

RESULTS



3.6 Socio-Demography

The overall majority of the study population was African Black. Looking at population group across study sites, the results showed that racial divisions associated with the Apartheid era continue to be strongly entrenched in the sites studied. As can be seen from Table 6, Hillbrow and Braamfischerville housed Black African households exclusively, and this group also constituted the majority of households in Bertrams and the informal settlement of Hospital Hill. By contrast, the majority of households in Riverlea was Coloured.

3.7 Languages Spoken

Overall, isiZulu and Afrikaans were the main languages spoken, with seSotho, seTswana, Venda and English also being spoken by sizeable proportions of the study population (see Table 6).

		Hospital Hill	Riverlea	Braamfischerville	Bertrams	Hillbrow
Main Home Languages Spoken	Primary	seSotho – 25%	Afrikaans – 80%	SeTswana – 36%	isiZulu – 34%	isiZulu – 45%
	Secondary	isiXhosa – 21%	English – 11%	isiZulu – 29%	Afrikaans – 24%	Venda – 12%
Population Group	Primary	Black African – 100%	Coloured – 91%	Black African – 100%	Black African – 71%	Black African – 77%
	Secondary	0%	Black African – 8%	0%	White – 18%	Coloured – 19%

3.8 Population Age Distribution

In Hillbrow only one fifth of households included a child under the age of five years. In Hospital Hill on the other hand, 37% of households included a young child (see Table 7).

	Hospital Hill	Riverlea	Braamfischerville	Bertrams	Hillbrow
% households with one or more children under the age of 5 years	37	27	35	29	20

3.9 Country of Origin

The proportion of non-South African households in the study sites varied from 0% in Riverlea, to 31% in Hillbrow (see Table 8). Amongst South African households, several of the study sites had attracted households from provinces other than Gauteng. In Hospital Hill for example, 19% and 14% respectively of households reported coming from the Eastern Cape and the Free State. Households from a particular province appeared to cluster in a particular site. Households originating from Limpopo for example, appeared to be concentrated in Hillbrow, while as many as 26% of Bertrams households were from KwaZulu Natal (see Table 7). In general, most of the non-Gauteng South African households appeared to originate from South Africa's poorest provinces – Eastern Cape, Limpopo, KwaZulu Natal and the North West.

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Hillbrow households had the highest levels of residential mobility, with 38% of respondents reporting that their households had lived in the current dwelling for less than one year. By contrast, all Riverlea households had lived in their current dwelling for more than one year, and 95% had lived there for more than five years.

Table 8. PLACE OF ORIGIN & RESIDENTIAL MOBILITY

		Hospital Hill	Riverlea	Braamfischerville	Bertrams	Hillbrow
% non-South African households		7	0	2	13	31
Province of Origin of South African households if not Gauteng (province in which Johannesburg is located)		Eastern Cape – 19% Free State – 14%	Eastern Cape – 6% North West – 3%	Eastern Cape – 12% North West – 7%	KwaZulu Natal – 26% Eastern Cape – 6%	Limpopo – 15% KwaZulu Natal – 14%
Period of Residence in current dwelling (years)	< 1	8	0	5	15	38
	2 to 5	30	5	20	34	34
	> 5	62	95	75	51	28

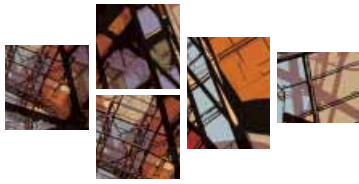
3.10 Ownership & Decision-making

Housing tenure in Hospital Hill, Riverlea and Braamfischerville took the form mainly of ownership. In Bertrams and Hillbrow on the other hand, housing was mainly being rented (see Table 9). In Hospital Hill, where expenditure on housing was lowest, more than one third of households reported that they were not paying for their housing.

In Hospital Hill and Hillbrow, dwellings were reported to be owned mainly by men, whereas in Riverlea and Braamfischerville the owners were mainly female. The distribution of decision makers in respect of sex, was similar to that of ownership (see Table 9).

TABLE 9. OWNERSHIP AND GENDER (SEX)

STUDY SITES		HOSPITAL HILL	RIVERLEA	BRAAMFISCH-ERVILLE	BERTRAMS	HILLBROW
Ownership	Owned	56	64	64	44	10
	Rented	8	16	25	47	90
	Do not pay	37	15	9	6	0
Sex of owner	Male	66	35	23	45	62
	Female	26	61	65	45	35
	Both	8	4	12	9	3
Sex of main decision-maker	Male	58	32	26	38	51
	Female	26	56	53	47	33
	Both	16	12	20	15	16



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3.11 Living Conditions & Access to Environmental Health Services

As can be seen from Table 10, dwellings in Hospital Hill were mainly of an informal nature, in Hillbrow mainly apartments, and in the remaining three sites, mainly free-standing dwellings.

The number of people living on dwelling sites ranged from 1 to 39. The average number of people on a dwelling site ranged from 4.0 in Hospital Hill to 7.7 in Bertrams. The number of households living on a single site ranged from 1 to 17. The average number of households per site ranged from 1.2 in Braamfischerville to 3.2 in Bertrams. The size of the primary household on the site ranged from 1 to 25 persons. The smallest primary households (an average of 3.6 people per household) were in Hillbrow, while the largest were in Braamfischerville (an average of 4.7 people per household) (see Table 10).

Table 10. LIVING CONDITIONS

STUDY SITES		HOSPITAL HILL	RIVERLEA	BRAAMFISCHERVILLE	BERTRAMS	HILLBROW
Type of Dwelling % of households	Formal) free-standing, semi-detached, townhouse, cluster	20	96	98	94	1
	Flat/Apartment	0	0	0	1	99
	Informal/backyard	79	3	2	1	0
	Other	1	1	0	3	0
Mean (median) number of people per site		4.0 (3) Range: 1-25	5.5 (5) range: 1-13	4.4 (4) Range: 1-13	7.7 (6) Range: 1-39	4.4 (4) range: 1-13
Mean (median) number of separate households per site		1.4 (1) Range: 1-11	1.6 (1) range: 1-6	1.2 (1) range: 1-6	3.2 (2) Range: 1-17	1.8 (1) range: 1-5
Mean (median) number of people in the primary household		4.4 (3) Range: 1-25	4.7 (4) range: 1-13	4.5 (4) Range: 1-12	4.4 (4) range: 1-10	3.6 (3) range: 1-8

3.12 Housing Conditions

Respondents were asked about the condition of the dwelling of current residence, and their responses are given in Table 11. There was evidence of degradation of dwelling units, with one quarter of respondents reporting having a major problem with leaking roofs, 15% with leaking water pipes, and 36% with cracks in walls. Around 14% reported damp problems at home, and 25% said they have a major problem with peeling interior paint. As expected, for several of the housing parameters measured, it was reported that residents in the informal settlement of Hospital Hill were worst off. Unanticipated however, was the reported extent of degradation of housing infrastructure in the relatively recently constructed housing development of Braamfischerville. For example, 45% of Braamfischerville respondents reported cracks in their walls and 18% reported leaking water pipes, which could be an indicator of poor quality housing construction. Braamfischerville also had amongst the highest proportions of respondents reporting dampness (16%)

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and fungal growth on walls (15%), which may increase the risk of respiratory ill health conditions such as asthma. The reported extent of housing degradation in Braamfischerville (constructed around 10 years ago) appeared to be similar to or worse than in the suburb of Riverlea, which was constructed more than 40 years ago.

Table 11. PROPORTION OF DWELLINGS WITH STRUCTURAL AND OTHER DEFECTS

	STUDY SITES	HOSPITAL HILL	RIVERLEA	BRAAMFISCHERVILLE	BERTRAMS	HILLBROW
% of respondents who thought ... was a major problem	Peeling paint indoors	30	28	25	25	19
	Cracks in walls	62	41	45	25	12
	Ventilation	38	23	23	7	9
	Broken windows	31	15	4	12	12
	Noise in the area	45	31	26	36	45
	Leaking indoor water pipes	10	19	16	18	12
	Dampness	24	11	16	16	8
	Fungus or mould on walls	4	13	12	15	5

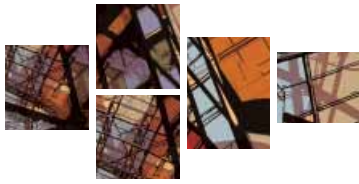
3.13 Access to Environmental Health Services

Apart from the informal settlement of Hospital Hill, most areas were well provided with indoor water supplies and indoor sanitation, and electricity was the main fuel used for cooking. The Hospital Hill community used mainly outdoor or communal water supplies and sanitation services, and paraffin for cooking (see Table 12).

While expected in Hospital Hill, there was a surprisingly low level of access to indoor hot water supplies in the established, formal settlements of Braamfischerville (6%) and Riverlea (18%), and to some extent in Bertrams (27% of households had no access to indoor hot water).

Table 12. ACCESS TO BASIC ENVIRONMENTAL HEALTH SERVICES

STUDY SITES	HOSPITAL HILL	RIVERLEA	BRAAMFISCH-ERVILLE	BERTRAMS	HILLBROW
% without access to running hot water (geyser)	99	82	94	27	7
% using mainly electricity for cooking	2	97	98	90	98



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3.14 Pests and Pesticide Use

Rats and cockroaches were reported to be most prevalent in all the study sites (see Table 13). Problems with rats were particularly prevalent in Hospital Hill, Braamfischerville and Bertrams, whereas cockroach infestations were reported most frequently in Riverlea, Bertrams and Hillbrow.

To address pest infestations, up to 46% of households (in Bertrams) were applying pesticides on a weekly or daily basis. Mean monthly expenditure on pesticides ranged from R21.00 in Hospital Hill to R43.00 in both Bertrams and Hillbrow.

STUDY SITES		HOSPITAL HILL	RIVERLEA	BRAAMFISCHERVILLE	BERTRAMS	HILLBROW
% with rat problem		69	42	66	59	26
% with cockroach problem		28	71	46	72	76
Frequency of pesticide use	Daily	6	11	5	11	6
	Weekly	22	20	28	35	17
	Monthly	41	51	49	39	47
	Intermittently	3	10	8	8	8
	Never	27	9	10	6	11
Mean monthly expenditure on pesticides (Rands)	21	31	26	43	43	

3.15 Perceptions of Neighbourhood Conditions

Perceptions of noise as a major neighbourhood problem were widespread, ranging from 26% in Braamfischerville to 45% in both Hillbrow and Hospital Hill (see Table 14), especially with respect to sources such as music being played loudly and parties late at night. In both Hospital Hill and Hillbrow as many as 45% of respondents described noise as a major neighbourhood problem. Even in the least affected area, Braamfischerville, more than one-quarter of respondents thought noise was a major neighbourhood problem.

	Hospital Hill	Riverlea	Braamfischerville	Bertrams	Hillbrow
% respondents who regard noise as a major neighbourhood problem	45	31	26	36	45

Most households (88% overall) used mainly public transport to get around – from 75% in Bertrams to 96% in both Hospital Hill and Braamfischerville (see Table 15). Levels of private vehicle ownership were low, with most people making use of public transport, mainly mini-bus taxis,

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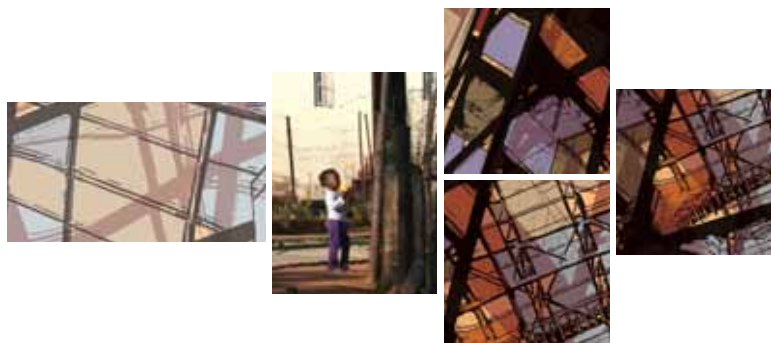


Table 15. USE OF PUBLIC TRANSPORT

	Hospital Hill	Riverlea	Braamfischerville	Bertrams	Hillbrow
% households mainly walking or using public transport to get around	96	90	96	75	80

3.16 Health Status – acute

As expected, the highest levels of acute ill health, as measured by levels of vomiting and diarrhoea using a two-week recall period, was found in Hospital Hill, where only communal environmental health services were available (see Table 16). In the remaining sites, levels of vomiting and diarrhoea appeared to be low. In Bertrams however, levels of vomiting and diarrhoeal appeared to be slightly elevated; investigations as to the cause of this should include the prevalence of HIV/AIDS.

Table 16. ACUTE ILL HEALTH CONDITIONS: TWO-WEEK RECALL PERIOD

	Hospital Hill	Riverlea	Braamfischerville	Bertrams	Hillbrow
% adults with vomiting (two week recall)	14	4	5	7	3
% adults with diarrhea (two week recall)	19	6	3	9	6

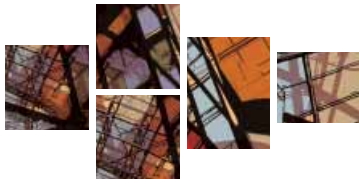
3.17 Chronic Ill Health Problems

In terms of chronic ill health, the prevalence of hypertension was reported to be particularly widespread, with asthma and diabetes also being major concerns for households. The prevalence of particular chronic ill health conditions varied from site to site (see Table 17), with Riverlea and Bertrams being worst affected in respect of asthma, diabetes, hypertension and stroke. Bertrams also had the highest reported level of obesity. The lowest levels of asthma, hypertension, stroke and obesity were found in the poorest and the wealthiest sites – Hospital Hill and Hillbrow respectively.

In Hillbrow 2% of households had suffered the death of one of its members during the past year. In the remaining sites, between 11 and 13% of households had been affected by death in the past year (see Table 17).

Table 17. PREVALENCE OF CHRONIC ILL HEALTH CONDITIONS

	Hospital Hill	Riverlea	Braamfischerville	Bertrams	Hillbrow
Asthma	3	19	7	20	2
Diabetes	8	16	4	15	2
Hypertension	11	31	16	23	5
Stroke	2	5	3	6	0
Obesity	0	4	6	10	2
% households in which a death occurred during the past year	12	13	13	11	2



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3.18 Mental Ill Health

Apart from Hillbrow, between 13% (Bertrams) and 24% (Hospital Hill) of respondents reported feeling nervous or anxious most or all of the time (see Table 18). Between 16% (Riverlea) and 23% (Braamfischerville) of respondents reported frequent problems with depression. Hospital Hill had the highest proportion (14%) of respondents who always or often felt life was not worth living and respondents from Riverlea reported the highest proportion of households (6%) in which a member had committed suicide over the past year.

Table 18. PREVALENCE OF INDICATORS OF MENTAL ILL HEALTH

		Hospital Hill	Riverlea	Braamfischerville	Bertrams	Hillbrow
% respondents who experienced the following most/all of the time	Nervousness/ anxiety	24	16	18	13	9
	Depression	21	16	23	20	6
% respondents who often/always did not feel life was worth living	14	10	10	7	0	
% households in which a member has committed suicide	2	6	5	1	0	

3.19 Experience of Violence

Violence was a major public health concern in all the study sites, but was most pressing in Hospital Hill, where, using a 1-year recall period, respondents from 28% of households reported that one or more members had been a victim of a rape, deliberate gunshot, stabbing or assault incident (see Table 19). Hillbrow households had the lowest levels of experience of violence; nevertheless 14% of households had a member who had been afflicted by violence in the past year. In Hospital Hill concern was also most widespread over increased crime during the previous year.

Notable in Riverlea was the high proportion (15%) of households that had been affected by more than one form of violence (rape, gunshot, assault or stabbing) in the past year, indicating a concentration of violence in certain households in that suburb.

Table 19. PREVALENCE OF EXPERIENCE OF VIOLENCE

	Hospital Hill	Riverlea	Braamfischerville	Bertrams	Hillbrow
% households affected by violence (intentional gunshot, stabbing, rape or beating) - 12-month recall period	28	19	17	18	14
% households affected by multiple forms of violence – 12 month recall period	9	15	8	2	1
% of respondents who think crime worsened in past year	54	33	25	57	50

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The pattern of violence varied from site to site. For example, the highest levels of rape were reported in Riverlea and Braamfischerville (8% of households in each of these sites had a member who had been raped), as was the highest levels of injury from intentional gunshot wounds. The study did not distinguish between domestic and neighbourhood violence.

Half or more than half of respondents in Hillbrow, Hospital Hill and Bertrams thought that crime in the neighbourhood had worsened over the past year.

3.20 Perceptions of the Significance of Social Concerns in the Neighbourhood

Concern over neighbourhood social issues was widespread, but particularly elevated in Hillbrow, Riverlea and Bertrams as far as drug abuse was concerned (see Table 20). Large proportions (70% to 88%) of respondents in Hillbrow, Bertrams, Riverlea and Hospital Hill thought that alcohol abuse was a major neighbourhood problem, while in Braamfischerville a relatively lower but still high proportion (51%) of respondents thought so.

Table 20. CONCERN OVER NEIGHBOURHOOD SOCIAL ISSUES

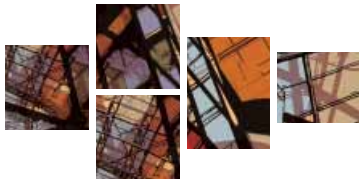
	Hospital Hill	Riverlea	Braamfischerville	Bertrams	Hillbrow
% respondents who believe that alcohol abuse is a major neighbourhood problem	70	75	51	76	88
% respondents who believe that drug abuse is a major neighbourhood problem	44	83	38	76	85

3.21 Patterns of Activity

When asked about exercise during the past three months, information from respondents showed that in all sites a lower proportion of women than men were taking exercise (Table 21). More members of households in Bertrams and Hillbrow than elsewhere were exercising, possibly because of a higher level of exercise, recreation and sporting infrastructure available in those areas.

Table 21. PARTICIPATION IN EXERCISE: MEN AND WOMEN

	Hospital Hill	Riverlea	Braamfischerville	Bertrams	Hillbrow
% households in which women have exercised during past month	8	18	13	30	27
% households in which men have exercised in past month	28	26	24	44	43
% households in which adults are participating in sport	52	49	57	40	43



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3.22 Social Cohesion

In recent decades the importance of social capital and social cohesion in health has been increasingly recognized. As can be seen in Table 22, membership of religious or faith-based groups are the dominant vehicle for social cohesion in all of the study sites. In the relatively impoverished and under-served site of Hospital Hill, a higher level of membership of political parties was observed, while more in Hillbrow than elsewhere were members of unions.

Table 22. MEMBERSHIP OF SELECTED COMMUNITY OR SOCIAL GROUPS

Does anyone in this household belong to a (% of households):	Hospital Hill	Riverlea	Braamfischerville	Bertrams	Hillbrow
Union	19	18	18	18	30
Religious group	68	84	69	79	70
Political group	25	7	14	11	8
Cultural group	16	6	14	9	12
Education group	4	5	8	8	13
Sports group	15	18	21	24	24
Non-governmental organization	4	11	9	8	4
Youth group	4	14	8	12	10
Women's group	6	11	16	14	6

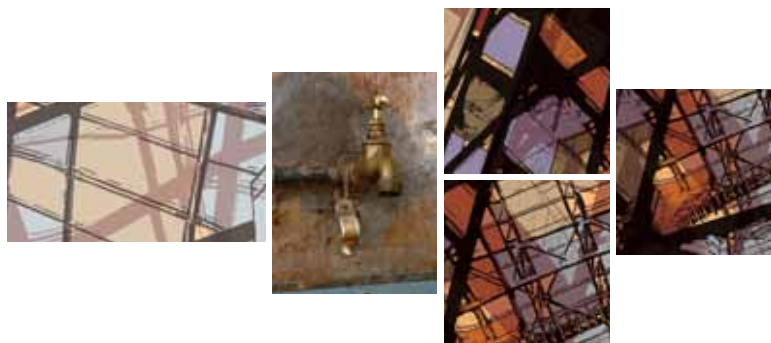
3.23 Quality of Life

Table 23 gives the results when respondents were asked to rate their quality of life. For the most part respondents in Hillbrow rated the various aspects of their quality of life highly, relative to their counterparts in Hospital Hill. An exception was in relation to their sense of community connectedness. In this regard Hillbrow respondents gave a poor overall rating, possibly associated with the relatively high proportion of households reporting that they are not South Africa in origin.

Table 23. PERCEPTIONS OF QUALITY OF LIFE (on a scale of 0 to 10, with 0 = poorest and 10 = excellent)

How satisfied are you with your:	Hospital Hill	Riverlea	Braamfischerville	Bertrams	Hillbrow
Standard of living	4.0	5.7	5.8	5.8	6.0
Health	5.3	6.7	6.5	7.1	7.5
Achievements in life	4.4	5.6	5.2	6.3	6.3
Relationships	7.9	7.6	7.8	7.5	7.6
Safety	4.9	6.8	6.7	6.1	6.4
Community connectedness	5.7	6.3	6.6	5.2	4.8
Future security	4.7	6.0	6.0	5.4	6.0
Life as a whole	6.2	6.9	6.9	6.8	7.3

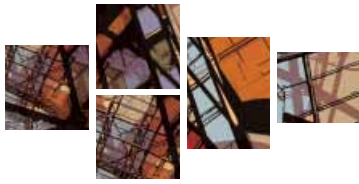
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3.24 Perceptions of Dwellings, Neighbourhood Conditions and Services

Table 24 gives a breakdown of the responses when respondents were asked to rate, on a scale of 0 to 10, their dwellings, neighbourhood and various aspects of local infrastructure and services. The information provides insight into local perceptions and a guide for local interventions.

Table 24. PERCEPTIONS OF DWELLINGS, NEIGHBOURHOOD CONDITIONS AND LOCAL SERVICES					
How would you rate your: (on a scale of 0 to 10, with 0 = poorest and 10 = excellent)	Hospital Hill	Riverlea	Braamfischerville	Bertrams	Hospital Hill
Dwelling	3.3	5.3	4.8	5.7	5.6
Neighbourhood	3.6	4.6	5.5	3.9	3.9
Schools in the neighbourhood	3.7	5.6	4.0	4.7	5.2
Local Roads	1.4	5.6	3.1	5.9	5.7
Traffic	5.2	5.5	5.3	5.8	4.3
Litter in the area	1.6	3.8	4.9	3.6	2.9
Dumping in the area	1.6	3.5	1.6	3.9	3.1
Street lighting	3.1	5.5	6.1	6.6	6.6
Open space	2.1	5.1	3.9	4.7	3.5
Play areas for children	1.1	5.5	1.2	5.9	4.6
Air quality in the area	3.3	4.0	4.5	5.9	4.1
Local police services	3.6	3.9	3.8	3.9	4.4
Health services	5.0	5.1	2.9	4.0	5.5
Refuse removal	1.6	7.7	8.2	7.3	6.9
Parks	1.8	5.7	1.8	4.9	4.7
Trees	3.9	5.9	3.9	6.2	4.0
Shopping facilities	3.1	3.0	4.9	5.2	6.1
Cinemas	0.6	0.8	0.7	2.2	5.5
Public transport	4.5	4.7	6.4	6.9	7.7



DISCUSSION



4. DISCUSSION

While the study sites described here were selected because of their perceived status as impoverished, the data presented nevertheless show high levels of income inequality across the five areas. The study has also demonstrated a high degree of heterogeneity across the study sites, in terms of language, place of origin, living conditions, health profiles and activity patterns, implying the need for tailor made health optimization and promotion strategies.

In Hospital Hill, which is provided only with communal services, a heavy burden from acute ill health problems, such as diarrhoeal diseases, remains an important health concern. Overall however, it appears that, especially in the case of the Riverlea, Braamfischerville and Bertrams study sites, the predominant health concern is from a variety of chronic ill health conditions such as diabetes, hypertension and asthma. In this regard, alongside the implementation of various reconstruction and development programmes, a health transition may be underway – with disease profiles shifting from a heavy burden from acute ill health concerns, to an increasing burden of chronic diseases. In addition, indicators of mental ill health, a neglected public health problem, is widely prevalent. The high levels of household experience of violence reported in this study is a further important public health concern. As far back as 1996 the World Health Organization declared violence a major and growing public health problem, saying that health cannot flourish in conditions of violence. (WHO 2002) With as many as 28% of households having experienced rape, gunshots, stabbing or assault in a single year prior to the day of the interview in Hospital Hill and 19% in Riverlea, community violence in these areas can only be described as pervasive, and most likely a major obstacle to good health.

The data indicate that the highly impoverished Hospital Hill community is bearing multiple burdens of disease, associated with inadequate housing and services, as well as the growing epidemic of chronic diseases predicted for developing countries, accompanied also by violence and mental ill health.

Chronic disease, obesity, inactivity, mental ill health and violence have been shown to be inter-related, and also have a strong environmental or developmental dimension. For example, high levels of neighbourhood violence is likely to result in a decline in the use of outdoor spaces and lower levels of outdoor or physical activity, leading to sedentary lifestyles and high levels of obesity, and in turn, high levels of cardiovascular diseases, diabetes and certain forms of cancer. Similarly, high levels of neighbourhood or domestic violence has been associated with poor mental health status. Poor or limited neighbourhood infrastructure, such as inadequate open space, children's play parks and sporting facilities, can have a deterrent effect on inclination to exercise, leading in turn to obesity and an escalation of downstream ill health conditions.

With the establishment of the WHO Commission on the Social Determinants of Health (CSDH), impetus has been given to the position that action to address the underlying causes of ill health is as important as the provision of health services. The chairperson of the CSDH, Professor Sir Michael Marmot, has asked “why do we keep on treating people, only to send them back to the conditions which caused their ill health in the first place.” Some in the communities described here may well fall into this category of people whose prospects for good health are threatened by inappropriate development and social conditions, that lie outside of the ambit of health departments.

DISCUSSION



Effective responses to this changing health profile, require a re-engineering of urban health departments to ensure that the services provided correspond with local health needs, for example an increased emphasis on mental health and chronic disease services, that include community outreach initiatives. A significant need for health departments to drive a broader process to put in place measures that will prevent the predicted epidemics of chronic disease and mental ill health in the African Region, as well as measures to reduce levels of violence that are already pervasive in some areas. Since the cause (and solutions) to these public health problems lie outside the ambit of the health sector, it is increasingly important that the political and developmental dimensions of public health be understood and addressed at the highest level in local and other spheres of government, and that closer relationships are forged between health departments and non-health sectors in the interests of improved public health.

In many ways the ground is fertile for action around the social dimensions of health in South Africa, where concerns around crime and violence are already a political and public priority. There is also support at the highest level for a focus on inequity and social

factors: in 2006 the President, Thabo Mbeki, acknowledged that in recent years development efforts in the country had focused on “changing the material conditions [water, sanitation, housing, electricity, telecommunications and so forth] of the lives of [South African] people”, but were lacking in terms of the social dimensions. He went on to say that “human fulfilment consists of more than access to modern services,” and appealed to South Africans to “place at the centre of our daily lives the pursuit of the goals of social cohesion and human solidarity” ([http:// www.nelsonmandela.org/](http://www.nelsonmandela.org/)). This study has shown that membership of cultural, education and youth groups, for example, is low relatively to membership of faith-based agencies.

Any efforts to address the health concerns facing communities such as Hillbrow and Bertrams will be challenged by factors highlighted in the report, such as the high levels of residential mobility, as well as the challenges inherent in working with foreign communities, whose languages and cultural practices may be different to what local service providers are accustomed to.

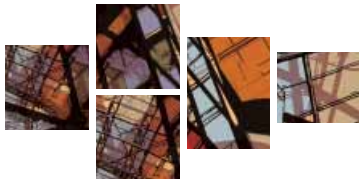
Over the past century, understanding of the determinants and promotion of health has changed dramatically, moving from a simplistic medical model, to a greater recognition of the complex nature of

the biological, environmental and social forces that impact on health. These are reflected in the key public health milestones of the last half-century:

- The Alma Ata Declaration on Primary Health Care;
- The Ottawa Charter for Health Promotion
- The Helsinki Statement on Supportive Environments for Health;
- The Healthy Cities Project;
- The Commission on the Social Determinants of Health

Given the ill health profiles determined, it is apparent that in the communities studied (and possibly similar settings elsewhere in South Africa and beyond) there is a need for a developmental or cross-sectoral approach to address the health problems revealed. It is also clear that tailor-made plans of action are needed if the complex and multiple burdens of ill health being experienced by these communities are to be addressed effectively.

The most important lesson from this study, as well as from international experience, is the need for a holistic and integrated approach to the design and development of human settlements. In particular, to ensure that disease is prevented and that health is promoted, a closer relationship needs to be forged between planning and health



REFERENCES



departments. To engage most effectively in such partnerships, health departments need to ensure access to appropriate skills and expertise, for example in terms of health impact assessments and the management of inter-sectoral relationships.

In order to respond effectively to the particular health challenges of various urban communities, it is important to develop a sound information base. The Health, Environment and Development (HEAD) study seeks to describe prevailing health status in selected sentinel sites of relative impoverishment in Johannesburg.

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