

Using lay knowledge to transform understanding of links between the built environment and health

The Issue

'Lay knowledge' - that is knowledge and understanding held by lay public/s based on their subjective experience - has attained new prominence as a form of evidence for public health in the UK during recent decades. Collecting and sharing lay knowledge can illuminate the social determinants - that is the conditions in which people are born, grow, live, work, play and age - as well as structural processes which impact on health and lead to health inequalities. While it has traditionally been overlooked, lay knowledge can be claimed as an important source of empirical evidence, which enables more holistic understanding. Lay knowledge can be collected in the form of qualitative research interviews and focus group discussions or through visual data such as photography or video, or participatory mapping. It can also be mobilised within research co-production as part of a wider imperative to work closely with people experiencing inequality in order to develop informed solutions.

We want to find ways to apply lay knowledge in the urban development system in order to achieve some of TRUUD's key aims:

- Increasing understanding amongst decision-makers about the links between the built environment and health, and the real-life challenges posed by health inequalities and;
- Working with the public to bring their lived experience closer to decision-makers.



Our exploration of different ways in which lay knowledge about the links between the built environment and health can be applied in urban development has taken us down several pathways. Our review of how digital tools are used for public engagement in urban development identified how lived experience might be incorporated more meaningfully within current approaches. We have also investigated how lived experience can be combined with other forms of evidence (such as statistics about health outcomes and associated costs), to transform understanding and influence a shift towards healthier decision-making.

Our response



University consortium



















What we know so far

Examples of where lay knowledge can shed new light on connections between the spaces and places where people live and their health were uncovered by an initial literature review.

These include the practical and psychological stresses of living in poorly-designed high-rise accommodation complexes, the impacts of neighbourhood design on noise pollution at household level, and the impacts on children of living in damp accommodation. Impacts are often multiple, negatively affecting physical and mental health, and the sharing of personal experience revealed health outcomes which might never have been predicted ('unintended consequences'). For example, the health impacts on different household members due to changing domestic sleeping arrangements as a result of noise, and the distress of stigmatization experienced by children when going to school with damp-smelling clothing. Such impacts have a knock-on effect on individuals and families, with wider associated health service and societal impacts spanning both the immediate and longer term. Case studies exist of lay knowledge about the health impacts of poorly designed neighbourhoods being used as part of Health Impact Assessments (HIAs) for housing re-developments, influencing decision-makers' understanding and subsequent behaviour.

Lay knowledge can therefore be claimed as an important albeit often unrecognised and undervalued - source of empirical evidence in and of itself. In certain scenarios the knowledge elicited has been seen to not only engage decision-makers politically, intellectually and emotionally but create new 'spaces' for technical and practical-experiential knowledge to be brought together and deliberated. Our review also found that lay knowledge can potentially be used to enhance the explanatory power of statistical data by combining qualitative and quantitative evidence. This was confirmed by findings from TRUUD's Stage 1 research where many of the decision-makers interviewed highlighted (i) the value of personal narratives explaining the consequences of urban development (although these are not currently included systematically as evidence); and (ii) the potential for such qualitative material to be included within the evidence 'mix' currently employed in decision-making.

Next steps

A set of short films will present first-hand narratives of the different ways urban built environments negatively impact families' physical and mental health. These films, chosen in response to evidence gathered through the TRUUD Health Appraisal of Urban Systems (HAUS) model, are focused on three areas - noise pollution, damp and mental health - and include both interviews and statistical evidence. The films will be tested through various TRUUD interventions to appraise the potential for this method of evidence-sharing to transform the understanding and behaviour of decision-makers working in different areas in the urban development system. These include those working in national and local government as well as those in the private sector. We are also investigating ways in which lived experience can be used in tandem with other evidence as part of problem-solving deliberations during early-stage public engagement for potentially polarizing health-promoting initiatives such as 'low traffic neighbourhoods'.

About Truud

'Tackling the Root causes Upstream of Unhealthy Urban Development' (TRUUD) is a 5-year, £6.7m research project that aims to design policy interventions to support the development of healthier urban environments. Our research seeks to promote a fundamental shift in thinking about how to prioritise healthy urban development. We are funded by the UK Prevention Research Partnership.

Contact the authors

This briefing is based in part on a Lay Knowledge Literature Summary by Dr Jo White at the University of the West of England.