

Health impact assessment in the UK planning system: the possibilities and limits of community engagement

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SUMMARY

This paper explores the use of health impact assessment (HIA) as a means of facilitating community engagement in spatial planning. The paper discusses the background to the development of HIA as a tool for assessing the likely impact of policies and wider changes on health with a view to building those into planning and decision-making, and describes the evolution of HIA into more participatory forms. It then goes on to describe a case-study of plans for a waste incinerator in an inner-city area in the UK, where HIA was used in response to community concerns about the development as a means of building in the views of local people to the decision-making

around the plan. We describe in detail how the HIA was conducted and additional research undertaken within a timescale set by the planning processes. We discuss the difficulties involved in conducting any kind of research-based HIA so rapidly and in a situation of multiple, competing stakeholder interests. We argue that although the HIA failed to influence the final decisions in this particular instance it does, nonetheless, provide a model for how to create 'knowledge spaces' in which different perspectives and information can be brought around the table to create more democratic approaches to planning for waste.

Key words: HIA; planning; communities

BACKGROUND

In this paper, we use a case study in the UK of a community's attempt to use a health impact assessment (HIA) to voice their concerns about the siting of an energy-from-waste plant, to highlight structural barriers to community involvement inherent in the planning process. HIA is often reported as being both a mechanism for informing decisions about the potential health impact of a proposal as well as a means of engaging the public in decisions that may affect them (Elliott and Williams, 2004). Spatial

planning has been seen as one area in which health assessments of different kinds need to be improved (Rao et al., 2007) and HIA offers a potential means of ensuring that health, as understood by scientific experts, professionals and the people whose lives are affected, is considered in the planning process. We argue that if HIA is to be used as an effective and credible tool for planners, public health professionals and communities then its role and purpose needs to be recognized in the planning process itself. In the meantime those involved in HIA need to be canny in identifying the loopholes that the

developers themselves may use to put commercial interests before health and well-being.

Impact assessment first emerged in the field of environmental hazards, notably in the USA, where the National Environmental Policy Act of 1969 provided the legislative framework for the US [Environmental Protection Agency](#) (EPA), set up in 1970. During the 1970s concern over the environmental impact of large engineering projects in developing countries became widespread and organizations such as the World Bank began to insist that such projects were preceded by an assessment of how natural and physical environments were likely to be affected. Such projects were also often associated with the massive disruption of human communities, and parallel disciplines of ‘environmental impact assessment’ (EIA) and ‘social impact assessment’ (SIA) developed ([Kemmm and Parry, 2004a](#)). HIA has evolved from this as a process of generating information, informing policy development and communicating risk relating specifically to possible effects on health, defined narrowly as specific diseases or more broadly as human well-being. These different slants on impact assessment—environmental, social and health—share common ground, and in many ways it is difficult to envisage what one might mean that also does not take account of the other two.

There are numerous definitions of HIA, but most follow the [World Health Organisation’s](#), Gothenburg consensus which states that HIA is

...a combination of procedures, methods and tools by which a policy, programme or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within the population. ([ECHP, 1999](#), p. 4)

This tool-box approach is embodied in the various guidelines available for undertaking HIAs ([Scott-Samuel et al., 2001](#); [WHIASU, 2004](#)). The purposes of HIA are first to raise awareness amongst decision-makers of the relationships between health and physical, social and economic environments; secondly, to help them identify and assess possible health effects and optimize overall outcomes of any decision taken; and thirdly to help those affected by policies to participate in policy formation and contribute to decision making ([Kemmm and Parry, 2004b](#)).

This brief history implies, but underplays, the existence of different and sometimes conflicting frameworks operating in the current practice of HIA. At risk of oversimplification, there are ‘traditionalists’, taking their lead from orthodox EIA, for whom it operates firmly and unapologetically within the frame of positivism, with scientific experts making testable predictions upon which rational decisions and policies can be developed. However, there is an increasingly strong social science presence in HIA, some of whose proponents point out, for example, ‘... that the world of decisions is actually much more complicated than any simple model of “rational decision-making” assumes’ ([Lehto, 2004](#), p. 54). This kind of perspective has led to the development of a more sociological approach:

Health impact assessment is a process through which evidence (of different kinds), interests, values and meanings are brought into dialogue between relevant stakeholders (politicians, professionals and citizens) in order imaginatively to understand and anticipate the effects of change on health and health inequalities in a given population ([Elliott et al., 2010](#)).

This definition emphasizes not only the perceptions of the actors involved, but their interpretations of events, processes and relationships, and acknowledges that interpretation depends on complex contextual factors which are expressed as forms of knowledge in particular social settings or milieux. In such an approach to HIA, community members become, in some sense, equal deliberative participants in the development of ‘civic intelligence’ ([Elliott and Williams, 2004, 2008](#)). However, HIA and other forms of impact assessment are also tied into institutional and political contexts where existing power structures may prove resistant to the kind of reflection and deliberation required of an impact assessment of this kind. Furthermore, the level and nature of participation within HIA is likely to differ depending on the processes, structures and political context in which the HIA is operating, and a blanket assumption of democratic, well-established processes within which HIA can operate would therefore be an oversimplification. This resistance may be construed conspiratorially as an attempt to undermine the debate on the health impact in question, but it can equally be seen as a reflection of the contingent and messy realities of time, space and opportunity in situations where

at least some of those involved want decisions to be taken quickly.

In this paper, we use, as a case study, a community-led HIA of a proposal to develop an energy-from-waste plant. The proposal identified a proposed site in Splott, a densely populated inner city area of Cardiff in South Wales. The HIA was supported by the Wales Health Impact Assessment Support Unit (WHIASU) (WHIASU is partnership between Cardiff University and Public Health Wales and is funded by the Welsh Government to develop the capacity for HIA in Wales. It comprises both HIA development workers, to support organizations and communities in Wales, and social science researchers.) as part of a response to the developer's planning application. The HIA was undertaken under considerable pressures of time, with only 8 weeks being available to undertake the HIA and report its findings. We believe that this case study illuminates some of the barriers to public engagement when using HIA in the context of the planning system, while also suggesting that there is potential for HIA to contribute to wider participation in public policy. It also serves as an illustration of the difficulties facing researchers/impact assessors who attempt to use an inclusive, mixed methods approach to impact assessment while operating under considerable pressures of time and stakeholder interests.

AN INNER-CITY CASE-STUDY

Splott is an electoral ward in south Cardiff to the east of the city centre, which emerged as a distinctive community during the industrialization of the area towards the end of the nineteenth century. Most of the housing stock is Victorian in origin, built during the 1880s and 1890s to house those employed in the developing nearby steel works. For a time, this was a lively working-class neighbourhood. However, the later twentieth century was a difficult time for manufacturing across Wales, and the community which had previously thrived on the concentration of industry in the area became badly affected by de-industrialization, with several thousand jobs having been lost through plant closures in the 1970s. Splott and its neighbouring communities are now skirted by business parks, coastal moorlands and some residual steel making.

Today Splott has a population of around 12 000 people and is one of the most disadvantaged wards in the city ([Welsh Index of Multiple Deprivation, 2011](#)). There are fewer people in full-time employment than other parts of the city and half of all children live in workless households. The population reflects the ethnic mix of the city, with 8% coming from minority ethnic communities, including African and South Asian groups for whom English is not their first language. The locality also has higher levels of ill health than other parts of the city (65% of people reporting their health as 'good' compared with 69% in the unitary authority boundaries of the city and 14% reporting 'not good' health, compared with 10% in the unitary authority and 12% across Wales ([Neighbourhood Statistics, 2001 Census](#)). It also suffers reputational damage with 'joke' descriptions of Splott as '... a crime infested crap hole where if your (sic) not being robbed your (sic) robbing someone' ([Urban Dictionary, 2012](#)). In spite of these statistical indicators and subsequent stigmatization, Splott is more commonly and fairly seen as '...a vibrant, multicultural area with a solid working class community ... [which] gets a bit of a bad press' ([Pini, 2011](#)).

PLANNING FOR WASTE

In February 2009, plans were submitted by a private company to develop a large £150 million waste incinerator in the area. The scale of the planned facility, processing 350 000 tonnes of waste a year, with 250 lorries a day carrying waste indicated that the plant would be handling waste from beyond Cardiff to enable it to operate at peak efficiency. According to the company, the plant would provide ~200 jobs during the construction stage and 50 jobs at the operational stage. The submission included no significant local public consultation or engagement in risk assessments beyond the letter of the planning laws of England and Wales; that is, some printed notices displayed publicly, an announcement in the local press and some leafleting.

Local community workers together with the local public health team, concerned about the potential impact of this development, contacted WHIASU asking for advice on conducting an HIA. In July 2009, the plans for the incinerator were rejected by the local authority on sustainability grounds and an appeal date was set.

Following the rejection of this first set of plans, community interest in the HIA waned as it was felt that the 'threat' of the incinerator had gone away. Later in 2009, however, a separate planning dispute between the local community and the local authority (over change of use of a retail premises) energized community members who expressed the view that the local authority was unwilling to listen and respond to community concerns. So when in February 2010 new plans for the incinerator were submitted, community workers once again contacted WHIASU seeking support to undertake an HIA. The research team supported them in the HIA which, it was believed, could be submitted to the Planning Committee for consideration in their decision making. The HIA process was undertaken as a rapid, participatory HIA but researchers also took the opportunity to use ethnographic techniques to investigate the processes and social relationships in further detail, albeit under considerable pressures of time and resources.

As was the case with the proposed Splott incinerator, such developments, are, in the main, proposed or sited in areas where health inequalities, inequity and deprivation exist. The association between socio-economic characteristics and residence in the vicinity of waste sites has been well documented in England and Wales (*Friends of the Earth*, 2004; Walker et al., 2003), with the correlation between income and deprivation with localization of solid waste and other polluting facilities, finding that facilities were disproportionately located in more deprived areas. Furthermore, the locating of incinerators in these areas usually compounds the impact of other 'undesirable' developments in the area (in the case of Splott the local steelworks) with the cumulative impact of these industrial sites causing wider concerns for local communities.

UNDERTAKING THE HIA

The very tight timescale available for the conduct of the HIA meant that a 'rapid HIA' was the most appropriate approach (Ison, 2004). The WHIASU team supporting the HIA included an HIA development worker (whose remit is to support the development of the HIA approach across Wales) and two researchers. A brief review of appropriate literature on incinerator development, air pollution, mental health and incineration, fuel poverty and waste

technology was undertaken (WHIASU, 2010) which provided evidence both for a participatory workshop and the subsequent HIA report (Harris et al., 2001). In order to broaden the evidence base, the research team also held a stakeholder workshop, a focus group and 12 one-to-one interviews. In addition, one researcher collected detailed observational data throughout the HIA process. Such data help to inform understanding the use of HIA in real-life contexts.

Participatory stakeholder workshop

The 3-h workshop was held at a local community centre in April 2010. Participants included seven local residents, a local Public Health worker, a local business representative, two Communities First (Since 2001 Communities First has been the Welsh Government's flagship programme to improve the living conditions and prospects for people in the most disadvantaged communities across Wales.) staff, a local elected representative and an official from the Environment Agency. Whilst some of the people in the room had been involved in many local protests on various issues there were others who were new to community action and none had been involved in an HIA. Once they arrived at the workshop they grouped themselves around two tables, self-selecting where they sat. Following a brief introduction to HIA and overview of the proposal, participants worked in their groups working through a checklist of the wider determinants of health (commencing with individual lifestyle issues, progressing to social and community influences on health, living and environmental conditions affecting health, access and quality of services and macroeconomic, environmental and sustainability factors), additionally identifying any particular vulnerable groups who may have been impacted upon by the proposal. Information was captured by participants on sheets of flip chart paper, collated by the development worker leading the workshop, and circulated amongst participants for comment prior to publication of the HIA report. The researcher undertaking participant observation at the workshop and focus groups took hand written notes which were then typed and discussed within the research team.

Through a systematic process of discussion about the local determinants and population groups likely to be affected, the workshop

participants identified two key areas of potential health impact: economy and environment. Economic benefits which might improve the wellbeing of the local community were thought possible with direct benefits in the form of jobs at the plant and indirect benefits following on for local business. However, some participants felt that the potential negative health impacts of the proposal would significantly outweigh any positive impacts brought about through the creation of jobs at the site. Further opportunities resulting from the generation of power at the plant were feasible, if it were possible to negotiate a 'good neighbour' agreement with the developer (Illsley, 2002). However, disadvantages were also identified in terms of the likely number and wage level of jobs at the plant and in terms of the possibility that as a result of the development, the value of property and the perception of the area might decline.

Workshop participants felt that they did not have enough information about the likely environmental impact of contemporary incineration technology or the specifics of the local development. However, they did identify a number of potential environmental issues which may bring indirect benefits to health, including the contribution that the plant could make to producing energy from non-fossil fuels, with consequent implications for sustainable development, and the pride that a well designed, good looking building could contribute. On the other hand, there could be additional pollution, affecting the whole of the area, but particularly those living closest to the plant. The need for the plant to run continuously would mean a major increase in traffic to the site and the possibility of additional noise, pollution, safety issues and congestion in the area. Secondary impacts from pollution, such as making outside play and physical activity less attractive for children and parents, and conflicts with other local policies and programmes, including the city's Healthy City status were also noted. There was also discussion about how the plant may be deemed more acceptable to people in the local area if it was to deal only with municipal waste from the city. This led to a perception that the area would be stigmatized as a dumping ground for other people's rubbish.

Discussion of potential positive and negative health impacts provided further insight into the dynamics of the groups and their feelings towards the proposed incinerator development.

Up to this point, discussion and observation had revealed that overall the group were against the proposed development, considering it to be a blot on a landscape already beset with social and economic problems. However, differences emerged following a prompt from the workshop facilitator that they needed to try and identify both positive and negative impacts. Both groups initially discussed potential positive impact (mostly around employment opportunities in the area) with the Environment Agency representative leading the discussion in Group B (an older group which included the local elected member, and Group A struggling to identify positive benefits. Both the Environment Agency representative and local elected member were treated with respect by the other members of the group, despite having differing viewpoints—the elected member being firmly against the proposed development and the Environment Agency representative being mainly in favour and offering his professional knowledge and clarification of factual details about energy from waste developments.

The group discussions around recommendations and mitigation measures initially focused around ways to halt the incinerator proposal, rather than finding ways to minimize health impacts, maximize health benefits and suggest positive changes. This may demonstrate a misguided perception by some members of the group that HIA was a protest tool to prevent the development going ahead. On the other hand, it may have been seen as a galvanising moment to form a consensus of opposition to the plant in the interests of local well being. Rather than a lack of understanding of the HIA process, they perceived political potential in co-opting the HIA process to assist them in the face of asymmetrically more powerful economic and political interests (Davoudi and Atkinson, 1999). First among the suggested recommendations was the need for increased engagement between the developer and local people; however, the role of the City council in working with other stakeholders to ensure adequate monitoring of noise, traffic and emissions and limit the visual and environmental impact of the operation of the plant was questioned, with some scepticism about the Council's role in approving the planning permission for the site. There was a clear feeling of inequality of power between the council and developer on one side, and local people on the other.

Through the workshop, strong opinions about the area in general and the proposal specifically were raised, and it was clear that the local people felt very strongly that their area had enough problems and issues without the proposed incinerator being added. Other contentious decisions (for example, over the closure of a local post office in early 2010) meant community members and their representatives felt a lack of trust in local government. This was demonstrated in comments by some members of the group about bribery and corruption between the local planners and the developer in order to ensure that the proposal went ahead. Furthermore, they felt that other agencies such as the local health board and Environment Agency Wales (EAW) were unable (through lack of funding) or unwilling to represent their interests.

A potential reduction in fuel poverty, through local use of power produced by the plant was regarded as one of the strongest benefits that stakeholders hoped, at that stage, was still on offer. A strong sense of pride in the community was evident throughout the workshop, and local residents in particular voiced concerns about 'outsiders' such as developers and business owners who were not resident in the area coming in and operating without care or concern for what would be of greatest benefit to the community.

Focus group and interviews

Following the workshop, 2 focus groups and 12 individual interviews were planned with local people identified by a local community worker who had been involved in the HIA. These were conducted by the HIA development worker and one of the researchers. The interviews were with local people at a play group and at local allotments and were all audio recorded and transcribed. These were semi-structured, brief and opportunistic with the researchers working with the community workers to identify and attend events where local people would be in attendance, and interviews being conducted on the day with people who happened to be present at the locations. One focus group was conducted at a local primary school, organized through the community staff and led by the WHIASU researchers whereas the second planned focus group at the local traveller site did not go ahead because of difficulties in

gaining access under such pressures of time. Observational data were collected at the primary school focus group, but not at individual interviews. Both focus groups were recorded and partially transcribed. The primary school focus group included female Somali and Vietnamese participants. One of the Somali women acted as an informal translator and interpreter for the researchers and the others in the group. Both focus groups were led by the researcher, and discussion was informally framed, using a topic guide devised by the research team around potential positive and negative health impacts that the group felt would occur if the proposed incinerator development were to go ahead.

Apart from the Somali and Vietnamese participants, older participants who were grandparents of children in the school, a teacher, head teacher and receptionist took part. Although the opportunistic and unplanned nature of the data collection created problems in the quality, particularly, the clarity of the data, one benefit was that it included the views of groups of people not represented at the stakeholder workshop and are difficult to access unless specifically targeted. Interviews highlighted some of their specific concerns (particularly relating to engagement and language) within the HIA.

Three themes emerged very clearly from the interviews and discussion: lack of knowledge of the development; a feeling that this was just one of many undesirable developments that had been put into the area, giving an impression that the City did not care about residents in the area; and that the development of an incinerator in their community represented just one more way in which the area was disadvantaged. As one young mother said: 'I'm not against it like, but why should it be here? [this area] again... it's just a dumping ground'.

They also talked about how existing factory emissions polluted their homes: 'Especially in the summer, like now – you can't even open your windows or put your washing out' (Play Centre) 'With all the dust and that... I don't think I agree with it. We got enough pollution as it is we don't need any more... you don't want to take your kids out. With all the smoke and the dust in the air and that you feel more protective of them' (Play Centre). Within the school group the Vietnamese participant seemed very upset by the discussion and began talking about dioxins and the Vietnam War,

evidently fearful about the potential hazards of the plant. Concerns were further expressed about the cumulative effects with the existing steelworks, highlighting issues of mistrust within the area: 'We have already got the steelworks; you should see what comes out of the chimneys there, it's shocking. Even at night, I'm sure they put more out at night...' (Parent, Primary School).

Both interview and focus group participants spoke with resignation about the planning process, insisting that they had not been consulted about the development. Materials had not been translated into community languages, despite the multicultural nature of the area. One of the Somali women, translated by another parent, asked: 'Don't we count?' This feeling of deliberate exclusion from the process was also felt by another parent who had heard about the development but who had been unable to attend the consultation meetings as: 'they (the developers) always set the meetings for inconvenient times when people are at work'. Participants expressed anger at the lack of engagement and how consultation had taken place: 'There hasn't been much publicity about it, they kept it low key, *very* low key. Probably they would have had more backlash if they had advertised it' (Parent, Primary School), with another parent angrily asking: 'How have they let people know this was going to happen? I want to know! I only found out in the staff meeting this morning... 2 years ago this was (the consultation materials were put out) I haven't seen one!' (Teacher at a Primary School).

With regard to the potential health impacts of the incinerator, the focus was on economic and environmental determinants. The likely economic impact, although small, was thought to be positive. As a disadvantaged area, any increase in local employment was welcomed: 'If it brings jobs, that's cool but I don't really know what it is (Allotments); but others thought that it didn't fulfil the needs of the area: 'We need more jobs in the local area, everyone needs jobs – but we don't need that. Build something else, build something that don't pollute' (Play Centre). There was a feeling from some within the school discussion group that the jobs that would be provided by the incinerator, though needed in the area, were not worth the negative impacts of having another hazard on their doorstep.

The lasting impression was that people felt uninformed about the proposal: 'What is the

evidence on health? Does it release a lot of smoke? I don't know what the impact is' (Play Centre).

THE HIA AND THE PLANNING PROCESS

The developer's activities, and hence the opportunities for wider public consultation in Splott, need to be seen in the broader context of the evolving waste market in South Wales. Here, as elsewhere in the UK, citizens were largely excluded from meaningful contributions to 'upstream' planning considerations such as the selection of sites and waste technologies, and local residents only have a minimal impact upon 'downstream' considerations through the various impact assessments (Wynne, 2002; Petts, 2004; Chadderton et al., 2008). Within such a bureaucratic and expert-led frame, where low levels of public participation via the planning system have long been the norm (Petts, 1992) the most effective entry points for boosting decision influence in Splott by way of HIA proved difficult for the WHIASU team and local residents, public health and community groups to pin down. Arguments for not involving citizens in strategic and 'upstream' planning decisions are usually on the basis of costs and efficiency which trump considerations about participation, democracy and local empowerment. In the words of the Welsh Government's waste team:

Difficult decisions will be required about, e.g. the location of disposal and treatment sites. The parties involved clearly need time and space to think and consider the options available in private before embarking on public consultation. Failure to do so could lead to circumstances which would unnecessarily delay and substantially increase the costs of the exercise... if [potential] sites are published at the early stage there will be inevitable public concern, lobbying, requests for information, adverse effect on local property markets etc. all of which will need to be handled adding to the cost and time taken over the project (WAG, 2008, 1).

In this case study, potential opportunities for more democratic forms of governance were lost when a failure to find a publicly owned site for the development opened contract bids to private firms. Public sector upstream evaluations of the most appropriate technologies and siting considerations were thus tempered by

private sector judgements of what the market would bear. However, it could also be argued that the progressive withdrawal of local authorities from waste management in favour of private waste companies is a marriage of political as well as financial convenience as public sensitivities toward incineration could be dealt with at arm's length.

Opportunities for local residents to raise objections as well as potentially contributing positively to plans through the HIA were also hindered by the company's nimble use of the planning system. Whilst the company's appeal against the decision was set for July 2010, revised proposals had been submitted and were to be reviewed in June, although no precise date was set. If approved, this would negate the need for the appeal hearing, arguably eliminating the opportunity for a wider range of evidence about the plant's environmental impacts to be considered. The company's twin-track approach meant that the WHIASU team undertaking the HIA in Splott in the spring of 2010 had to be prepared for all the different eventualities by getting data and analysis presented to decision-makers at one or both venues.

There was uncertainty among the team as well as among the community workers in Splott about the actual dates for submission of the team's HIA report to both the Planning Committee in June and the appeal to the Planning Inspectorate (Wales) in July. In the event, the Planning Committee decision was taken on 9 June to approve the energy-from-waste plant on the basis of its revised second set of development plans. An interim HIA report had been made available to the Committee by the team and the community workers in late May. WHIASU team members and local community workers were assured at the time by the Council's planning officers that the interim report's contents would be circulated beforehand and discussed on the day by councillors on the Planning Committee. But on 9 June, the interim HIA report was actively not permitted to be considered in evidence at the meeting. A member of a community regeneration organization attended the meeting and a local councillor was given time to speak about the lack of meaningful consultation with the local community. He also described how the HIA report was developed and why councillors on the Committee needed to be aware of its initial findings with regard to the potential health risks

of locating an incinerator in such a deprived part of the city.

Later, when queried by the WHIASU team, the Committee cited its own bureaucratic procedures in terms of not being able to consider such a late submission, contradicting the advice the team had been given in May by the Council's planning officers. Crucially, the Committee's decision to approve the development then forced the cancellation of the Planning Inspectorate's hearing, which would have taken place a month later, and where the results of the full HIA report would have been presented amongst other evidence. This meant that on 9 June, the WHIASU team was forced to stop its work on the 'final' more complete HIA report as it would now no longer be required. The Environment Agency Wales (EAW) consulted with public stakeholders over the summer of 2010 and granted the company an operating licence in November.

In terms of the bigger waste management picture in South Wales as a whole there have been some consultations with the public and a shortlist of health-related literature is offered for news editors to peruse including the use of the term 'the perceived health effects of waste incineration'. Perhaps then in attempting to understand the difficulties thrown up by the planning system for the local community and the WHIASU team, the most pernicious problem is the shared bureaucratic framing of downstream risk evaluations between developers and regulators (which are not shared by those concerned about potential health risks). By minimally engaging with the public, qualitative data on the potential experience of living with environmental hazards such as the noise, vibration and pollution associated with HGV movements never percolates up through the planning system's predominantly quantitative risk-based assessments.

In addition to the events outlined above, and partly because of these, WHIASU support was brought in at a very late stage in the planning cycle for the company's second set of plans. Conveying the team's analysis of the community's views on the potential future health risks of the development and the community's creative and positive responses to mitigating such risks was always going to be difficult. Despite this, the planning system in England and Wales already has significant problems effectively representing those who have neither political

power nor resources (Davoudi and Atkinson, 1999; Greed, 2000; Doak and Parker, 2005), and the existing processes suggest that the same lack of decision influence might well have been arrived at even if this HIA had had a year or more to prepare.

DISCUSSION

We have argued that HIAs are an important tool and process for assessing the health risks of industrial developments in a way which allows for the involvement of citizens and includes consideration of multiple points of view and forms of knowledge. In this particular instance, the HIA was undertaken following a request from Communities First staff and the local public health team, but was not commissioned by the planning authorities and remained outside the formal planning process, and this meant that it was not possible to submit HIA evidence at points in time that fitted with the local planning and regulatory frameworks. The potential for influencing decisions was, therefore, significantly reduced and, as highlighted above, efforts to anticipate the company's twin-track approach to getting its plans approved, failed. For the company, this approach appeared to be a way to greatly increase its chances of winning the business and not come away empty-handed. This case study therefore illustrates both the possibility of HIA to contribute to evidence-informed decision making within the planning arena (and thus as a means of public health improvement), but also how the political structure of the UK planning system currently works against the consideration of potential health and wellbeing impacts of contested developments such as incinerators.

One successful example of resistance to an inner-city incinerator in Newcastle in England, in an area similar to that of Splott in Cardiff, but taking place over a much longer time-scale, demonstrated the importance of communities getting alongside the Council and being part of the process, while remaining alert to political shenanigans (Dodds and Hopwood, 2006). Local government has the powers to exclude or include critical local voices through the construction of its procedures, and it could be argued in the case of Splott that the rationing of the time available was one way in which local people were

effectively excluded, and allowed the local council to retreat into bureaucratic proceduralism. Although the consultation process may have met the statutory requirements, it failed to engage significant parts of the local community, including people whose first language was neither English nor Welsh. Whilst the research team did not encounter any issues with recruiting local people to participate in the stakeholder workshop (possibly due to the utilization of local contacts in order to invite participants), a theme that ran through aspects of the HIA was that, as a deprived community, the people of Splott felt that their voices were frequently ignored by the local authority, compounding feelings of powerlessness and apathy towards developments such as the proposed incinerator.

The influence on decisions is hard to assess, but Burton (2004) offers a possible approach. He focuses on the importance of clarity in the relationship between the decision-makers and the participants. HIA could provide such clarity, providing a structure within which a 'conversation' can take place between the state and citizens. It is interesting that while they opposed the development, workshop participants also considered possible mitigation measures that could minimize negative health impacts and that first among these was the need for increased engagement between the developer and local people, in other words a desire for an ongoing conversation, as we have indicated in our analysis. The differences in the Council's view of the process, and residents' expressed experience of life in the area raises the issue of so-called 'critical trust' (Pidgeon et al., 2003, 2007; Poortinga and Pidgeon, 2003) between the community and the authorities (and in this case the developer) on projects which may well be perceived in terms of the 'dread risk' of their potential future health impacts (Petts, 2004). Perceptions of an absence of trust may have been linked to the low levels of engagement with the local community from both the Council and the developer.

Ultimately, in this case the process failed because of the resilience of the procedural process and its ability to impose and sustain tight schedules. By the time many in the community learned of the project, they wanted to ask the developers and the council upstream questions such as 'why this technology?' and 'why here?' (see Wynne, 2002). But by then it

was already too late to consult on alternatives because of the procedural nature of the planning laws in England and Wales.

CONCLUSION

Despite the failure of the HIA case study outlined in this paper to influence the decision-making process relating to the planning application there were a number of positive outcomes. The local community members and representatives who were involved found the HIA process itself to be a valuable experience and have expressed their intention to use it in the future on other local development projects. It also provides a basis for ongoing communication and dialogue with the developer of the incinerator, providing input on community concerns and recommendations during the implementation and development process for the incinerator.

Further work may be needed to examine whether changes in planning policy and practice could facilitate and enable more effective community involvement and engagement within (often complex and exclusive) planning processes. The role of HIA within the planning system is still very much in evolution, and whilst not a mandatory requirement for planning applications, it may, if used in a timely way so as to have maximum influence on decision making processes, act as a means to put health and wellbeing of local people firmly on the agenda of planning departments.

HIA provides a vehicle through which participation may be facilitated and a framework through which power structures can be addressed and challenged. It has the advantage of providing an output which, if accepted, fits comfortably into bureaucratic decision-making processes. However, when participative forms of HIA are undertaken, they have the potential to capture the voices of local participants on specific decisions and enable inclusion of 'other ways of knowing' into the bureaucratic planning process.

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