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Professional workforce training needs for Health Impact Assessment in spatial planning: A cross sectional survey☆

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ABSTRACT

Objectives: Heath Impact Assessment (HIA) in spatial planning can influence wider determinants and prevent ill-health, promote good health and reduce inequalities. They remain underutilised in England, partly due to inadequate workforce training. This study sought to identify the training needs of Public Health Professionals, Planners and Impact Assessment Practitioners in England in 2021.
Study design: Cross-sectional survey.
Methods: A survey was undertaken of Public Health Professionals, Planners and Impact Assessment Practitioners to ascertain their training needs. Descriptive statistics, frequency tables and charts summarised feedback.
Results: 76% (68) of 90 total respondents, never received any training in HIAs. Quantifying impact of planning on health, especially in monetary terms and monitoring success of HIA recommendations, were common challenges for all professions. Musculoskeletal health and infectious disease were among specific health impacts where professionals welcomed further training. Public Health professionals requested support to identify high-impact interventions and work more collaboratively with Planners and a need to justify budgets for undertaking HIAs. Planners expressed training needs around justifying requirement for HIAs, data collection; and identifying local public health priorities. Impact Assessment Practitioners expressed uncertainty about policy triggers needed to undertake HIAs citing that the scale of HIAs must be proportional to project scope, the challenge of identifying planning interventions and a need to apply consistent methodological approaches in HIAs.
Conclusion: There is need for baseline training to upskill all professionals, alongside tailored-training on key topic areas to address profession- and locality-specific needs to ensure spatial planning decisions better influence wider determinants and address local health priorities.

1. Background

Health is significantly impacted by our built and natural environment and it is well accepted that morbidity and mortality can be prevented through healthier environments [1]. The World Health Organization defines Health Impact Assessments (HIAs) as a combination of process and methods used by those planning, deciding and shaping changes to the environment to evaluate the significance of health effects of a plan or project." [1] HIAs in spatial planning can influence wider determinants of health, through shaping the built and natural environment in which people live, work and play including: homes, workplaces, schools, communities, high streets, and green spaces [2,3]. Through influencing these wider determinants, HIAs can help decision-makers in Local Authorities and wider stakeholders make decisions about planning applications in a way that promotes good health, prevents ill health, improves access to health and community services and reduces health inequalities [1,2,4–7].

In England, there is no legislative and policy requirement for the use

☆ Note as of October 1st, 2021, the Health Improvement functions of Public Health England have largely moved to the Office for Health Improvement and Disparities (OHID) and the Health Protection functions have moved to UK Health Security Agency (UKHSA).

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of HIA in the spatial planning process. The Government's Planning Practice Guidance recognises that HIAs can be useful where there are expected to be significant health impacts[8]. However, a recent study showed that less than a third of Local Authorities have HIA policies in place [9]. Contrastingly, there are legal requirements for Strategic Environmental Assessment (SEA) of plans and Environmental Impact Assessment (EIA) of projects to consider the effects on population and human health [10,11]. There are different roles in the HIA process: Planners and Public Health professionals (PHP) are more likely to be involved in creating policies for HIAs and reviewing submitted HIAs, whereas most HIAs on specific developments will be undertaken on commission by Impact Assessment (IA) practitioners, working mainly in the private sector. Having a better understanding of these distinctive roles can enable training provision to be more effective.

Despite their potential utility and the rising prominence of the importance of creating healthy places in both the government and National Health Service (NHS) agenda [12–14], HIAs remain underutilised for spatial planning in England, and when undertaken, have been criticised by some experts for perceived lack of quality and inadequate impact [2]. Two major reasons have been cited for this. Firstly, the absence of adequate training given to those, who are responsible for commissioning, undertaking, and reviewing HIAs [15]. Secondly, the absence of national legislative framework in England mandating the use of HIAs in planning [2].

By virtue of the broad impact that planning can have on health, many professionals may become involved in HIAs at some point in the process. Arguably, Planners, PHP and IA practitioners are most engaged in undertaking and reviewing HIAs. In this study, we focus on identifying the training needs of these professionals with respect to HIAs in spatial planning through a cross-sectional survey. The survey focused on finding practical barriers that may prevent a consistent approach being taken to adopt HIAs in planning decisions, and to improve their quality and impact.

2. Methods

2.1. Study design and participants

A cross-sectional online survey of Planners, PHP and IA practitioners involved in undertaking, reviewing or contributing to HIAs in spatial planning in England was undertaken.

2.2. Questionnaire development and distribution

An online questionnaire to identify training needs was developed, piloted, revised and then distributed to those involved in spatial planning HIAs. It was sent to those professionals deemed likely to be mostly involved in the HIA process: Planners, PHP and IA practitioners across England. The questionnaire was designed on Select Survey software®. The full questionnaire is included in the Supplementary Appendix 1. Questions were multiple choice format, with free text responses also included and ran from March to June 2021.

The questionnaire was sent as a hyperlink with an accompanying email to stakeholders and networks including the Faculty of Public Health, Association for Directors of Public Health, Royal Town Planning Institute (RTPI), Town and Country planning Association (TCPA), Chartered Institute of Environmental Health (CIEH), Institute of Environmental Management and Assessment (IEMA) and Local Authority contacts who were asked to promote this widely through other communication channels. Individuals contacted were invited to complete the questionnaire themselves and to disseminate it further to colleagues. Reminders were sent periodically to encourage completion.

2.3. Statistical methods

Results were stratified by the three target professional groups (PHP, Planners and IA Practitioners) and analysed using descriptive statistics, frequency tables and charts. We intended to use thematic analysis to analyse freetext comments to see if they aligned with or against the quantitative feedback, however freetext responses were very limited in number. As such, we analysed them as supportive analysis to sense check the quantitative feedback. All data was anonymised at source.

2.4. Ethical considerations

Ethical approval for the project was not required according to the Health Research Authority Research Ethics Committee decision tool [16], and confirmed on consultation with the local Research Governance lead. This was because the study responses were anonymous and we did not collect any personal or sensitive identifiable data of respondents. Respondents contributed based on their professional roles.

3. Results

A total of 90 individuals responded to the survey. This included 37 identifying as Planners, 34 as PHP and 27 as IA Practitioners. 64% (58) were aged >36 and 40% (36) has been working in an area where HIAs formed part of their work >5 years. 68% (61) worked in a Local Authority while 23% (21) worked in the private sector. Survey respondents worked in diverse areas across England, with the three highest being; 20% in Northwest England, 14% in Southeast, and 14% in London. Despite all respondents having some involvement in HIAs, 76% (68) reported having never received any formal training in HIAs.

3.1. Public Health Professionals (PHP)

34 survey respondents reported working as a PHP. 15% (5) were Directors of Public Health or Consultants while 56% (19) were programme leads. The most common role for PHP was reviewing HIAs for comment as a stakeholder, though roles did vary (Fig. 1A). Overall, training provision for PHP in reviewing spatial planning HIAs was found to be very limited, with 65% reporting that they had received no formal HIA training.

As shown in Fig. 2A, the 5 top areas considered to be most challenging for spatial planning HIAs included:

1) Quantification of health impacts in monetary terms
2) Quantifying impact of planning applications on health
3) Identifying planning interventions in HIA
4) Knowing how to monitor success of HIA recommendations
5) Justifying suitable budget for undertaking HIA with clients

Conversely the 3 areas that were reportedly least challenging were:

1) Identifying sources of health evidence
2) Identifying health and wellbeing issues
3) Identifying stakeholders needed

Freetext comments further expanded on the major challenges. It was noted that absence of partnership-working between PHP and Planners and a lack of awareness of the most evidence-based planning interventions made quantifying the impact of planning on health and identifying effective interventions harder.

One PHP asked "*how can we link at the earliest opportunity with Planning, developing true partnerships*" and another noted that there was a lack of awareness "*for specific interventions with highest impact, and clear links to either legislative or economic evidence required to actually make them happen*".

The variation between Local Authorities on thresholds that require HIAs to be undertaken heightened the challenge and there was a call "*to better understand monitoring … and what good looks like*" as well as "*what the future planning landscape means in terms of coding good design for local*

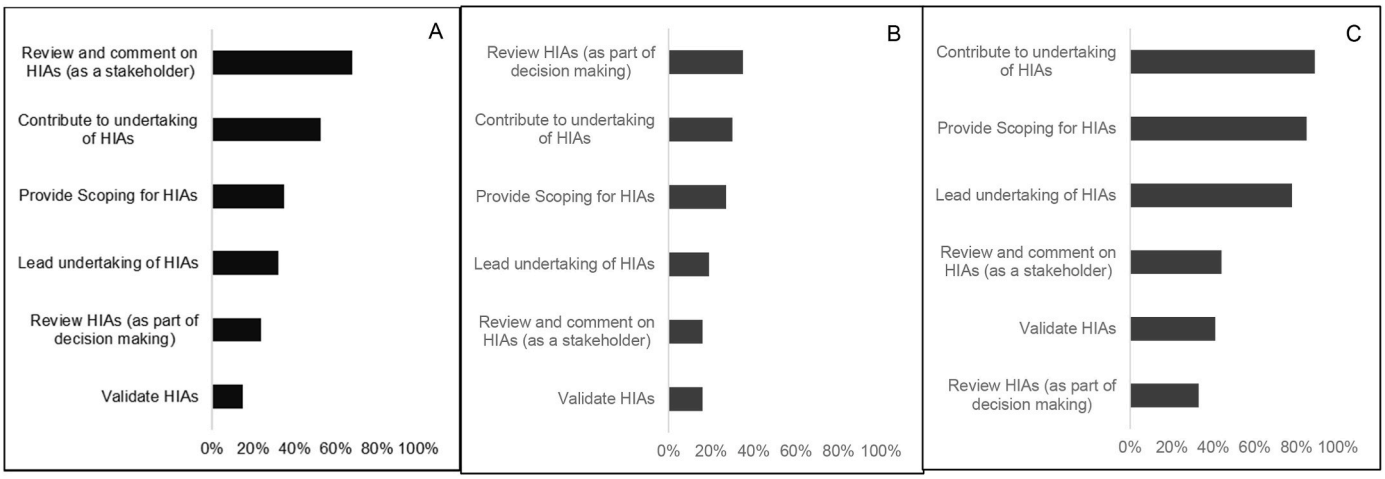

Fig. 1. Roles of Public Health professional (A), Planners (B) and Impact Assessment Practitioners (C) in Health Impact Assessments in Spatial Planning.

health need".

Addressing issues with respect to environmental hazards, musculoskeletal health and infectious diseases were listed as the top health and wellbeing areas where further knowledge and training was needed (Fig. 3A).

3.2. Planners

37 survey respondents classified themselves as Planners. 70% (26) were development management planners while 35% (12) were policy planners. Development management planners make decisions on planning applications while policy planners are responsible for developing planning policies. The most common role Planners reported was involvement with reviewing HIAs (as part of decision making), though roles varied (Fig. 1B). Training provision for Planners for spatial planning HIAs was found to be limited, with 89% reporting that they had received no formal HIA training.

As shown in Fig. 2B, the 5 most challenging areas were:

1) Quantification of health impacts in monetary terms
2) Knowing how to monitor success of HIA recommendations
3) Quantifying impact of planning applications on health
4) Justifying the need for HIA for non-EIA (Environmental Impact Assessment) developments
5) Identifying the most suitable data collection methods for a HIA

Conversely, 3 least challenging areas were:

1) Identifying recommendations,
2) Identifying health and wellbeing issues
3) Identifying stakeholders needed.

Free text comments, expanded on challenges with individual Planners noting the lack of legislative mandate to justify the need for HIAs, challenge poor quality ones and lack of resources compounding the problem."

"*There needs to be more of a statutory hook for planners to engage on HIA (else why would they) and second, there needs to be more resources within Local Authorities to deal with the issue.*"

It was also stated that *"Health and HIA should form a defined element of undergraduate planning courses."*

Planners shared a lack of awareness of public health data and local health priorities.

"*The real crux for us is what public health data should be used to inform local health profiles.*"

Addressing infectious disease, musculoskeletal health and cardiovascular health priorities were key areas where training was needed (Fig. 3B).

3.3. Impact Assessment Practitioners (IA practitioners)

27 survey respondents classified themselves as IA practitioners, 44% (12) were HIA only practitioners with 70% (19) working privately. The most common role IA practitioners reported adopting was undertaking and scoping HIAs, though roles varied significantly (Fig. 1C). Training provision for IA practitioners in spatial planning HIAs was found to be very limited, with 63% reporting that they had received no formal HIA training.

As shown in Fig. 2C, the 5 top areas considered to be always challenging with HIAs in spatial planning included:

1) Quantification of health impacts in monetary terms
2) Quantifying impact of planning applications on health
3) Knowing how to monitor success of HIA recommendations
4) Determining what triggers should require that HIAs be considered
5) Identifying planning interventions in HIA

Conversely the 3 areas where there was least challenge were:

1) Identifying recommendation
2) Identifying health and wellbeing issues
3) Identifying stakeholder needed

Free text comments further expanded on these challenges around measuring impact of planning on health, with individuals citing a *"need for a consistent methodology"* in HIAs and the need for HIAs to be proportional to planning application size. The lack of legislative mandate for HIAs made it harder to identify reasonable *"thresholds for HIAs to be considered"* and made justifying their completion to developers more difficult. Training was also requested on accessing public health data, identifying high-impact interventions and monitoring recommendations.

"*having a strong evidence base of interventions that work would help. in changing perception of it being a "woolly topic"*"

Addressing issues with respect to musculoskeletal health, infectious diseases and mental health and wellbeing were listed as areas where further training was needed (Fig. 3C).

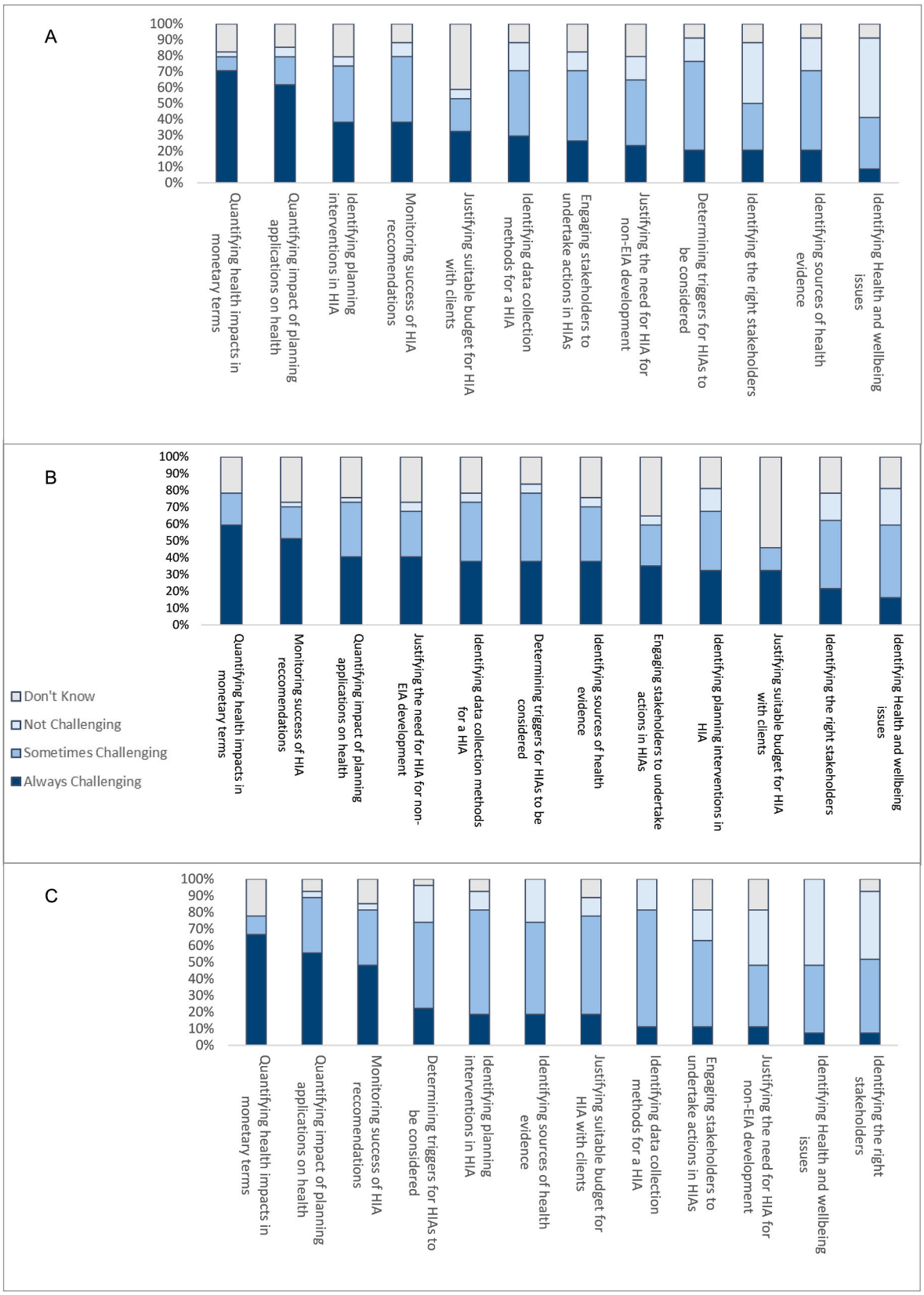

Fig. 2. Challenging issues for Public Health Professionals (A), Planners (B) and Impact Assessment Practitioners (C) involved in Health Impact Assessments.

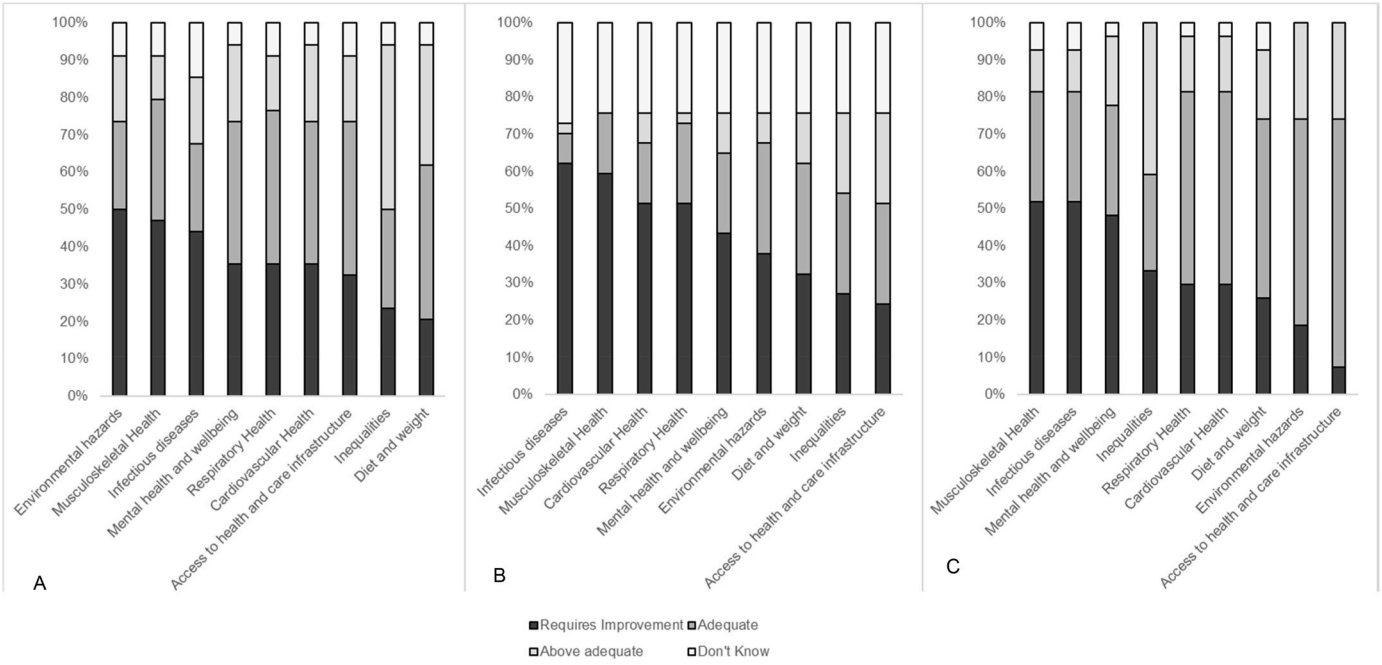

Fig. 3. Knowledge of health and wellbeing areas for Public Health Professionals (A), Planners (B) and Impact Assessment Practitioners (C).

4. Discussion

4.1. Main findings

76% (68) of 90 respondents from 3 professional groups surveyed: PHP, Planners and IA Practitioners reported never having received any training in HIAs. Quantifying impact of planning on health especially in monetary terms and monitoring HIA recommendations were among the 5 most challenging areas for all professions. Musculoskeletal health and infectious disease were specific health and wellbeing areas where professionals welcomed further training. Planners requested training: to help justify the need for HIAs given the lack of a legislative mandate; on data collection for HIAs; and to identify local public health priorities. PHP expressed a need for training to: help identify high-impact interventions; work more collaboratively with Planners; and justify budgets for HIAs. While IA Practitioners expressed uncertainty about triggers needed to undertake HIAs (citing that the scale of HIAs should be proportional to project scope), identifying planning interventions and robust methodological approaches in HIA.

4.2. Comparison with literature

4.2.1. Economic evaluation

Evaluating the impact of planning on health especially in monetary terms was cited as the highest training need for all professionals. This emphasises the challenge that both those undertaking and reviewing HIAs face, when trying to make recommendations to improve or mitigate against harm to health, without an economic argument to support their case to developers and wider stakeholders. Making the economic case is difficult, given the complex causal pathways from planning interventions to preventing ill health, but it is an area of active research [17]. More recently, there is a focus on whether Social Return on Investment (SROI) methodologies can be employed in HIAs to better monetise the social value and benefits conferred by HIAs [18]. Given monetary gains are not immediate, there is a need to embrace long-term strategic health and planning considerations with mindset of long-term economic gains.

4.2.2. Monitoring recommendations

Monitoring the implementation of HIA recommendations is one of the most crucial steps, but often undervalued or under-resourced meaning the true impact of a HIA is not evaluated [19]. A more systematic approach to monitoring plans as well as adequate allocation of funding, and greater accountability are key to raising the profile of HIAs [19].

4.2.3. Collaborative working

Despite multiple common training needs across the professional groups and collective recognition of the need to work collaboratively, the lack of wider awareness of local health priorities highlights a disconnect remains. This may reflect their diverse professional backgrounds, competing organisational priorities and the public-private sector divide. One contributor to this divide is the language used to consider public health which Planners in particular, may be less familiar with. The "Healthy New Towns Programme" has tried to create a *culture shift* and make health language more accessible to support planning decisions [14,20]. The Programme highlighted how this could be achieved for both small and larger spatial planning projects through simple considerations such as; prioritising means for active transport; transport access to key health and community services and areas of employment; having accessible green spaces that are maintained; and prevention of over-concentration of hot-food takeaways [14]. This need for a *culture shift* and strengthening of the planning-public health partnership in particular, has been previously reported [15].

4.2.4. Identifying health data and priorities

The challenge cited by Planners and IA Practitioners of identifying local health data could be readily addressed. PHP have the opportunity to raise awareness of health priorities through local health and wellbeing strategies as well as indicators from Public Health Outcomes Framework through local HIA policies [7].

With respect to health and wellbeing, OHID (Office for Health Improvement and Disparities) (formerly Public Health England PHE) has identified a range of topics that could be included in an HIA [7], and respondents noted musculoskeletal health, mental health, infectious disease and cardiovascular health were most challenging. Another survey of 156 HIAs, showed that 73% included mental health at scoping

stage, but just 38% of those HIAs measured mental health problems at baseline [21]. This is despite an extensive body of research that demonstrates the potential for the built and natural environment to impact mental wellbeing [22]. Mental health considerations are arguably more challenging as they require greater community engagement to identify the problems, and greater follow-up ensure any mitigation is effective [23].

Considerations around infectious disease in planning is an emerging topic, following the devastating impact of the COVID-19 pandemic which highlighted how those without access to greenspace; safe transport, and secure and quality housing have been disproportionately impacted [2,24]. Addressing these aspects, would also offer secondary benefits to musculoskeletal and wider health. PHE* have produced recent guidance on evidence-based planning interventions and their impact on wider determinants and health [3,7,25].

4.2.5. Practical barriers

Despite availability of considerable guidance [7,26–28], there remains multiple practical barriers to undertaking high-quality HIAs in spatial planning in England. This is linked to both a lack of legislation mandating HIAs to be undertaken alongside a lack of workforce training. By comparison, in Wales, there is a legal requirement under the Public Health (Wales) Act 2017 for public bodies to carry out HIAs. While there is a clear need in the long-term for public health bodies to ensure that the national planning system supports improved health and wellbeing – with HIA being one of a range of tools and policies. In the short-term, an option for Local Authorities is to develop their own local HIA policy as advised in recent PHE* guidance [7]. Such local policies can help clarify thresholds for HIAs, justify need for HIAs to developers, highlight local health priorities, as well as identify plans for upskilling local workforce and tackling the barriers we have highlighted here. However, less than a third of Local Authorities have such policies in place [9]. With emerging health and social care reforms and creation of Integrated Care Systems alongside a greater government and NHS mandate for population health [12,13], this forthcoming period may represent an opportune time for greater development of local HIA policies with respect to spatial planning to allow better consideration of "*health and environment*".

4.2.6. Recommendations

To support both short- and long-term work, based on our findings we recommend that HIA training provision be increased and both a general practical syllabus and a more tailored one to specific professionals and areas depending on local needs is considered. The findings and self-identified learning needs from this survey must be combined with existing literature on best practice on HIA in spatial planning to devise suitable training syllabi [3,7,26,28,29]. The general syllabus may cover core aspects of HIAs such as quantifying impacts of planning on health especially in monetary terms and monitoring the success of HIA recommendations and be sufficient to upskill the workforce to a foundation level. Additional training could then focus on local priorities, such as identifying thresholds to undertake HIAs or specific health and wellbeing topics. In the long-term, the general syllabus on HIAs should be considered a foundational part of the curriculum for professional training for all these professions.

4.3. What is already known on this topic

HIAs can help shape the built and natural environment, influence wider determinants of health and reduce inequalities [7]. Despite this, HIAs are under-utilised and often of poor quality. This is due to the absence of a legislative mandate that requires their completion in planning [2], and adequate workforce training for Planners, PHP and IA Practitioners. [15].

4.4. What this study adds

This study is the first aiming to identify training needs for HIAs in spatial planning for three professional groups most involved in HIAs, to determine how they may be upskilled. Though some needs were common, some were profession-specific, hence there is scope both for a general practical syllabus and a more tailored one to specific professionals and areas depending on local needs. The general syllabus would cover core aspects of HIAs such as quantifying impact of planning on health especially in monetary terms and monitoring the success of HIA recommendations, while a more tailored package could help identify thresholds to undertake HIAs or address specific health and wellbeing topics.

4.5. Limitations of this study

Despite widespread circulation, survey responses were modest, though this remains the only training needs assessment done with respect to HIA in spatial planning with participants from these three professional groups. As such, these responses give an overview of the current landscape highlighting problem areas rather than a complete representative view. Equally, free text comments were not extensive enough to undertake a complete thematic analysis, however they were included in supportive analysis to shed further light on challenges raised. Finally, each area of learning identified, for instance support with stakeholder engagement, lends itself to further interrogation e.g. community engagement vs corporate engagement, Nevertheless, our intention was to provide a comprehensive overview of the breadth rather than depth of training need, that could be usefully combined with existing best practice to develop a suitable syllabus for professionals.

Funding

No funding was received.

Participant consent

Obtained through patient consent on questionnaire. All survey responses anonymised at source.

Competing interests

None to declare.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.puhip.2022.100268.

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