional injury and equity. The interest in this case is that the approaches are not only rhetorical but can be witnessed on the ground across the city and in particular in the two recent neighbourhoods of Vauban and Risenfeld. This case study provides evidence that some key innovative principles in development (e.g. reduction in land use, promotion of green belt, urban green parks, connectivity between built environment and open spaces combined with high density and a rethink of building designs) can help create compact communities which offer suitable open spaces

encouraging physical activity as well as greater social and age mix.

These few examples show that several methods readily available for cities to integrate the consideration of health into planning strategies and decisions. To draw the lessons from these examples, we will highlight in particular the role of national policies, the practice of planning at the local level as well as assessment tools as key aspects of healthy planning approaches.

PART 2: LESSONS FOR PLANNING PRACTICE

LESSON 1: ROLE OF NATIONAL POLICIES IN PROMOTING HEALTHY URBAN PLANNING

In Australia, New Zealand and Germany, (Freiburg) evidence suggests that the balance between regulation, guidance and flexibility needs careful consideration from regulators so that local planning authorities have an incentive to buy-in to healthy planning, but there is also ample opportunity for local initiative and leadership. The municipal public health plans in Victoria is a useful model to learn from.

National/State intersectoral working can also facilitate integration. In Australia and New Zealand, intersectoral partnerships at central government level were important to build good evidence bases and support the integration of health into plans. For instance, in Australia, capacity building through institutional adaptation/development (Vichealth; Planning Institute of Australia-Victoria Division; Preventative Health task force at national level) and intersectoral partnerships between public health and planning bodies and authorities (Primary Care Partnerships, Vichealth and PIA) can facilitate integration. Effective

strategies include targeted preventative action at national level in response to chronic conditions, building the evidence base on the links between planning and health (e.g. Planning for Health), developing guidance on design criteria for healthy planning (e.g. Healthy by design), and educating planners through funding of postgraduate courses or continuous professional development. In other words it is important for government to speak with one voice on the issue. However, individual cities can take very effective action independently of government, so long as they have sufficient autonomy as the Freiburg example shows. In the English context, it is not simply the Department of Health and the Department for Communities and Local Government that need to collaborate (as indeed they are doing in some fields), but the Departments for Transport, Trade and Industry, Environment, Food and Rural affairs, Energy and Climate Change, and the Treasury can offer contribute to resources allocation and incentives that favour good health integrated planning.

LESSON 2: THE ROLE OF LOCAL PLANNING SYSTEMS IN PROMOTING HEALTHY URBAN PLANNING

Building health/planning collaboration can facilitate healthy planning. Evidence suggest many ways in which collaboration can be made effective include:

- the preparation of best practice guidelines
- joint strategy preparation, joint appraisal exercises
- the development of health action zones which involve housing, transport and economic units as well as health and planning
- the establishment of a WHO Healthy Cities project
- embedding of public health expertise in planning units
- embedding of planning expertise in public health units

A challenge for integration in that respect is the different knowledge base of planning and health professionals. Through our research, we have found that the limited shared knowledge of planners and health professionals in relation to appraisal can be a barrier to integration (Carmichael et al., 2012). Guidance and shared experience would help both professions understand the issues and processes involved in incorporating health into appraisal of plans and projects: so that planners grasp the health significance of land use development decisions, and health professionals understand the intricacies of the planning system. Shared team work can help break down the language and cultural barriers and build mutual confidence. Building understanding and shared knowledge base between planners and public health professionals is a useful tool and it is important to extend the education of the planners operating the system beyond sustainability and into health. Joint appointments between health authority and local authority has the potential to break down silo barriers and greatly assist the integration of health into planning policy and decisions. It can take the form of a joint director of public health, and a dedicated officer with explicit health and planning responsibilities. In a situation where the local authority takes over the public health remit this should in theory at least be easier to implement.

In Freiburg, sustainable planning is facilitated through the integration of transport planning with spatial planning and thought through from the inception of project and can lead to behavioural changes and promote active living. It also shows that social mix can be brought in through good urban design (Vauban).

If we look at the specific level of development management (i.e. process of developing the land), then there are several drivers of integration

emerging from the practice. At the city level, it is important for a city to influence the development process: the evidence from Freiburg highlights the value of the local authority having considerable influence and authority over land ownership, infrastructure provision and the detailed pattern of development (in contrast to British local authorities). Central to this is the ability to buy up development land.

Leadership and expertise are also key. Strong political and technical leadership, together with an effectively integrated joined-up management of transport, housing, employment, greenspace and facility provision with land use planning (i.e. what in this country is called „spatial planning“) are essential facilitators for integration.

Community involvement and engagement in planning also facilitate the integration of local knowledge into the development decision making and promote sustainable planning. Community engagement in Vauban occurred from the inception of project development to inform all the aspects of the development and carried on after the project was completed as support for managing the neighbourhood, encouraging social engagement. This community engagement can help communities to see the development from a developers perspective. Unlike the British situation, where a limited number of major developers dominate the development process, Freiburg achieves a diversity of private, community, market and social housing development in every area, increasing access to housing for all, building social capital and empowering the population (all important determinants of health). There are clearly issues about the transferability of this approach. It relies on city ownership of development land. The UK in principle has the mechanisms available, but not the policy context to support it.

LESSON 3: PLAN AND PROJECT APPRAISALS, USEFUL INTEGRATION TOOLS FOR HEALTHY URBAN PLANNING

We saw above how building shared understanding and knowledge base to planning and health professionals is important. HIA can be a trigger for mutual learning as it was shown in San Francisco or Christchurch. The potential of HIA as a means of developing shared understanding between professionals was shown there but rapid (or mini) HIAs can also be used to address the planners' concern that health assessment will add to costs without compensating benefits. In Bristol, the practical use of rapid HIA to engage and educate planners has been useful. Practice there has underlined the value of pre-application negotiations with applicants (i.e. developers) of major urban development schemes. A pre-application HIA, with the health and planning authorities helping with scoping, can enable key issues to be addressed in advance and mitigation incorporated at the outset when it is likely to be much more effective.

The examples of Australia and San Francisco also illustrate the benefits of health sector funding into HIA methods.

One issue in respect of health consideration in impact assessment is whether health should be mainstreamed into other forms of assessment or to have separate health assessment. Both approaches can be successful in achieving health benefits, and there are excellent international examples of both. However, experience of HIA (outside statutory processes) is overall mixed, while integrated appraisal (IA) is good, so the evidence perhaps favours the latter. But the key to positive impact for either IA or HIA is involvement through the whole plan, policy or project process, so that health objectives are integrated into the thinking

from the outset. Assessments should utilise both quantitative and qualitative approaches, and take an holistic view of health. Integrating health, social and environmental considerations into one statutory, holistic, integrated assessment process could ensure that health is properly considered in plan and project appraisal. San Francisco shows that HIA methodologies are most effective in influencing planning when they employ a broad definition of health that includes social, economic, cultural elements and incorporate broad and different sources of knowledge, including local knowledge from diverse ethnic and cultural groups. However, for existing assessment methods to take into account a holistic view of health implies legislative change, at least at the project (i.e. new urban development) level, because the scope of current statutory appraisals such as environmental impact assessment (EIA) is limited to considering the impact of urban development projects on environmental health.

San Francisco and Christchurch cases also showed the value of drawing on diverse sources of knowledge, including local knowledge, especially where there are ethnic and cultural divides. The Christchurch case provides strong evidence that institutionalising the rights of minority groups (Maori in this case study) to participate in all aspects of policy making (i.e. at early stage of the development plan or project) is a method to ensure that health equity concerns are highlighted. In San Francisco, the participatory approach used to develop the HIA led to an effective partnership between the community, experts (including public health and academics) and policy-makers. This partnership was effective because it ran through the whole development process, had a strong structure, developed a collective vision and consensus, which was supported by research and knowledge, and could disseminate its findings

appropriately. This led to the development of a measuring tool used by other local authorities in the USA.

These examples suggest that three groups of actors are needed in order to build strong outcomes: the community, the experts (including built environment professionals, public health and perhaps academics) and the policy-makers. The HIA approach contrasts with the much more technical EIA processes which do not usually engage with a broad range of stakeholders. Furthermore clear commitment from a high level in the organisations, together with resource allocation and capacity building, was important to achieve effective health assessment in the examples we examined. Without entering into the detail process of HIA, examples also show that HIA will be more effective if undertaken at an early stage of the decision making process in ensuring that the impact of the plans and projects on the broad determinants of health can be assessed and remedied.

CONCLUSION

The way health issues and well-being strategies are being pursued through spatial planning are different in a wide variety of countries and settings and integration of health into urban planning depends on economic and sophistication of planning policy instruments. As we saw in part one, we can divide integration of health into planning in three different phases. Low income countries will have limited regulations on land control and planning system and they will need to concentrate on issues such as access to clean water and sanitation. In developed countries, it will be easier for local authorities to develop either single projects or strategies to integrate health into planning using legislation or more sophisticated regulatory systems. But situations

can be hugely different as is the case in US states. Oregon and Portland offer perhaps the best example of planning system facilitating sustainability and healthy planning. Other cities will need to rely on local Mayor's leadership to make things happen rather than on a very regulated planning systems. Health issues will also be different in developed countries where non communicable disease such as obesity or diabetes are rife.

We saw through our examples that the overwhelming focus has been on building partnerships between planners and public health practitioners in order for both professions to understand each other's language, evidence base and altogether knowledge.

So we have offered a number of case studies and lessons. For transferability of good practice to happen will require that local and national governance systems, local health issues at stake, land ownership or availabilities of resources to tackle issues are understood and taken on board.

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