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Housing, planning and urban health: historical and current perspectives from South Africa

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Abstract. Globally, policymakers often describe informal settlements and slums in terms of health problems. In this paper we trace the way housing and planning have been linked to health concerns in the history of South Africa and we assess post-apartheid literature on the topic. We note that researchers continue to rely on a biomedical understanding of the relationship between housing, planning and health although, we argue, the links between them are tenuous. We propose the capabilities approach as a way to understand this relationship. Reframing the relationship between housing, planning and health within the capabilities approach may improve the current understanding of this link. Aim. This paper discusses the historical links between housing, planning and health in South Africa, assesses post-apartheid policy, and reviews post-apartheid literature on the relationship between housing, planning and health. Results and conclusions. We find it is assumed that the link between housing, planning and health is a biomedical concern and not a social concern. We argue that scholars thinking about this relationship should consider the opportunities embedded in the capabilities approach to understand health outside the biomedical frame.

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1. Introduction

Researchers often describe informal settlements and poor housing conditions in health-related terms. The global literature commonly refers to informal settlements or slums as unhealthy, overcrowded or illegal and emphasises that these three aspects are related (Alaazi and Aganah 2019). These public health concerns remain a prominent motivation for slum clearance programmes across the globe. This emphasis on environmental health is also evident in the UN programme 'Cities without Slums'. However, systematic reviews have found little relationship between housing, planning and health (Thomson *et al.* 2009). Huchzermeyer (2011), for one, questions the health intentions of the programme. Yet, it is not possible to simply ignore this relationship (Weiman and Oni, 2019).

South Africa's urban history, rooted in the colonial and apartheid systems, offers ample examples of how the authorities used health concerns as a motive for slum clearance and racial segregation. Parnell (1993: 471) claims that the Public Health Act (1919) and the Housing Act (1920) included town planning clauses linked to health which 'were aimed at the entrenching of urban privilege for whites' and through which 'the position of urban Africans was marginalised'. Many of these principles continued during the apartheid period. These health and racial motivations created segregation, low densities, sprawling suburbs and slum clearance and located the poor on the outskirts of cities (Dewar 1977).

Against this background, the post-apartheid government since 1994 has had to develop new housing policies and restructure race-based planning. Spatial integration, higher densities and informal settlement upgrading have replaced the historical emphasis on segregation, low densities, slum clearance and health concerns. Neither the original White Paper on Housing (1994) nor the revised policy proposals in 'Breaking New Ground: A comprehensive plan for the development of sustainable human settlements' (2004) discuss health-related issues in depth but both documents acknowledge the importance of healthy environments. Breaking New Ground stresses the role of housing in poverty alleviation by highlighting the creation of assets (Cross 2008). Consequently, the informal settlement upgrading strategy as developed in Breaking New Ground emphasised poverty alleviation and healthy environments (Huchzermeyer 2006).

This paper discusses the historical links between housing, planning and health in South Africa, assesses post-apartheid policy, and reviews post-apartheid literature on the relationship between housing, planning and health. Primarily, we ask whether the post-apartheid policy and research reinforce the historical ideas or provide an appropriate alternative. We find it is assumed that the link between housing, planning and health is a biomedical concern and not a social concern (Ataguba *et al.* 2015). We argue that scholars thinking about this relationship should consider the opportunities embedded in the capabilities approach to understand health outside the biomedical frame.

2. Literature review: Historical perspectives on housing, planning and health

We distinguish between three periods of South African history relevant to housing and planning: pre-unification colonial (1652–1910), post-unification colonial (1910–1948) and apartheid (1948–

1994). See Parnell (1993) and Mabin and Smit (1997) for further detail.

2.1. Pre-unification colonialism (1652–1910)

Two conflicting colonial administrations dominated this period: the corporatist Dutch and liberalist British. The Dutch administration is labelled 'corporatist' because it was the Dutch East India Company that provided the first tenure rights in South Africa and not the Dutch government. Two systems, quitrent and loan farm, in practice very similar, governed tenure rights for Dutch settlers. The Dutch East India Company leased land to them for 15 years, after which the lease was renewable. This was technically corporate ownership on behalf of the Dutch government, but in practice it operated as individual ownership. Corporate and government interference was minimal, the boundaries were not strictly determined, and the land was often sold illegally or subdivided without consent from the authorities. Davenport (1985) described the loan farm concept as legalised squatting. By late 1700, 80% of farms were operating on the loan farm system.

In 1806 the British took over the Cape Colony and introduced a liberal approach to land and tenure. This allowed for individual landholding and it applied free-market principles. However, the Dutch settlers resisted it, and it proved more attractive in the towns than on farmland (Venter 2017). The Great Trek resulted in the creation of the Zuid-Afrikaanse Republiek (the Transvaal) and the Orange Free State Republic, which did not follow the British system, and land rights here developed separately from the British land rights system in the Cape Colony and Natal. The British land rights system did not discriminate on the basis of race and black people could, and indeed did, own land.

After the discovery of diamonds in 1867 and gold in 1886, single-sex hostels became a dominant informal housing approach around the mines, mainly because of the mining companies' need to control their workers. The strict building controls for the construction of hostels (for example in prescribing construction materials and building standards) were the first signs of health-related arguments in the built environment in South Africa.

The discovery of mineral resources accelerated urbanisation and resulted in a rapid increase of informal structures in the mining areas. The housing for black labourers was generally poor. The Zuid-Afrikaanse Republic settled the growing black, coloured and Indian communities on the peripheries of cities because of the Dutch administrative style (Davenport, 1985). During the late 1800s, various governments enacted anti-squatting legislation to support segregation (Davenport 1985). The outbreaks of bubonic plague in Cape Town (1902) and Johannesburg (1904) placed pressure on urban planning to deal with the disease.

2.2. Post-unification colonialism (1910–1948)

Against a background of mining development and urbanisation the four political entities (the Cape Colony, Natal, the Orange Free State and the Transvaal) became the Union of South Africa in 1910. This unification created a centralised state (not a federal system) with four provinces with limited, decentralised functions and powers. The relationship between housing, planning and health became a powerful guiding tool to enforce racial segregation and privilege large numbers of poor white people (Parnell 1993).

Two factors played a role in linking housing, planning and health. First, Dr Charles Porter, the Medical Officer of Health in Johannesburg, prioritised health-related concerns for planning (Parnell 1993). The Public Health Act of 1919 linked housing, planning and health. This piece of legislation resembled the Housing of the Working Classes Act in Britain in 1890. The Public Health Act ordered the screening and repatriation of sick people and the resettlement of black people on the outskirts of cities (Christopher 1987). Parnell (1993) argues that this Act capitalised on housing and health to create racial division instead of solving the housing and health problems in South Africa. The Act was designed to eradicate congestion, prevent slums and curtail the spread of epidemics.

The second factor was the influence of the 'garden city' planning paradigm, which emphasised greenbelts and separate land uses for different economic activities (Mabin and Smit 1997). Richard Stuttaford, a member of the Union government,

was instrumental in getting the ideas of the garden city transferred to South Africa. He also made sure that the application of garden city ideas included the link between housing, planning and health. Creating a healthy environment was a prominent concept.

The Public Health Act and the emphasis on garden city planning laid the foundation for various pieces of legislation that followed. Further legislation restricted rural-urban migration, reinforced segregation, removed slums, and forcefully removed people – often in the name of improved public health. From the 1920s public housing was emphasised as an approach to ensure good health. Mabin and Smit (1997: 199) argue that the Natives (Urban Areas) Act of 1923, which split planning for 'locations' (for the non-white population) from planning for other urban areas, overemphasised planning as a technical exercise. Furthermore, the Slum Clearance Act of 1934 gave local authorities the power to demolish slum areas.

2.3.Apartheid

Apartheid policies after 1948 had a distinct impact on the shape of urban areas and built on pre-1948 legislation. Influx control continued and the Group Areas Act (1952) built on the principles of the garden city approach. Garden city ideas were used to ensure racial segregation and maintain low densities.

The apartheid government spent large amounts of money on cleaning up the black townships. Once again, public housing was a response to poor living environments. The state constructed more than half a million state rental houses between 1950 and 1970. Strict guidelines were set up to ensure residential segregation and promote public health. Examples were the *Minimum Standards of Housing Accommodation for Non-Europeans* (1952) and the *Guide to Planning of Non-European Townships* (1955) (Venter 2017). These documents emphasised regulations, infrastructure, social amenities and urban management guidelines. However, once the state rental houses were in place, the government strictly applied influx control and redirected urbanisation to ethnic homeland areas.

Informal settlements were illegal in the main urban areas and were often demolished by the apartheid government and the residents forced to move (Harrison 1992). The Prevention of Illegal Squatting Act of 1952 was instrumental in these forced removals. However, pressure from social movements and the international community increased from the 1970s. By the mid-1980s, the apartheid state had abolished influx control and replaced it with a policy of orderly urbanisation, which ensured the construction of new middle-class housing but ignored the housing needs of low-income people. Many urban households lived in illegal backyard shacks. By the early 1990s, this policy had become dysfunctional. Low-income households (many from the backyard shacks) invaded open land adjacent to the former black township areas (Wolfson 1991).

3. Research results: post-apartheid period

3.1. The policy regime

Providing housing and dismantling the spatial patterns of racial segregation under apartheid were two essential elements of the ruling African National Congress's Reconstruction and Development Programme. The post-apartheid state had to clear the large housing backlogs left by policies of influx control and segregation. Consequently, the White Paper on Housing (1994) was the first policy document released by the democratic government. The White Paper emphasised ownership, a capital subsidy programme that provided a starter home, and the right to housing. Health issues did not receive prominent attention, but the White Paper used terms like 'healthy environment', 'health standards' and 'the need to ensure basic health'. Infrastructure provision was vital for achieving these environmental health concerns. In 2004 the National Government released a revised policy (but not a new White Paper), which continued the existing policy, focusing on property, rental housing and informal settlement upgrading. Consequently, the Department of Human Settlements developed a new informal settlement policy, emphasising incremental development and including informal settlement upgrad-

ing as a poverty alleviation strategy (Huchzermeyer 2006). Environmental health and infrastructure thus resumed an important role in the policy debate.

Policy for informal settlements thus diverged from colonial and apartheid policy. Spatial integration, high densities, integration and informal settlement upgrading replaced apartheid concepts of segregation, low densities, fragmented development and slum clearance. New planning legislation now paid less attention to health issues, although planning guidelines continued to emphasise access to infrastructure and health facilities. A new set of ideas guided the link between housing, planning and health. Health did not direct the policy discourse. Backlogs, desegregation, higher densities and the need to address these concerns dominated the policy concerns.

Several provinces (Free State, North West and Kwazulu-Natal) and individuals challenged the original post-apartheid housing policy and implementation guidelines (Charlton and Kihato 2006). There were two reasons for these challenges. One was dissatisfaction with the starter home concept (Marais and Krige 2000). These complainants wanted larger houses to be built. The other was Marie Huchzermeyer's argument (2004) that the capital subsidy was not supporting informal settlement upgrading as it was too concerned with technical building and infrastructure details and did not facilitate larger development processes. For Huchzermeyer (2010), even the new informal settlement upgrading programme of 2004 represented a continuation of the technical approach and involved too many relocations rather than *in situ* upgrading.

Five points are relevant to the post-apartheid policy on informal settlements described above. First, the dominant health argument faded, although the health rationale remains essential. Secondly, the debates described above were often the result of politico-economic rationales and emphasised housing sizes and not health issues. In some cases the participants made simplistic arguments about the health benefits of larger homes, but they mainly emphasised the provision of decent sized houses. Thirdly, the link between informal settlement upgrading and poverty includes health-related issues. Fourthly, the government's limited ability to upgrade informal settlements could mean that social and health infrastructure would not be located in the most suitable places in the cities. Finally, the new policies have not viewed health within a broader framework or within the capabilities approach and implementers still often interpret the policy within a biomedical context.

3.2. A review of the post-apartheid research

Recent studies have investigated the health outcomes of housing types (Vorster *et al*. 2000; Thomas 2006; De Wet *et al*. 2011; Vearey 2011; Narsai *et al.* 2013; Marais and Cloete 2014; Mathee *et al*. 2017), informal settlements (Muller 2002; Shortt and Hammond 2013), informal settlement upgrading (Muller 2002; Van Wyk 2008; Shortt and Hammond 2013), urban renewal (Tlhabanelo 2011), subsidised housing (Govender *et al*. 2011a, 2011b; Marais and Cloete 2014) and backyard shacks (Govender 2011). Other topics that have been investigated are prostitutes' health (Olufemi 1999), the relationship between disease and the built environment in general (Smit *et al*. 2015), and the effect of housing conditions on children's health (Marais and Cloete 2014; Naicker *et al*. 2017) and the aged (Ralston 2018). Below we provide a more detailed overview of some of the main research findings.

Delayed urbanisation incurred an urban health penalty in South Africa (Marais and Cloete 2014). Vorster *et al*. (2000: 505) say the data suggest that black urbanisation

> *is associated with improved mental, physiological and physical health in the more affluent groups but that those in transition living in poverty on farms and in densely populated areas are experiencing a high risk of the double burden of diseases associated with undernutrition on the one hand and overnutrition on the other hand.*

The 'densely populated areas' they refer to are those to which urbanisation was redirected under apartheid, which means that at least one generation has missed out on the potential benefits of urbanisation.

Several studies have investigated the relationship between housing types and health and found no association. Once the researchers had controlled for age, the influence of housing types was mini-

mal (Shortt and Hammond 2013). In a Johannesburg-based study, age rather than housing type was the most crucial mechanism resulting in differences in health outcomes (De Wet *et al.* 2011). Marais and Cloete (2014) mainly confirm these findings. Marais and Cloete (2014) found statistically significant correlations between living conditions and health symptoms for adults, but this was associated with access to water and not the type of house.

Some studies reported positive relationships between improved housing conditions and health. Tlhabanelo (2011) noted a decrease in the number of reported cases of TB, pneumonia and diarrhoea leading to dehydration after an urban renewal project. Marais and Cloete (2014) found that the percentages of infant mortality, child mortality and stunting were slightly higher in informal than in formal houses. They also found that the percentages of the following health findings were significantly higher in informal housing than in houses subsidised by the government: yellow eyes (100% higher), eye infections (91% higher), skin disorders (89% higher), rashes (84% higher) and diarrhoea (81% higher). The prevalence of tuberculosis was also lower in houses provided through the government subsidy system than in informal settlements. The availability of water within 200 m reduced the incidence of disease. On-site water or piped water in the house did not result in a further statistically significant reduction in health problems. Instances of disease in the areas where people carried water from a communal water point were found be caused not by the distance per se but by the use of dirty containers. Longer distances require more water storage and clean containers then become an essential requirement. Not sharing sanitation with another household reduced the incidence of diarrhoea. Makene (2008) and Mathee *et al.* (2009) compared a range of health-related indicators across five different settlements in Johannesburg. Residents of informal settlements had substantially more cases of adults with vomiting, diarrhoea or diabetes than those living in government subsidised houses. However, the residents of the government subsidised houses had higher levels of asthma, strokes and obesity.

In contrast, other studies found clear evidence that improved housing has detrimental health outcomes (Govender *et al.* 2010, 2011a, 2011b; Narsai *et al.* 2013). This research contrasted the health outcomes of people living in government subsidised houses with those of residents of backyard houses. The empirical results from this work showed that the prevalence of diarrhoea, TB and HIV was slightly lower in government subsidised houses. The incidence of diarrhoea among women was higher in the subsided houses than in the backyard houses. Govender (2011: 75) concluded that the residents had not 'to any real extent benefited from the acquisition of a subsidised low-cost house' and that 'these communities remained disadvantaged, polluted and unhealthy'. Govender *et al.* (2011) argued that the increased density because of the growth in backyard shacks was the main reason for the residents' poorer health.

Several studies assessed conditions inside the houses. Thomas *et al.* (1999) reported a higher level of indoor dampness, density, poor ventilation and the use of paraffin for lower and middle-income households. Muller (2002) found that one hour of exposure to nitrogen dioxide (a by-product of the burning of paraffin) has minimal health implications. However, 24-hour exposure could cause symptoms such as coughing, wheezing, chest tightness, bronchial constriction and increased airway resistance, and to asthma and respiratory diseases. Indoor smoke is a major problem in informal settlements, and one study suggested that it is just as much a problem in the subsidised houses because their ventilation is also poor (Norman *et al.* 2007).

Linked to the above aspects and in direct contrast to the colonial and apartheid idea that segregation is the primary way to ensure good health, Smit *et al.* (2015) argue that segregated urban planning has contributed directly to poor health, and this is aggravated by limited access to health services for the poor.

Some studies have investigated people's perceptions of their housing conditions and their health. Those in informal settlements were more likely to perceive that their poor housing situation contributes to poor health (Shortt and Hammond 2013). Vearey (2008, 2011) compared the health perceptions of migrants living in inner-city areas of Johannesburg with those in informal settlements (usually on the periphery of formal settlements). Her main finding was that migrants in informal settlements were more likely to fear the possibility of contract-

ing HIV than those in the inner city. Research shows that the number of HIV infections in informal settlements is double that in formal settlements (Shisana *et al*. 2005; Marais 2007).

Several studies have also related housing to well-being and mental health. Shortt and Hammond (2013) found higher levels of pride, belonging and satisfaction in upgraded informal settlements. Compared housing satisfaction and health in four settlement types in eThekwini, Narsai *et al*. (2013) found that the respondents living in inner-city apartments were the most satisfied with their homes and those in informal settlements or subsidised houses the least satisfied. Marais *et al*. (2013) found that overcrowding had a bad effect on children's mental health (in some cases the damage was caused by sexual harassment), but that overcrowding was not associated with informal settlements. Mathee *et al*. (2009) found that residents living in an informal settlement had significantly higher anxiety (24%) than those living in government subsidised houses (18%). However, those in the subsidised houses reported higher levels of depression (23%) than those in the informal settlement (21%).

Finally, as regards access to health services, the findings are mixed. Marais and Cloete (2014) found no major difference in health facilities for people living in informal settlements and in other housing types. Naicker *et al*. (2017) found that an almost equal number of residents of informal settlements (20%) and government subsidised houses (21.3%) said their access to clinics was bad. However, inadequate access to hospitals was reported by more respondents in subsidised houses (20.3%) than in informal settlements (10.7%). This could be because of the peripheral location of the subsidised houses – a point made by Huchzermeyer (2010).

3.3. Evaluating the post-apartheid literature and policy

The findings reviewed above and the policy changes show that the direct relationship between housing, planning and health has faded. Housing policy now emphasises upgrading rather than slum clearance. The research reviewed above tends to understand the relationship between housing, planning and health in less direct ways and ignores the broader context. It is in this context that we discuss the findings outlined above.

First, the policy evidence suggests that the post-apartheid government has a more mature policy response than apartheid government in dealing with inadequate housing conditions and informal settlements. The emphasis on informal settlement upgrading as opposed to slum clearance is evidence of this change. The informal settlement upgrading policy, in line with international practice, emphasises *in situ* upgrading as opposed to greenfield development. However, in practice project implementers still remove a large number of people (Huchzermeyer 2011).

Second, the findings of the literature reviewed above are often contradictory and inconclusive. However, considering policy concerns, policymakers need a thorough debate about the link between housing, planning and health. Too often, planning and housing specialists use the evidence in a one-directional way and ignore the wider socio-economic setting and the historical context or the value of incremental housing development processes. For example, overcrowding is seen as a health concern without considering the quest for higher densities at the city level.

Thirdly, there is evidence that public health disciplines dominate the research and that there is little interaction between these disciplines. Most commonly, either environmental or public health specialists or researchers coming from a planning perspective do the research without considering the perspective across disciplines. There is little conversation between these two groups about the implications of health research for planning or housing. The environmental health experts publish in health journals and use housing and planning indicators as dependent variables. They come to simplistic conclusions about issues of housing quality and density.

Fourthly, although some research has begun to take into account the socio-economic context of the relationship between housing and health, too often it merely provides a sterile account of housing types.

Fifth, despite international theories and research on the health implications of segregation and isolation, South African research tends to ignore the role of historical segregation in the health outcomes of urban black South Africans. The health research

often ignores the historical context of displaced urbanisation, the group areas act and continued spatial inequality. Vorster *et al.* (2000) is an exception in this respect.

We noted the danger above of using housing types as independent or dependent variables, as focusing on housing types underplays the importance of infrastructure in the housing context. The sixth point we want to emphasise is the importance of urban infrastructure in promoting good health in informal settlements. Marais and Cloete (2014) provided statistical evidence that it was access to water within 200 m of the house that is the most important determinant of health outcomes in low-income areas.

Seven, implementers tend to ignore the limitations of arguments linking housing and health. They tend to ignore the understanding of housing and health as processes in poverty alleviation and human development. This means that housing and health need to be integrated with education, health services access, settlement stability and employment. The relationship between housing, planning, and health is not the only or the most critical factor in the wider relationship.

Finally, despite the changes in policy and the contradictory findings, research and policy still tend to believe there is a direct relationship between housing, planning and health. Researchers tend to be too quick to use overcrowding and high densities as proxies for poor health. The emphasis on crowding and congestion assumes a direct biomedical approach to understanding the problem. We argue that the capabilities approach, which we explain in the next section, is a solution to these problems as it emphasises the multi-dimensional nature of health and well-being, the importance of choice, and not attributing findings to just one cause.

4. Capabilities, health and urban living

Although the capabilities approach developed outside the realm of health and urban planning, it is gaining momentum as a useful tool for multi-disciplinary enquiry (including health). This approach, developed by Amartya Sen and Martha Nussbaum, owes its origins to the strong influence of mainstream economic thinking in development studies in the mid-1980s. Human capabilities are the abilities that allow people to be and do what is important to them (Sen 1993). They enable people to live meaningful, enjoyable, dignified lives. They allow people to translate what endowments are available to them into real activities and achievements. Nussbaum's (2002, 2003) central human capabilities include life, bodily health, bodily integrity, senses, imagination, practical reasoning, emotions, other species, play, and control over one's environment. These capabilities ensure human dignity and are necessary to achieve a decent life. However, the meaning of bodily health has been a bone of contention, causing controversy, for example, about how health varies across age and the multiple factors playing a role in ensuring good health.

The capabilities approach has been applied in debates about justice in health systems (Ruger 2007; Breton and Sherlaw 2013) and health care (Anand 2005). The application of the capabilities approach in the field of health and urban planning remains limited (Simon *et al.* 2013), but Biswas (2019) has related it to inclusivity in urban planning. Biswas (2019: 174) says the capabilities approach 'emphasises a shift in policy analysis from direct assistance to the expansion of opportunities and eliminating circumstantial governance'. Sridhar Venkatapuram (2013) seeks to distance health from the traditional biomedical disease-centred paradigms. Instead, he describes health as a metacapability that enables people to achieve the central capabilities. His most significant contribution is his application of the capabilities approach to the social determinants of health. In his health metacapability he further acknowledges the relationship between health and healthcare and that people may have different requirements or priorities in achieving health.

McNaughton Nicholls points out that homelessness can impinge on any of the central human capabilities, including life, bodily integrity and bodily health (McNaughton Nicholls 2009). In Venkatapuram's framework, homelessness may impinge upon health without necessarily involving healthcare or disease. Findings in social epidemiology support the notion that space and place have significant effects on health, whether through environmental exposure, the effects of the built environment, opportunities for health improvement, economic cir-

cumstances, nation-state policies, food insecurity, local beliefs or vulnerability to natural disasters.

In our historical account above and our review of the health and housing literature, we observed that health is conceived as the absence of disease, and the disease paradigm as paramount in assessments of health. We argue that this focus on disease is, at best, a limited conceptualisation of what health. We note that it underpins the link to concepts of contagion and contamination and has allowed ideas of health to underlie discriminatory policies of housing and urban planning. Reframing the concept of health within the capabilities approach enables us to integrate the interdependent ideas of housing or urban spaces and health. The capabilities approach also emphasises meaningful discourse as a means of determining how to pursue capabilities (Sen 1993). The interaction of the state, health and ideas of health and urban planning is central to the capabilities approach. Reframing these ideas within this approach may aid in directing activities in these interrelated spheres in meaningful ways. The move towards *in situ* upgrading mentioned in the preceding section fits well with the capability approach in general and with the ability to be healthy in its capacity for engagement with context, plurality and lived experience.

5. Conclusion

In this paper we discussed the historical and current relationship between housing, planning and health. Globally, public health concerns remain a crucial factor in negative views of informal settlements. Much of South Africa's planning legislation originated from public health concerns and public health rationales. This health logic resulted in slum clearances and urban segregation. We traced these historical developments and asked whether the approach has changed in a post-apartheid dispensation and what we can learn from the capabilities approach to health and planning.

A more accommodative policy approach has emerged in the post-apartheid period. Current planning guidelines emphasise upgrading, integration and higher densities. However, health-related arguments still dominate policy and practical decisions during informal settlement upgrading processes. Furthermore, research still tends to make simplistic arguments about the relationship between housing, planning and health. Too often, researchers use high densities and overcrowding as proxies for health problems. We argue that health researchers, public health experts and planners should have a more direct conversation about causality and start to rethink the relationship even further.

Finally, we argue that at the core of the problem lies a continuation of a health framework that emphasises biomedical and direct relationships. The capabilities approach sees the multi-faceted issue of health as a metacapability. We argue that the multi-dimensional nature of the capabilities approach associated with health should receive priority in research. The research and policy environment requires new thinking about the contribution of health to people's overall well-being. The capabilities approach provides such an approach and helps researchers to move away from direct relationships and biomedical dominance.

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