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Health

Manuscript Draft

Manuscript Number: PUHE-D-15-00531R1

Title: Crossing disciplines: do architecture and planning course leaders see value in a Public Health Practitioner in Residence programme?

Article Type: Short Communication

Keywords: Public health; practitioner in residence; wider public health workforce; architecture; students; Spatial Planning; Built Environment

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Abstract: OBJECTIVES: The built environment in which people live and interact affects their health. In order to create health promoting environments there is a need for public health and built environment professionals to work in close partnership. This study assesses the benefits, from the perspective of the teaching staff, of a residency for a public health practitioner within a university architecture and planning department as a way of introducing public health issues and concepts to built environment students. STUDY DESIGN: This is a qualitative study using data obtained from semi-structured interviews. METHODS: Semi-structured interviews were used to gather the views of module leaders and were analysed using a grounded theory approach. RESULTS: Module leaders felt the residency offered an effective and useful approach in getting students to better understand public health issues. The residency offered module leaders a way of teaching students to critically appraise architectural designs with a new emphasis on the community and health aspects of building users. This novel approach captured the students' attention and gave them an awareness of an additional professional role, that of promoting public health. Overall, the residency was assessed to be of benefit to the architecture and planning profession through strengthening awareness of its role in health and sustainability. Some concerns were raised regarding awareness of the residency amongst architecture staff and timetabling health topics into a full architecture curriculum. CONCLUSIONS: The findings revealed a gap in the architectural staffs' understanding of public health concerns and the impact of their profession on the wider determinants of health. Further research is required in the field of public health advocacy and public health literacy for built environment educators. Questions are raised about how built environment education may better incorporate public health, including national public health policy and a better understanding of evidence-based practice as a tool for built environment professionals.

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20th May 2015

Dear Phil Mackie and Fiona Sim (*Editors-in-Chief*),

Many thanks for taking the time to review our research paper entitled: *Crossing disciplines: do architecture and planning course leaders see value in a Public Health Practitioner in Residence programme?*. We are grateful for your comments and for the opportunity to re-submit the paper as a short communication.

We have re-written and submitted the manuscript as suggested and hope that this meets your expectations.

I confirm that this manuscript has not been published elsewhere and is not under consideration by another journal. All authors have approved the manuscript and agree with its submission to Public Health.

I look forward to hearing from you at your earliest convenience.

Yours sincerely,

Beth Bennett-Britton

Highlights

- We study a public health residency in a university architecture and planning department.
- We assess the benefits of the residency from the perspective of the teaching staff.
- The residency was successful at introducing public health issues and concepts to students.
- There appeared to be a gap in the staff's understanding of public health concerns.

Crossing disciplines: do architecture and planning course leaders see value in a Public Health

Practitioner in Residence programme?

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It has been well documented that the built environment in which people live and interact impacts on their health (Rydin et al., 2012). In response to this there have been calls for the health and built environment disciplines, that were originally born out of the same welfare concerns, to work in closer partnership once more (CABE, 2009, Ross and Chang, 2012). However, despite a growing interest in health promoting environments, in practice there remains little collaboration between the professional groups (Kent and Thompson, 2012).

The present study builds on a previous project in which a public health practitioner was embedded into a university architecture studio for one semester to introduce public health issues and concepts into the curricula of students (Pilkington et al., 2013). Following on from the success of that pilot, a programme of placement opportunities for public health practitioners in training with the UK Faculty of Public Health was established. The Public Health Practitioner in Residence programme differs from a guest lecturer model, as the practitioner is embedded within the department, contributing to research, pedagogic programme development as well as undertaking regular teaching and tutoring. The programme is based at the WHO Collaborating Centre for Healthy Urban Environments, in the Faculty of Environment and Technology at the University of the West of England, Bristol.

This communication describes and discusses the results of an evaluation of the impact of the Public Health Practitioner in Residence programme based on interviews with module leaders working with the practitioner. The residency ran for six months, during which the public health practitioner delivered lectures, tutorials and one-to-one mentoring to architecture and planning students who were in their first, fourth or Master's years of training. The subject areas covered included understanding public health and the wider determinants of health, advocacy, evaluation, principles of evidence based practice, policy and partnership working, as well as evidence-based examples of the effect of the built environment on health.

Semi-structured face-to face interviews were conducted with all four module leaders by the Public Health Resident and an independent researcher. The module leaders taught on the subjects of architecture, planning and transport. The interview questions explored staff attitudes about the integration of public health within the Faculty of Environment and Technology modules and the benefits (or otherwise) that the Public Health Practitioner in Residence programme brings to the teaching of built environment programmes. There were also questions to review the potential for further development of the Public Health Practitioner in Residence programme. The interview transcripts were analysed using the Grounded Theory methodology (Strauss and Corbin, 1990).

The analysis revealed four broad themes. Firstly the module leaders felt the Public Health Practitioner in Residence programme offered a constructive and novel approach for architecture and

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planning students to form a better understanding of public health issues and the relevance of public health to their chosen field.

Secondly, module leaders reflected that the benefits of the residency for them were that it gave them a way of teaching students to critically appraise their approach to design from a different perspective, in this case the community, and that this was rewarding. In contrast, the data indicated some logistical issues regarding the residency, such as lack of structure and focus, lack of staff understanding of the programme and lack of time in the curriculum.

Thirdly module leaders felt that the residency enabled the students to reflect on the new perspectives presented by the resident, such as population-wide issues, and enhance their projects by considering how they can improve the built environment for future populations. The novel approach of the Public Health Practitioner in Residence appeared to engage and challenge the students.

Finally, a theme emerged which indicated that as a result of the residency the students were exposed to the meaning of public health and developed a broader understanding of their role in public health agendas as future architects and planners. The residency brought the focus of design back to the importance of ‘people’ and communities, highlighting the co-benefits of linking sustainability, health and planning.

“It was very clear that they [the students] felt that public health was something that they'd never considered and they would do it and they would take it in to their practice work later on... So for me that residency made them look at the communities in a very different light and they then look at different aspects that they may have to consider.”

(Module leader 1)

As a result of the residency, module leaders reflected that the introduction of public health concepts had influenced both their own understanding of public health and the students’ work, enabling them to design places that could have a positive impact on the health of the local community. The module leaders also highlighted broader benefits, in particular teaching students to think critically and to focus on the people that will use and interact with the space. This finding was supported by Ellis et al. (2008) in their study which brought together medical and planning students on a healthy urban planning project. They argue that collaboration between different disciplines during training is essential to ensure that professionals are not only able to work well in multi-disciplinary teams, but also critically reflect on the value and outlook of their profession.

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As well as the benefits, module leaders also highlighted some problems such as difficulties scheduling health into the course programme due to the dense curriculum and competition from other disciplines such computer science. This suggests that health is a separate topic, outside of professional remits, rather than being a core principle and responsibility of built environment and sustainability professionals. However many of the built environment professional bodies have acknowledged the role of their profession in contributing to health and sustainability and requirements and for these to be incorporated in accredited higher education curriculums.

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The findings of this study also highlighted areas that were not addressed by the module leaders in their interviews. The evaluation revealed a lack of understanding that the module leaders have around the role of public health. This would be consistent with previous research with built environment professionals based in local government that has highlighted a lack of understanding as to the prevailing policy objectives, institutional structures and culture (Kidd, 2007). The meaning and practice of evidence also varies between these professions (Davis, 2014). Built environment professions utilise thematically based evidence, including housing projections and demographics, as well as drawing on precedent studies, past experience, general professional knowledge and education, and interactions with decision makers and community members. Whereas health professionals have pioneered evidence-based practice where evidence from systematic research is used to inform practice (Krizek et al., 2009). Approaches such as the Public Health Practitioner in Residence, could include provision for the co-education of public health and built environment academics in their different approaches to the generation and use of evidence and how the respective professions can work together.

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More research is required to understand the most appropriate stage of training for the residency to be targeted at and how learning could be further enhanced. This research has identified that the residency programme brought benefits to both staff and students and highlighted a lack of awareness about the potential benefits that public health evidence and perspectives can bring to built environment professions.

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