

## EVIDENCE BASED PUBLIC HEALTH POLICY AND PRACTICE

# Assessing the health impact of local amenities: a qualitative study of contrasting experiences of local swimming pool and leisure provision in two areas of Glasgow

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**Study objective:** To assess the health impacts of local public swimming pool and leisure provision.

**Design:** Retrospective qualitative study using focus groups. Reports from two areas with contrasting experience of provision of a public swimming pool (opening and closure) were compared within the context of general reports about health and neighbourhood.

**Setting:** Two deprived neighbourhoods in south Glasgow.

**Participants:** Local adult residents of mixed ages, accessed through local community groups.

**Main results:** In both areas the swimming pool was reported as an important amenity that was linked to health and wellbeing. However, few residents reported regular use of the pool for physical activity. Use of the pool facility for social contact was directly linked to reports of relief of stress and isolation, and improved mental health. Pool closure was one in a series of amenity closures and area decline and was used to represent other area changes. Health impacts were strongly linked to the pool closure. The pool opening was associated with local area regeneration, similar but less prominent links between swimming pool provision and health were reported. Health benefits of social contact were diffuse and linked to other local amenities as well as the new pool facility.

**Conclusions:** Although theoretically linked to increased physical activity, the health benefits conveyed by the swimming pool may be more closely linked to the facilitation of social contact, and a supervised facility for young children. The use of qualitative work to investigate area based change provides rich contextual data to strengthen and explain the reported health impacts.

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Observational studies have consistently reported a residual health effect that is attributed to area or contextual effects.<sup>1</sup> Yet, the nature of the relation between health and place remains poorly understood. As a result there has been a call to “move beyond the macro statistical relations” with a need to link investigation of area effects and social capital.<sup>2</sup> Qualitative analysis of lay reports has been recommended as one approach to further understanding of area effects, lay perceptions, and possible mechanisms around health and place.<sup>1,3</sup> Such empirical work could be used to inform health impact assessments of area based change as well as contributing to academic understanding of health and place.

We carried out a qualitative study in two areas of south Glasgow (three miles apart) to assess the health impacts of neighbourhood swimming pool and leisure facilities. We designed the study to examine reports of contrasting experiences of a specific area change in two similar areas. Comparison of these reports was thought to enable validation of the findings in the two areas by considering separately the immediate and possibly reactionary response from the situated nature of the psycho-social and perceived health impacts of the place of swimming pool provision within a community narrative. Analysis of narratives as they are embedded within the local historical context has been recommended to provide richer and more valid interpretations.<sup>4</sup> This paper presents a comparative analysis of local residents' reports of the health and social impacts of a local, public amenity, namely a swimming pool.

The study of the health impacts of a swimming pool facility is a good example for this case study of local amenities and health. Swimming is considered to be an inclusive sport and

leisure activity,<sup>5</sup> which is less gendered or socially patterned than many other sports, for example, tennis, golf, squash,<sup>6</sup> and can be continued into old age. Swimming is now the UK's most popular physical sporting activity,<sup>5</sup> and as a form of exercise has an obvious link to health. Although an attractive facility to invest in, the expense of maintaining aging swimming pools is considerable. Recent government inquiries in the UK<sup>7,8</sup> and high profile local pool closures add to the topicality of this case study.

## METHODS

In January 2000 a modern swimming pool and leisure complex was opened in one case study area (Riverside\*), while in December 1999 in the other case study area (Parkview\*) the swimming pool was closed. The closed swimming pool was originally opened in 1927; the reason given by the local council for closure was the expense of repair and upgrading. In both areas the pool buildings are located within a residential neighbourhood and included gym and spa facilities. The two case study areas are sociodemographically similar and are classified as deprived according to the Carstairs deprivation categories (Riverside 7, Parkview 6<sup>9</sup>) In the past decade Riverside has been part of an £80 million housing led regeneration programme and the area has Social Inclusion Partnership status. While in Parkview there has been no similar investment or prioritising. The contrasting levels of area investment and amenity provision were confirmed by focus group data and contact with the local authority.

\* Area names have been changed.

Fourteen focus groups were carried out 14–18 months after the pool opening and pool closure. The aim of the focus group data collection was to gather a collective community narrative of health, neighbourhood, local amenities, and contextual change rather than individual stories. Focus groups have been recommended as a method for focusing on a specific issue and exploring shared norms and meanings that underlie the collective assessments of a situation.<sup>10</sup> Ethical approval for the study was obtained from the University of Glasgow Ethics Committee.

The sample was recruited from the area immediately around the pool, defined by the local authority ward (n=7500–8000).<sup>11</sup> A field visit was carried out by the researcher to obtain contact details of local community groups in the areas. Local community groups of mixed gender were selected to provide a range of adult age groups. Groups were written to and long term (>4 years) residents were invited to take part. These groups were theoretically sampled according to age group and sampling in Riverside was carried out to mirror the sample in Parkview (see appendix). Posters and information leaflets describing the study were enclosed with the letter of invitation. A semi-structured schedule was drawn up beginning with discussion of what the area was like to live in and what local amenities were available. Relevant newspaper headlines and local photographs were used to stimulate discussion and introduce the concept of health and place. Focus groups lasted around one hour and participants were paid £10 (£15) for participating. The issue of the swimming pool was not raised specifically by the researcher until the end of the discussion unless it had already been raised spontaneously by participants. When the issue of the pool was raised by the participants they were asked to elaborate on their use and views of the pool rather than asking explicitly whether they linked it to health. Group members were given the opportunity after the group to speak individually with the moderator and stationery was distributed to allow for additional private feedback. Focus groups were audio-recorded in toto and transcribed verbatim. The tapes were listened to immediately following the group to allow for documentation of group dynamics and subtleties of emphasis.

Data analysis examined the place of the swimming pools in the local context and was facilitated by the use of NVivo software using inductive analysis and constant comparison in accordance with the principles of grounded theory.<sup>12</sup> The focus groups and preliminary analysis were carried out sequentially to allow for interim analysis to inform subsequent data collection. Transcripts were read repeatedly and coded into themes of health, place, and person. Further themes for coding emerged during this process, for example, “amenities” and “swimming pool”. Data analysis and interpretation was carried out by HT; validation of the thematic analysis was carried out by AK.<sup>13</sup>

## FINDINGS

All seven groups approached in Parkview agreed to take part, while in Riverside 10 groups were approached; three groups declined to participate. A total of 81 residents (male;female 11:70) took part with an average of six in each group (range 2–10). Three feedback forms were received but did not change the findings of the group discussion.

The main emergent themes are presented below with quotations (m=male, f=female voices) selected to represent the data and provide clear illustrations of the complex relationships of place, person, and health reported.

## REPORTS OF NEIGHBOURHOOD AND LOCAL CONTEXT

Reports of the local neighbourhood comprised a number of key features: people, location, length of residence, public space, amenities, private space, and housing. Changes in these

key features were reported throughout the data reflecting the contrasting levels of area investment and suggesting that there was a perceived change in the fundamental nature of the neighbourhood in both areas. People or other residents were the most prominent area influence and change reported.

The dynamics of the area changes and their impacts were reported to be complex in both areas. Change in a specific area feature influencing a chain of secondary changes in seemingly unrelated area features. For example, the pool closure was reported to have an impact on perceptions of safety in public space, other amenity closures, appearance of the area, and whether people are attracted to the area.

*M1: And it wisnae that it [the pool building] brought life into that bit of the area because it was lit up, the huge big dome the whole place had an aura about it but now you go up there, you've nae light, the building is dim the weans have smashed whatever lights hanging about, it's dreary, it's frightening, that's how the shops are shutting because naebody is there at night whereas when the baths were opened at night it lit the whole area up*

*F: Aye till about 10 o'clock even, even like you could park up next to it*

*M1: People were coming backward and forwards but now there's nae reason for anybody to go up there.*

### Parkview: middle aged men and women, (P4)

## THE PLACE OF THE POOL

The pool was an important change in both areas. In Parkview the closure of the swimming pool was presented spontaneously by each group as a significant change in the area. The swimming pool building occupied a large site in the centre of the neighbourhood and its closure was reported as one of the most recent in a long line of amenity closures. Reports of the pool closure were used to emphasise the scale of the reported under-investment in the area and, as such, were symbolic of wider area decline.

*F1: When we moved in, it was a high amenity area because you had the baths, the library, the station, the buses, the steamie [laundrette] everything was handy, now it's a deprived area.*

*HT: Right, so have these things been shut down then?*

*F2: Yeah, there are several shops that have closed completely.*

*HT: Right and so what is left for you to use?*

*F1: The library [laughing]*

*F2: That's all*

*F3: And thanks to the powers that be they made this one of the biggest ghettos on the south side the day they closed the swimming baths, it was the only thing that the kids had to go and do here, there's no other amenities other than the church and any other church groups round about have to use so that was thanks to them this place became . . . it's overnight they made it into a ghetto practically.*

### Parkview: elderly women (P3)

Residents in Parkview reported having little control over the pool closure. Lack of control and choice was an issue that was reported throughout the data. The closure of the pool was used to represent the powerlessness of the residents regarding decisions made that had an impact on the local environment and their living conditions. [see above quote]

Reports of the pool were markedly less prominent in Riverside, the pool was not always mentioned spontaneously. Other changes, such as new housing and new owner occupiers were reported to be more influential in the area. There were mixed reports of the adequacy of amenities in Riverside. There had been a number of new facilities provided and small shops had been replaced with an attractive mainstream shopping area.

*HT: And you've sort of said that there've been a lot of changes in Riverside over the past few years, what have been the main changes?*

*F1: Oh, housing is one.*

F2: Sports Centre.

F1: The Sports Centre. That's made a big difference.

HT: Has it?

F1: It took quite a lot off the street. The ones that want to go off the street, it took them off the street, you know.

F2: It made a big difference.

#### Riverside: mothers of pre-school children (G7)

##### USE AND BENEFITS OF THE POOL

In both areas the pool was reported to be an important amenity; use and benefits linked to the pool were similar in both areas, although more prominent in Parkview. Links were made between health and the physical exercise facilitated by the swimming pool and the associated leisure facilities. However, there were few reports of regular use of the facility for this purpose. The pool was reported to be important for facilitating social contact with friends and neighbours across all age groups and this was directly linked to mental health; this was striking throughout the data. The health benefits of social contact were reported to be stress relief and reducing isolation.

F1: Well we used to go to the keep-fit [held in the swimming pool building] every Tuesday night and that was a women's night from 6 o'clock to 10 o'clock at night and that was stowed every night of the week so I mean that was keeping us healthy. I mean although we smoke and everything else but we were still going there, keeping healthy, keeping fit, going for a swim and then going home. It was £3.20 we paid for the whole night and we had a swim, all the aerobics and everything else that they were teaching us.

F2: You can go to any of the big health centres . . . . .

F1: But we felt better for going there at least once a week, we felt good within ourselves going down the road with a chippy [everybody laughing]

F2: You worked it off before you ate your chippy . . . . .

#### Parkview: mothers of pre-school children (P6)

Further analysis suggested that the lack of the swimming pool compounded other stresses associated with personal and area disadvantage. Mothers of young children, those living alone, and elderly people were frequently reported as especially in need of amenities like the swimming pool and its associated benefits. In particular mothers of young children reported using the pool as a stress reliever to cope with lively young children in circumstances where there was not much secure public space accessible and where housing was not spacious; and reported benefits to children of being able to participate in safe, spacious, and energetic play. Mothers also used the pool as an opportunity to escape their domestic duties and socialise with other adults.

HT: Do you think this is an exercise thing do you think the negative thing of it closing is just that folk . . .

M1: Well, everything, social

F1: For some it was social and for some it was exercise some it was a hobby. It depends on how you look at it. Some of maybe of the younger kids, you took them you sort of monitored them but it let them release a lot of tension meant like when you got home they were exhausted and right bed and you would get peace and quiet for an hour [laughs] so it let you unwind. Whereas now they are totally about your feet your are hyper and they are hyper and you are [flop sound as if exhausted/exasperated].

F2: That's another thing, they are not allowed to play in the corridors, they can't play there, you can't let them out you can't let them play in the corridor so they are stuck in the house so they get bored stiff as well.

#### Parkview: middle aged men and women (P5)

In addition to highlighting groups most vulnerable to the impacts of the pool closure, there were also reports of widespread vulnerability in the local neighbourhood compared with neighbouring areas that were more affluent and where car ownership was high.

M: I'm not trying to bring this place down because I stay in it, but I know fine well that is how it is. If you have got money you can afford to send them, that baths being shut that won't affect a lot of people in Newton\* [neighbouring affluent area to Parkview] or whatever it is, you have got a car and you have got all of these things.

F: For instance they close that [the swimming pool] and then expect you to go to Riverside which to me in a winters night I would... go along and walk all along to Riverside? You just don't do it. A car at the door yeah that helps, but she eats healthy right enough

#### Parkview: middle aged parents (male and female) (P5)

##### GENERAL AMENITY PROVISION

Although the place of the pool in Riverside was less central to reports than in Parkview, similar use and benefits of the facility were reported. However, in Riverside reports of the use and benefits of other local amenities were similar to those that were reported in Parkview as being directly linked to the pool. These benefits, social contact, stress relief of individual disadvantage and isolation, were subsequently linked to mental health. It was also reported that a range of amenities was required to meet the needs of different groups.

F1: You feel happier here then you are healthier.

F2: And some days they are dealing with all sorts of problems when they leave their front door you know, one of the biggest ones maybe their giro didn't bounce on the carpet that morning, that is stress to somebody and they will still go out in the street and talk to you. The morale is always there. Maybe they don't know any better I don't know.

F3: It's human nature like you speak to a baby like anybody that speaks to you it brings up your self esteem, its like you are a person, you are there, you are alive, whatever.

#### Riverside: middle aged women (G2)

F1: You cant just take like certain groups of people like where I'm saying about the bookies [betting shop], the older men maybe have been out of work for a long time and they've no got anywhere to go to, they're still in the house, so you know, they're just in the house. That gets them out for that wee while, to get to meet people and everything about it is getting out and meeting people. I think gives you a bit of a . . . you know, a lift.

F: Well you'll no go in to a depression so much. Especially a man living on his own. You take away the bookies [betting shop], he's no just going to keep walking about the streets and stand and blather [chat] to somebody, whereas you always blather to somebody when you are watching the racing. There's a difference there, isn't there.

#### Riverside: middle aged women (G6)

##### DISCUSSION

###### Amenities and health

The pool was a valued amenity in both areas. Benefits of the pool included the health benefits of swimming and other physical activity. However, a greater emphasis was placed on the mental health benefits associated with the secondary functions facilitated by the pool, in particular social contact. This was reported to alleviate the stress of disadvantaged living circumstances and isolation. Reported benefits were similar across all ages with parents appreciating access to a safe play area for their children. The emphasis on social contact and mental health throughout the data is an important finding. However, the nature of our sample may have introduced bias against those residents with less interest in social interaction and who choose not to be part of a community group. This may or may not be related to the gender bias in the data owing to the lack of male participants, although similar impacts were reported for men.

The contrasting prominence of the pool in these areas raises important issues and supports the rationale for our study design. Analysis of the wider context was essential to explain the contrasting meanings and weight of impact attributed to

the pool; withdrawal of an amenity giving rise to more tangible reports and impacts compared with the diffuse impacts reported around the new facility. Pool closure was symbolic of abandonment by the council and was reported to compound both area and personal disadvantage. Added to this was an implicit lack of control over the pool closure and general living circumstances. In Riverside, the place of the pool was less obvious but benefits of the pool were reported along with general benefits of other amenity provision and improved housing following area regeneration. Despite different levels of emphasis and appropriation of the use and benefits of amenities, the reported benefits of amenity provision were similar in both areas. This provides empirical support to link general amenity provision with health effects, in particular mental health.

Higher rates of participation and better amenity and service provision have been associated with a positive area effect on self reported health.<sup>14–15</sup> Structural conditions, such as amenities, have been proposed as a forerunner to social ties and networks<sup>16</sup> and these, in turn, have well documented links to health.<sup>17</sup> Reports in this study add to the knowledge of these links by providing accounts of *how* local amenities may facilitate social networks, and how changes in amenity provision might influence residents' perceived health through a contextual effect. The collective narrative provided by the focus group method also implies that people may be affected by changes in this type of neighbourhood amenity despite not participating directly in it. Reported impacts, not related to pool use, included neighbourhood aesthetics, perceptions of safety in public space as well as linking the pool closure to further area decline and closures. The positive relation between health and context, independent of participation has been reported elsewhere and suggests a collective benefit.<sup>14</sup> Although not linked to health, similar feelings of loss, abandonment and lack of control have been reported elsewhere by residents following closures of local amenities and heritage buildings.<sup>18</sup>

### Assessing health impacts of area based change

Although the methods used in this study may not resemble some readers' ideas of health impact assessment, this study has assessed community reports of the health impact of a specific intervention. Health impact assessment has been described as providing a structured framework for "taking into account the opinions and expectations of those who may be affected by a proposed policy".<sup>19</sup> In a recent review of completed health impact assessments gathering community views was a common method used with some relying exclusively on community views to inform predictions of the health impact.<sup>20</sup> Because of the retrospective nature of this study it has also been possible to investigate reported impacts rather than rely on predicted impacts. This, together with prospective evaluations of area based interventions, may provide ways of strengthening the validity of health impact assessment.<sup>20</sup>

Assessing the health impacts of interventions and policies is a commendable idea and is a logical response to the independent contextual area effects reported in epidemiological studies.<sup>1</sup> However, area interventions or changes are typically complex, having the potential for multiple and diffuse secondary impacts that in turn may influence and be influenced by unique local factors, making evaluation difficult. The methods used for this study demonstrate the potential for qualitative methods in evaluation, in particular identifying mechanisms, investigating complex local networks and providing more in depth explanations.<sup>21</sup> More specifically, they highlight the need to examine structures and practices or behaviours to provide explanations of neighbourhood effects on health.<sup>22</sup> In addition, area based interventions often evoke strong emotions; care needs to be taken if more than reactionary responses are to be assessed and separated from possible longer term impacts. Our study design enabled

us to interpret the data and the meanings attached to the pool in light of the contrasting local contexts.

### Conclusions

Findings from this study suggest that the obvious health impacts of a public swimming pool and leisure facility, such as physical activity, may not be the health impacts that have the most profound impact on the local neighbourhood. Secondary functions, in particular the facilitation of social contact, of amenities, may convey health related benefits to local residents. These findings are important given that investment in leisure facilities are regarded as a high but neglected priority by residents.<sup>23</sup>

This study has also provided a case study of the health impacts of a specific area change using lay reports. The examination of the relevant context strengthens the findings of this study and adds to the generalisability of the findings to the issue of wider amenity provision. Similar qualitative work may contribute to an improved understanding of health impacts of area and area based change and could be used to inform future health impact assessments.

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### Appendix Focus group characteristics (n=number of focus groups)

	Parkview	Riverside
Parents of pre-school children	2	2
Middle aged adults	2	2
Elderly people	3	3

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