

Household characteristics in relation to COVID-19 risks in Gauteng

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Gauteng City-Region Observatory (GCRO)

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The structure of our households, the infrastructure we have access to, and where we come from, all shape our daily lives, and influence our access to various resources and forms of support. This visualisation explores the relationships between various household characteristics and exposure to factors that are expected to impact vulnerability in the face of the COVID-19 pandemic. This analysis, in turn, supports the provision of interventions tailored to different types of households and ensures that groups that may be particularly vulnerable are not overlooked. The visualisation draws on GCRO's Quality of Life V (2017/18) survey data, which defines a household as those people living in the same dwelling, and eating together for four nights or more per week. We focus on the following household characteristics: household size; households with children; multi-generational households; household headship; and dwelling conditions. We also look at the exposure to risk factors in households where our respondents are over 60 years old, primary caregivers or migrants. These three categories are not necessarily household characteristics but understanding the dimensions of the vulnerability faced by households that contain elderly members, primary caregivers or migrants is important to ensuring that key services reach them and their households.

Our work follows the analysis established in the March 2020 Map of the Month, which outlines two indices of factors anticipated to increase vulnerability related to the COVID-19 pandemic. Index 1 considers risk factors related to preventative measures such as maintaining high levels of personal hygiene and practising social distancing. These risk factors include living in a crowded dwelling; the absence of piped water; shared or inadequate toilet facilities; dependence on public health care facilities; limited access to communication tools; and reliance on public transit.

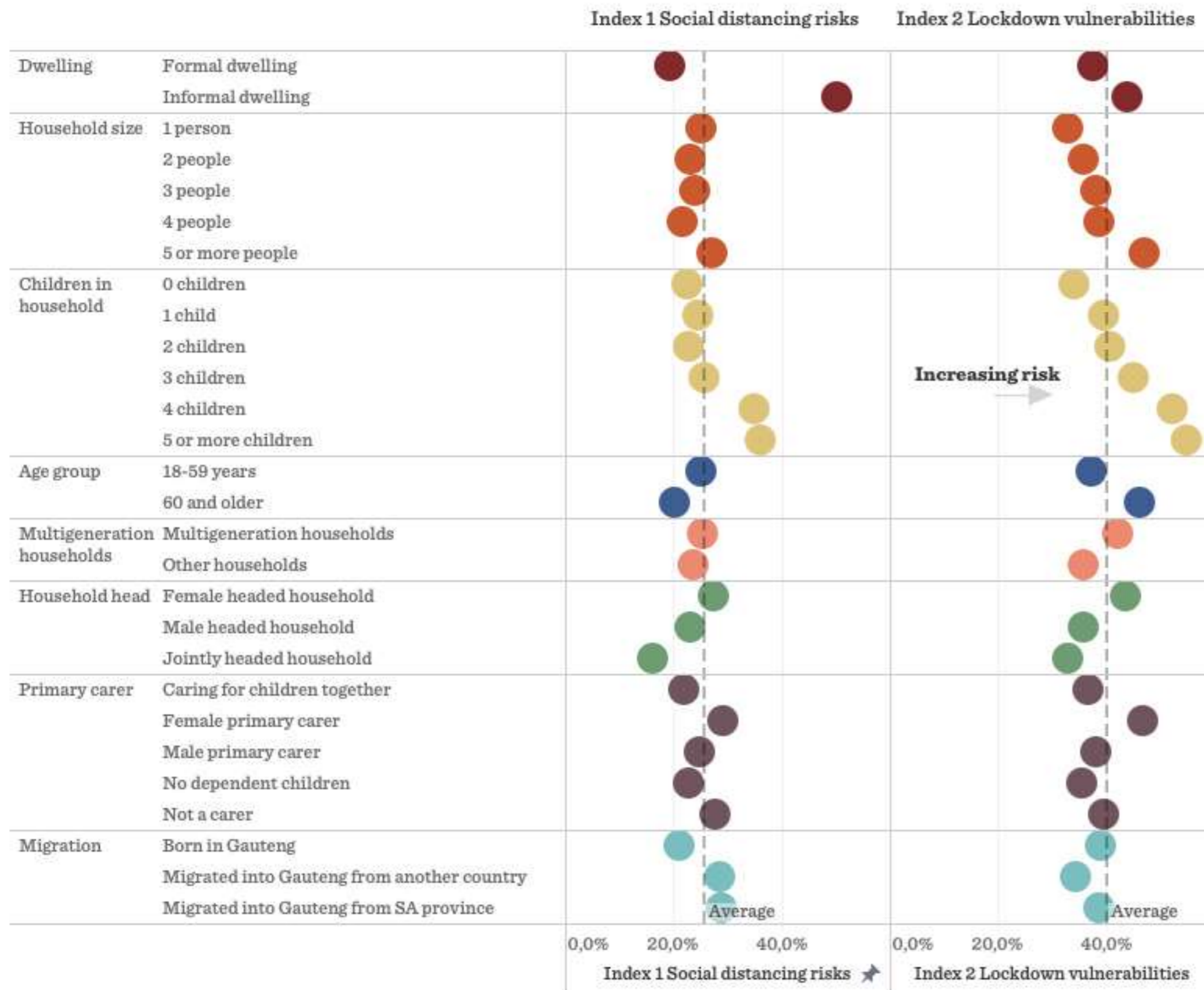
Index 2 examines risk factors related to lockdown conditions that are likely to increase health and socio-economic vulnerability. These factors include existing health conditions, and socio-economic conditions such as risk of hunger, ability to save money and access to medical aid. Each index ranges from 0-100, with 0 representing the lowest and 100 representing the highest level of risk.

Our indices were compiled to capture the multiple forms of risk during the COVID-19 pandemic, and the detailed analysis provided here shows how these risks shift and overlap for different household characteristics. For example, households living in informal dwellings are exposed to a particular form of risk because they are less likely to have piped water into their home or yard, and are more likely to have shared or inadequate sanitation. At the same time, these same households are more likely to be single person households, which this analysis shows, reduces the likelihood of hunger. Residents in these dwellings are also more likely to be migrants (both South African and foreign nationals), who are less likely to suffer from pre-existing health conditions.

In the charts below we compare the vulnerabilities and risks experienced by different household structures and living situations. The first chart provides an overview of how different household characteristics compare on the two indices. The rest of the document is divided into the different household characteristics and examines the risk factors for each of the indices and provides some maps of the distribution of some of these household characteristics.

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Household characteristics and indices of COVID-19 related risks



This chart shows how the different household characteristics compare on the overall COVID-19 risk indices. This provides us with an overall picture of which households score higher or lower on Index 1 and Index 2. Risk levels increase from left to right so that households or respondents with higher scores on the indices are closer to the right hand side of the chart. The dotted line represents the provincial average.

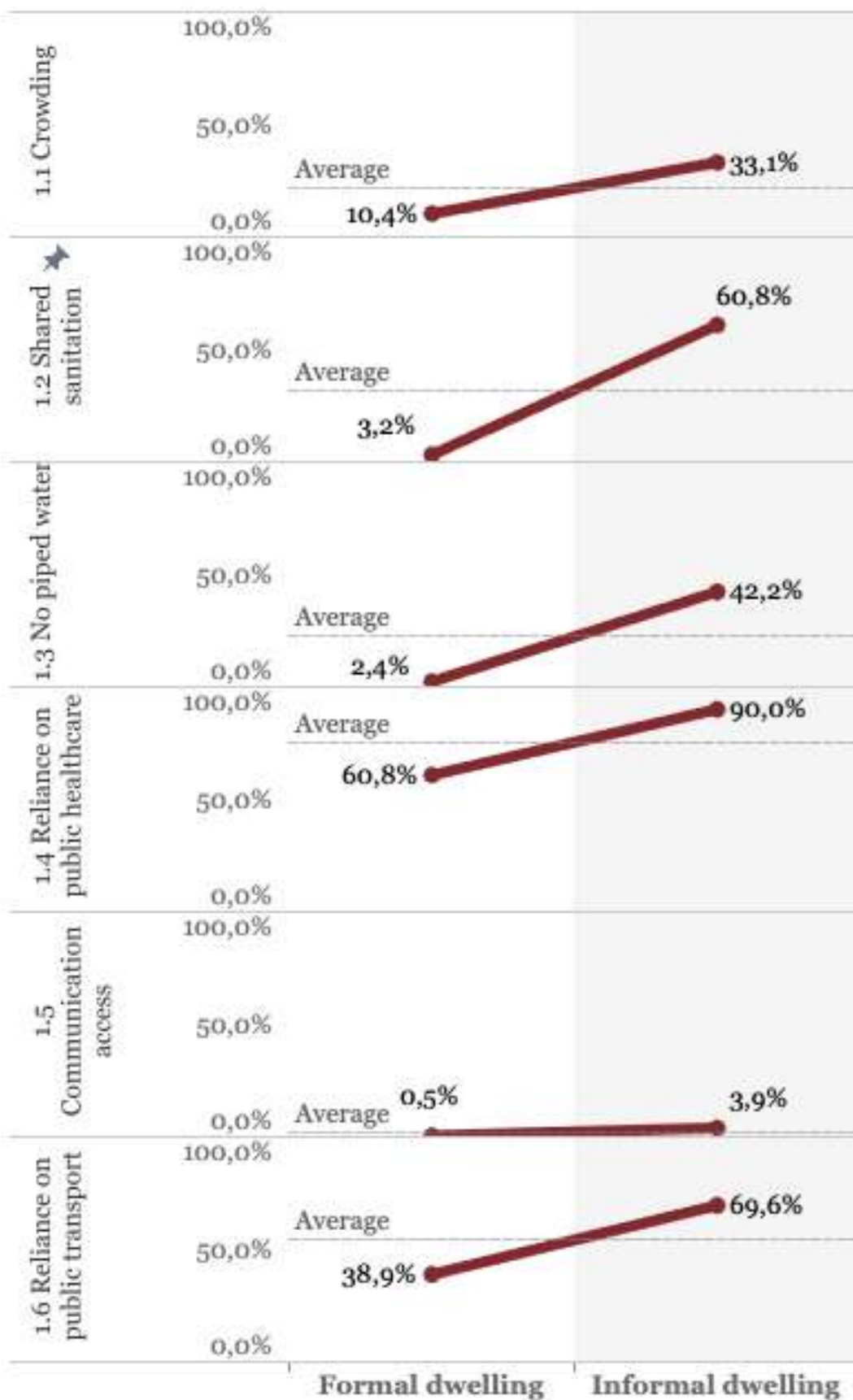
Household characteristics and risk factors

- Households living in informal dwellings face the greatest risk in relation to Index 1 of risk factors to maintaining high levels of personal hygiene and practising social distancing. Their risk level of 50% is substantially higher than other household characteristics. The details of this vulnerability are expanded upon below, but this is strongly connected to poor infrastructure and high levels of crowding in many informal settlements. While respondents in informal dwellings may be more at risk in terms of preventative practices, they are less at risk to social and health issues (Index 2) than other household characteristics.
- Households with five or more people are more exposed to the risk factors included in both Index 1 and Index 2, compared to smaller households.
- Similarly, households with five or more children also have higher risks in terms of both indices.
- Multigenerational households have a slightly higher score on Index 2 than other household characteristics.
- Female-headed households show an increased risk for both indices compared to households headed by males or households headed by adults together.
- Female respondents who identified themselves as the primary carers of their dependent children live in households which score higher on both indices than the households of male primary carers, joint carers, or respondents who do not have dependent children.
- Lastly, whether people were born in Gauteng or migrated to the province shows a mixed picture in relation to COVID-19 risks. Migrants from other provinces in South Africa have higher scores in Index 1 than migrants from outside South Africa and those respondents born in Gauteng. Internal migrants, along with respondents born in Gauteng, are also slightly more at risk according to Index 2 than international migrants. Key contributors to variations in risk scores across migrant groups are better overall health status, living in households with fewer pre-existing health conditions, and lower risk of hunger. However, these indices may understate the vulnerability of foreign migrants, as these groups have been excluded from many governmental pandemic support initiatives, such as grant increases and food parcels.

Dwelling type

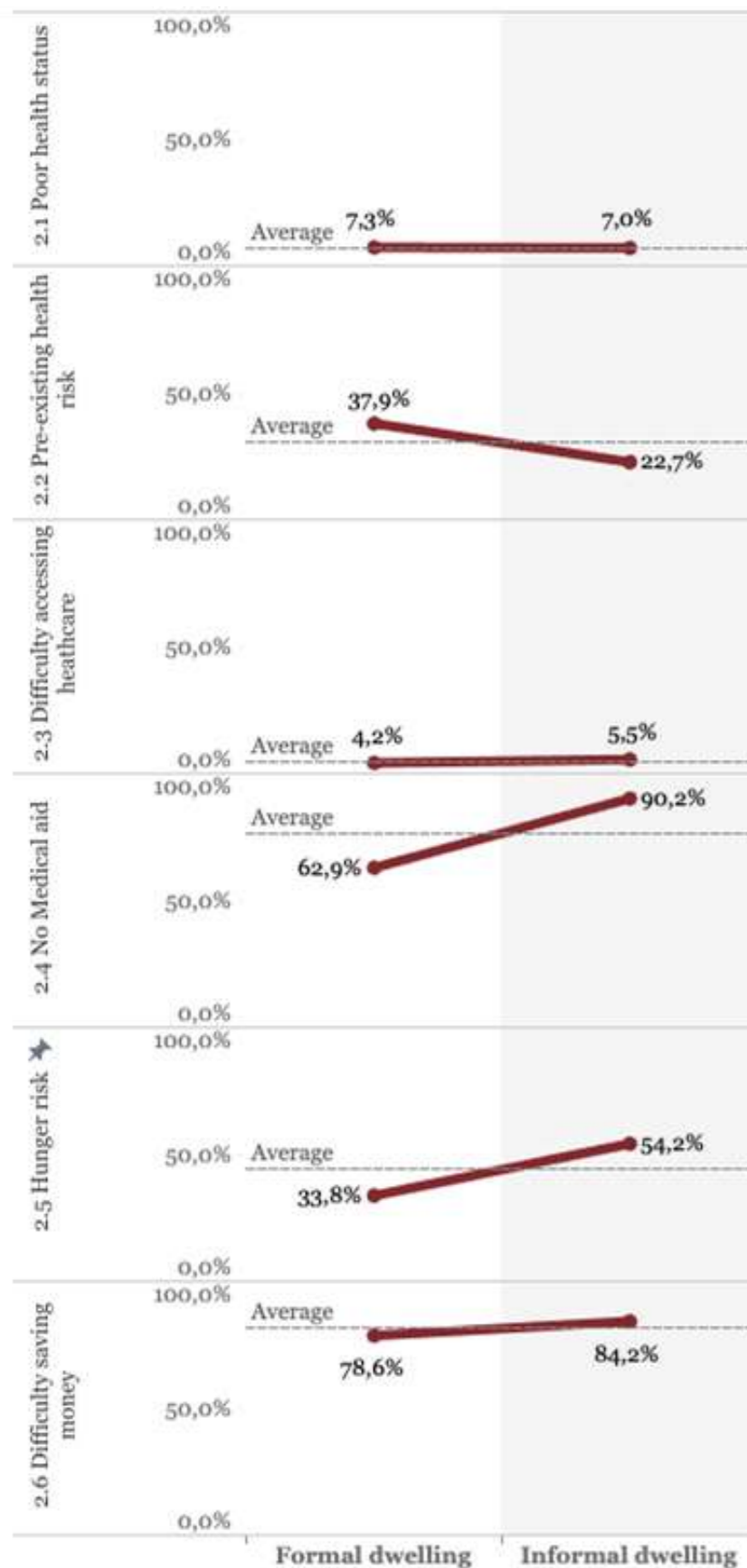


Dwelling type & Index 1 Social distancing risks



Many people have correctly identified the additional risks that households living in informal dwellings face but these two charts illustrate the extent of the different risks. Even the lack of access to communication tools such as television or radio, which is very low across the different groups, is higher for residents of informal dwellings.

Dwelling type & Index 2 Lockdown vulnerabilities



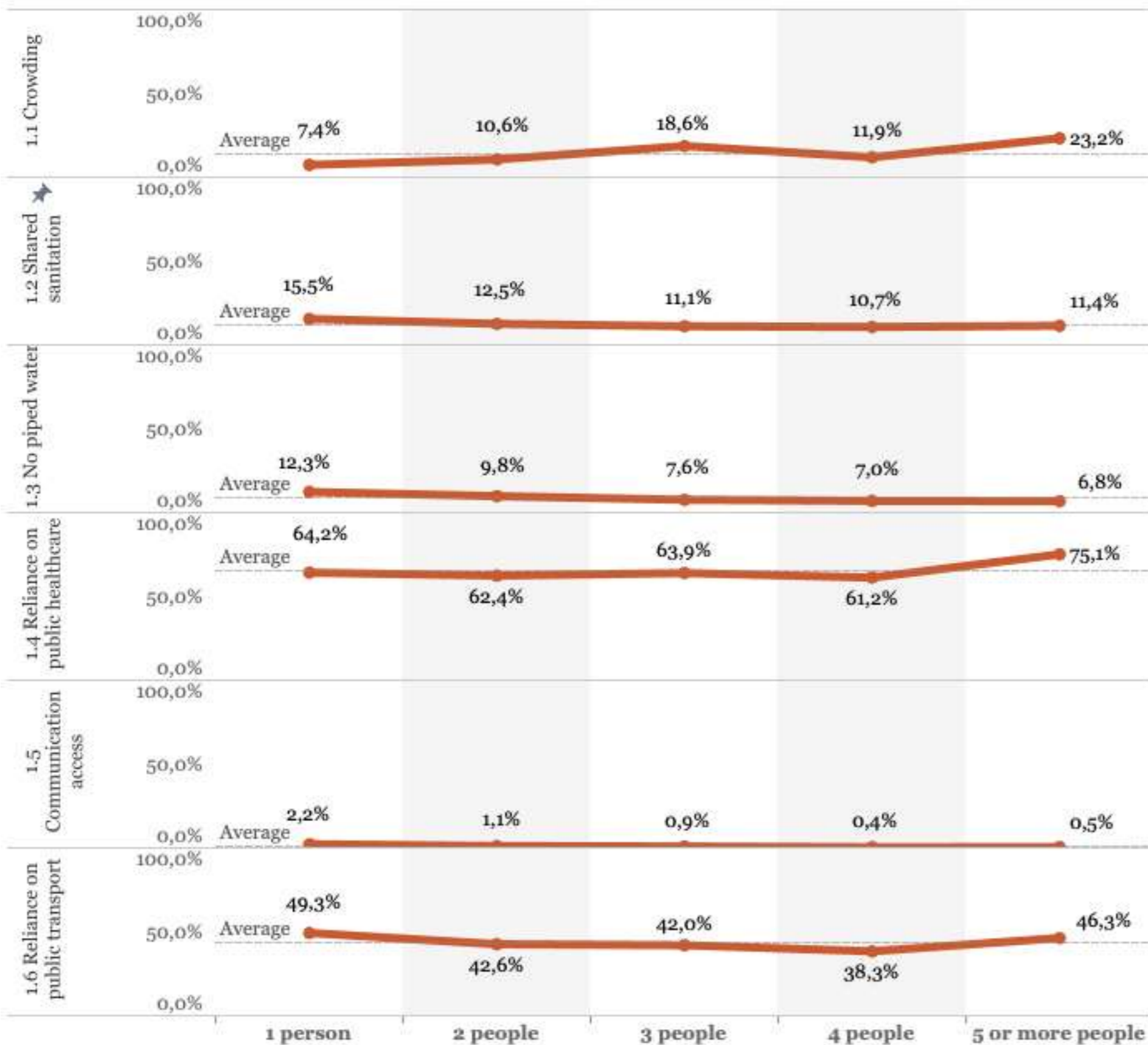
Interestingly, households living in informal dwellings are less likely to have existing pre-existing health conditions that have been shown to exacerbate the symptoms of the COVID-19 disease. This may be related to age - respondents in informal dwellings have a lower average age (37 years old) compared with the average age in formal dwellings (42 years old).

Key interventions for those in informal dwellings include improvements in provision of water and sanitation; ensuring that public transport & public health services are able to operate with minimal risk; provision of safe quarantine facilities for people who do become infected, food support and provision of fuel for cooking and heating.

Household size



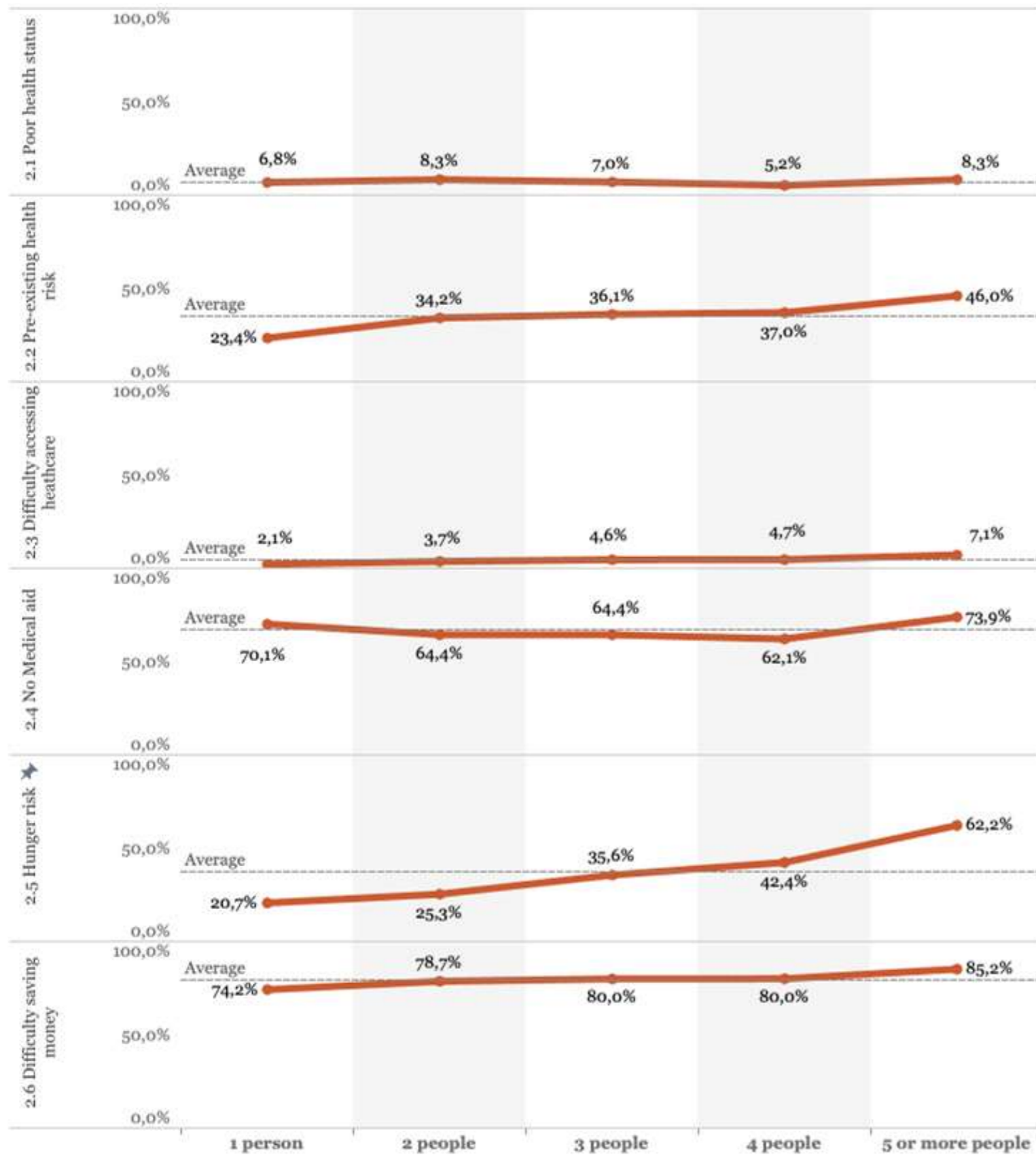
Household size & Index 1 Social distancing risks



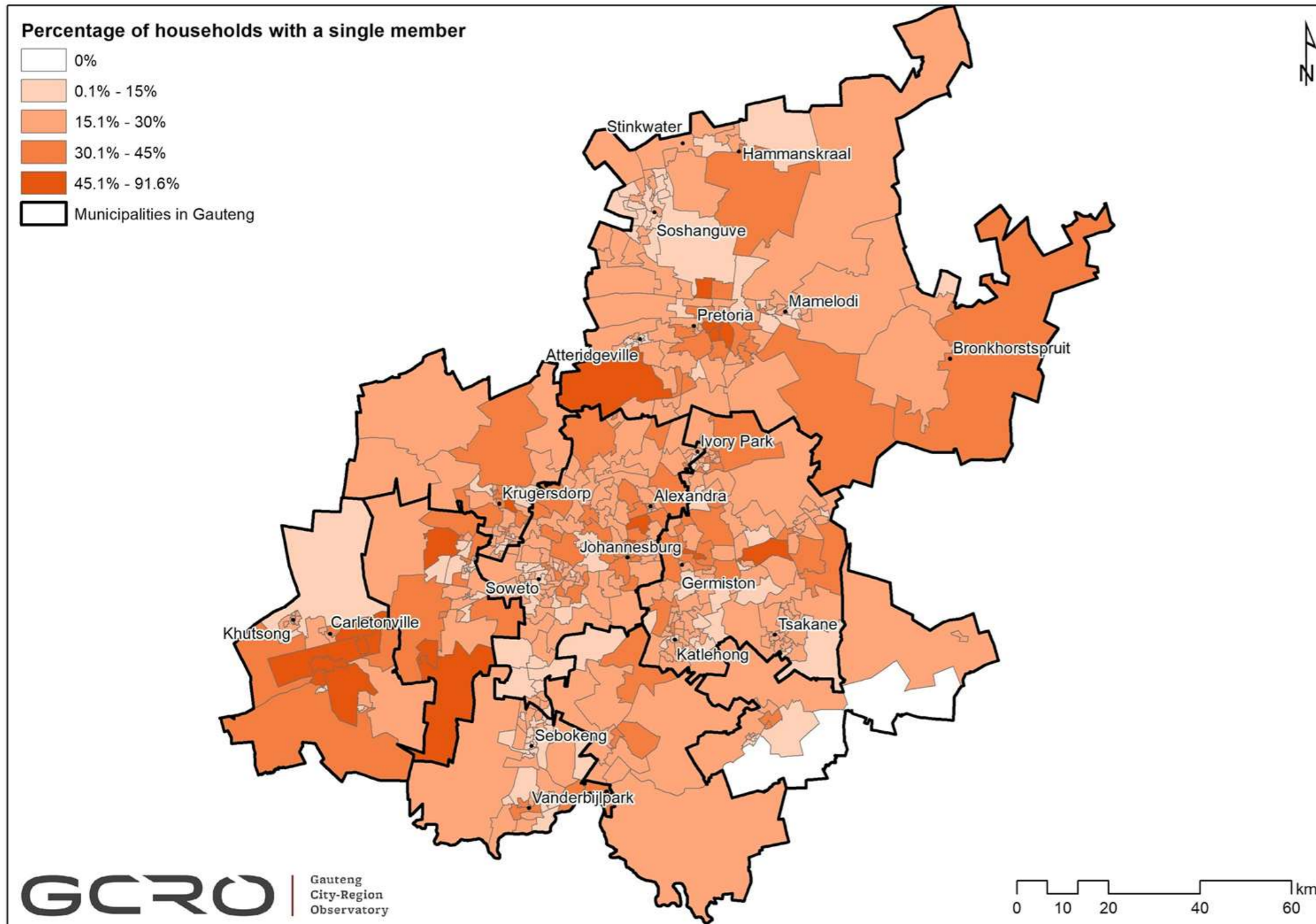
Larger households are more likely to be at increased risk of crowding, hunger and difficulty to save money: factors that we would expect to increase in bigger households. However, larger households are also more likely to rely on public healthcare and public transport as well as have higher levels of pre-existing health conditions that exacerbate the symptoms of COVID-19. While single-person households may not be trying to stretch resources further, they are more at risk in terms of shared or inadequate sanitation and not having access to piped water, relying on public transport and not having medical aid.

Key interventions to assist larger households would be to ensure safe access and use of public health facilities and public transport as well as providing food support. Single person households may need the provision of water and sanitation services.

Household size & Index 2 Lockdown vulnerabilities



Single person households



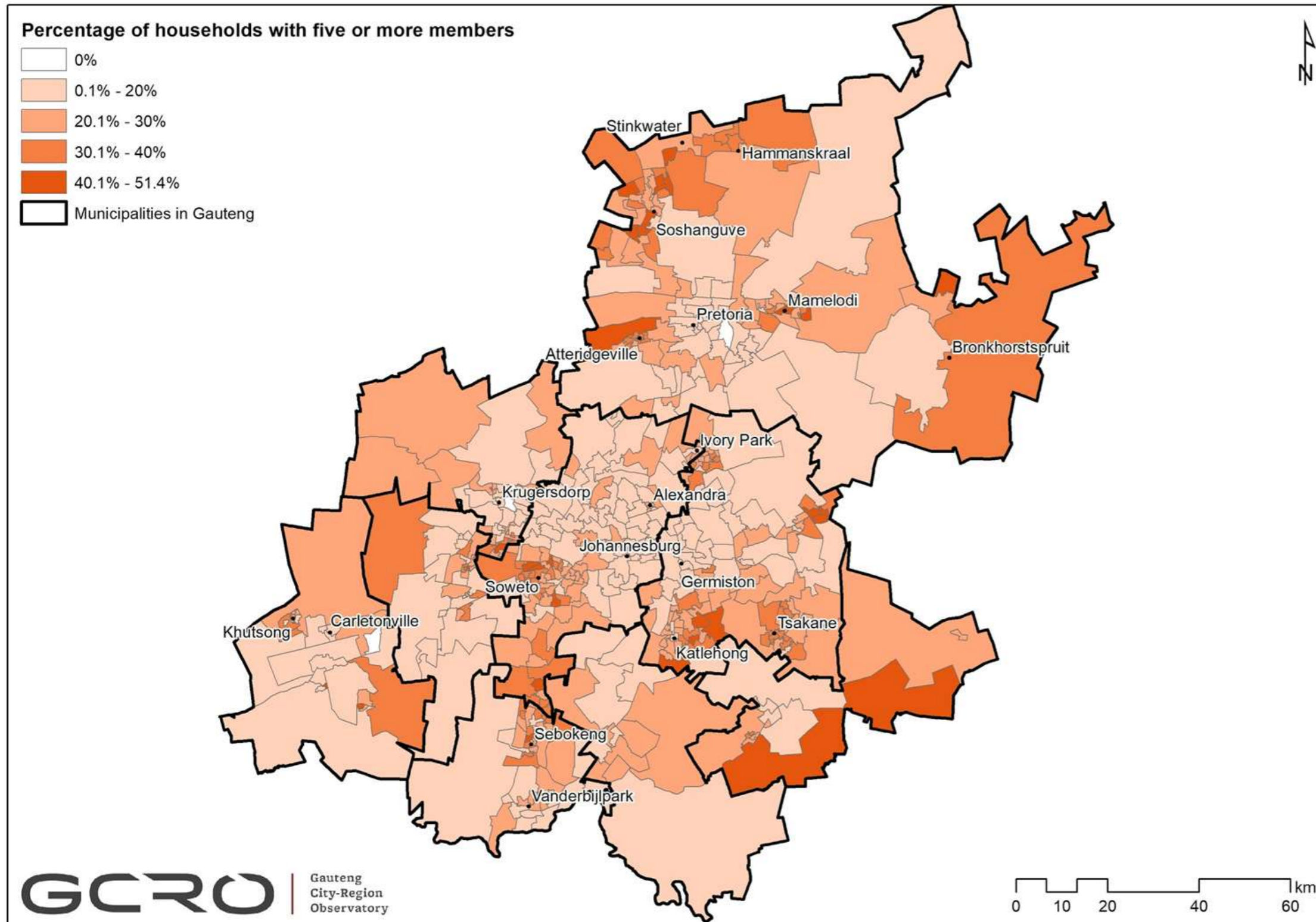
Just under a quarter (23%) of all households in Gauteng are single person households.

Single person households are more likely to be migrants, both South African and foreign nationals, and are more likely to live in informal dwellings.

The map shows single person households concentrated in the wards shaded darker orange.

Single person households are less likely to be in townships (such as Soweto and Soshanguve) and more likely to occur in suburban areas (like northern Johannesburg) and some peripheral wards (like those around Carletonville).

Households with 5 or more people



Similar to single person households, nearly a quarter (23%) of all households in Gauteng have five or more people.

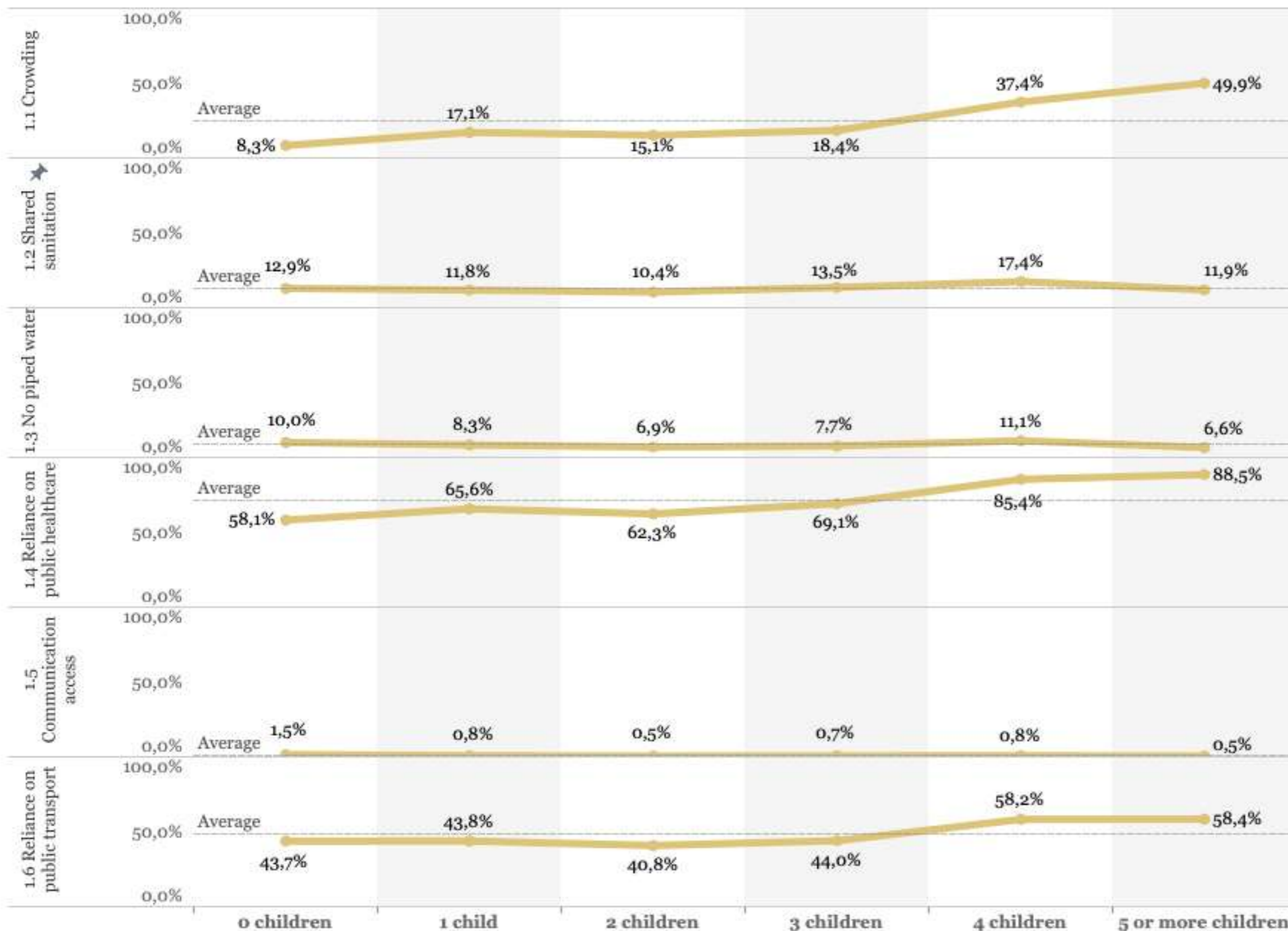
These households are more likely to have children and are more likely to be crowded.

Wards with a higher proportion of households with five or more people are clustered around the townships of Soshanguve, Atteridgeville, Mamelodi, Soweto and Katlehong.

Children in household

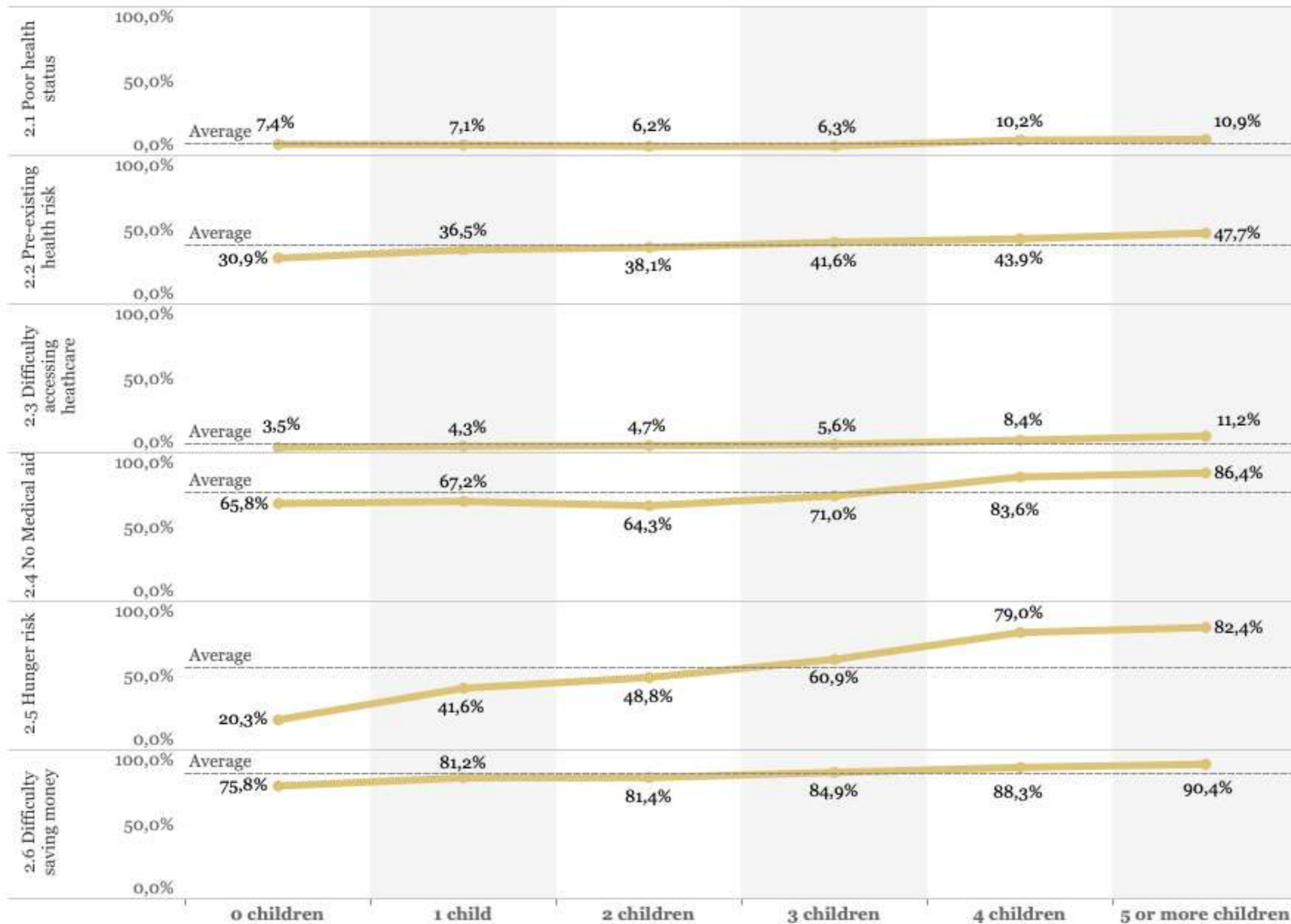


Children in household & Index 1 Social distancing risks

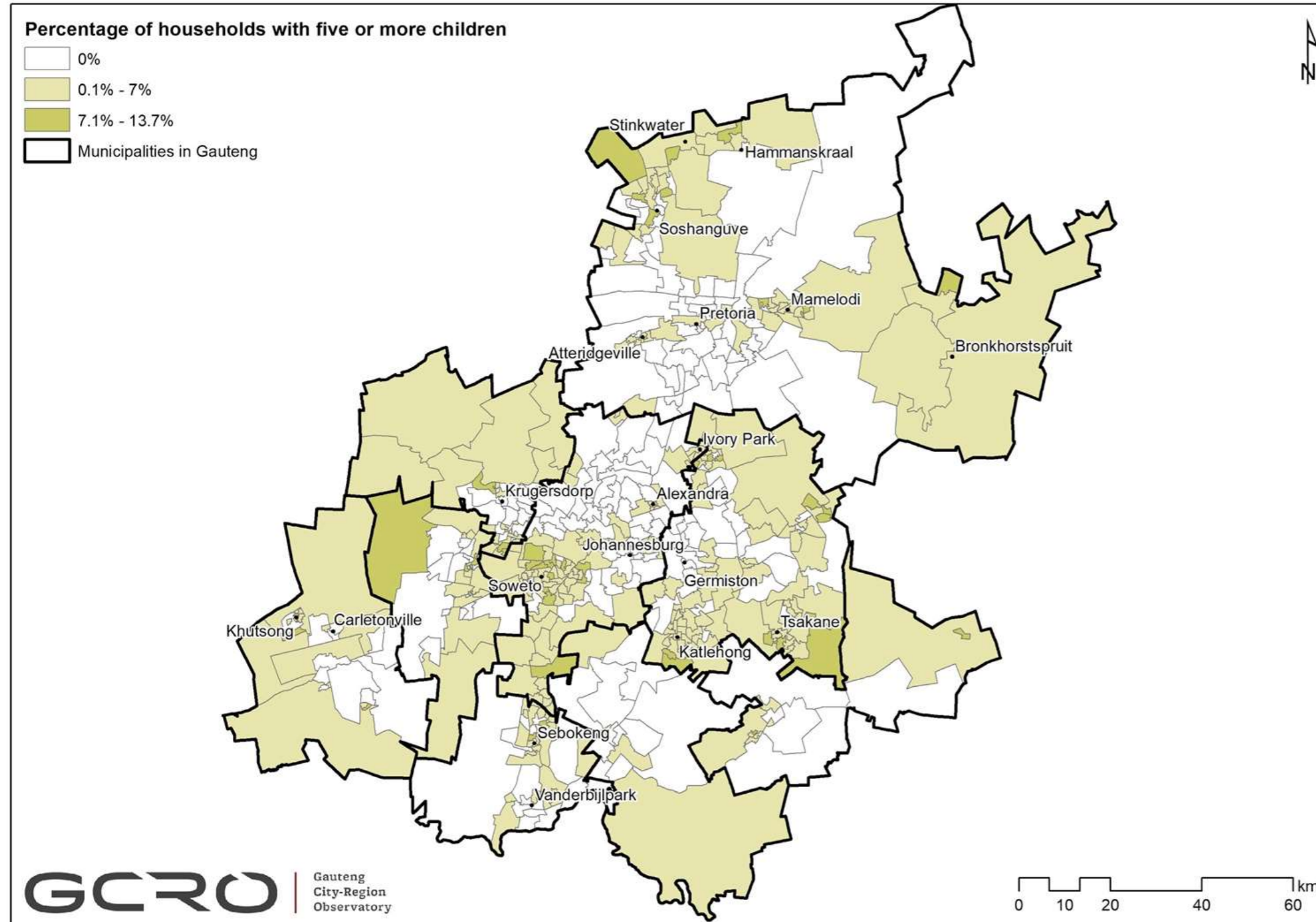


As would be expected with larger households, those households with 5 or more children, are more likely to experience hunger, have no access to medical aid, struggle to save money and have crowded living conditions. They are also more likely to rely on public transport and the public healthcare system.

Children in household & Index 2 Lockdown vulnerabilities



Households with 5 or more children



Only about 3% of households in Gauteng have 5 or more children, however poor conditions in these households will affect more children.

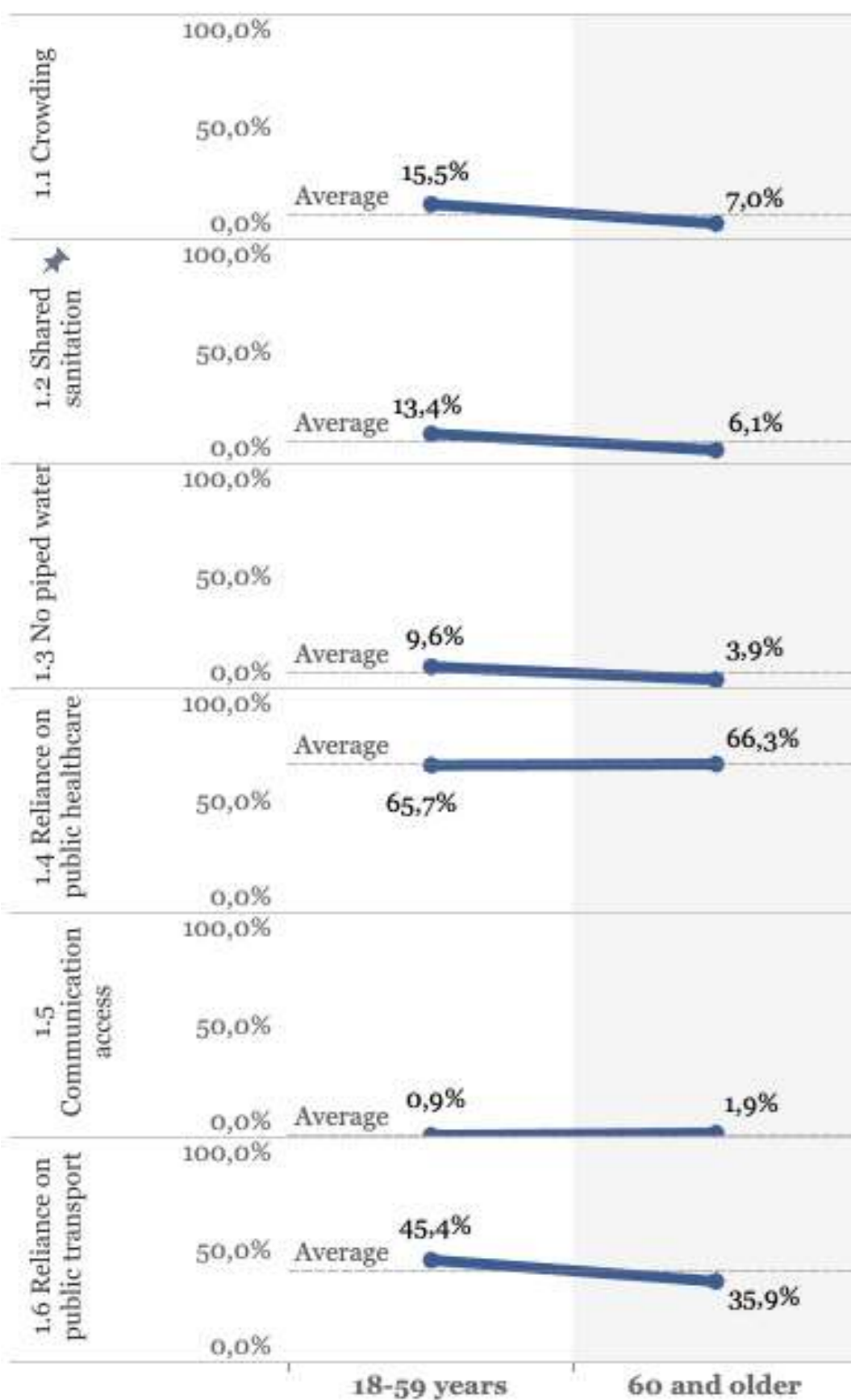
Wards shaded darkest yellow have the highest proportion of households with five or more children. In the many of Gauteng's wards, these households represented less than 7% of households in the QoL V 2017/18 survey.

Wards in townships (like Soshanguve, Ivory Park, and Soweto) tend to have a higher proportion of households with more than 5 children.

Age group



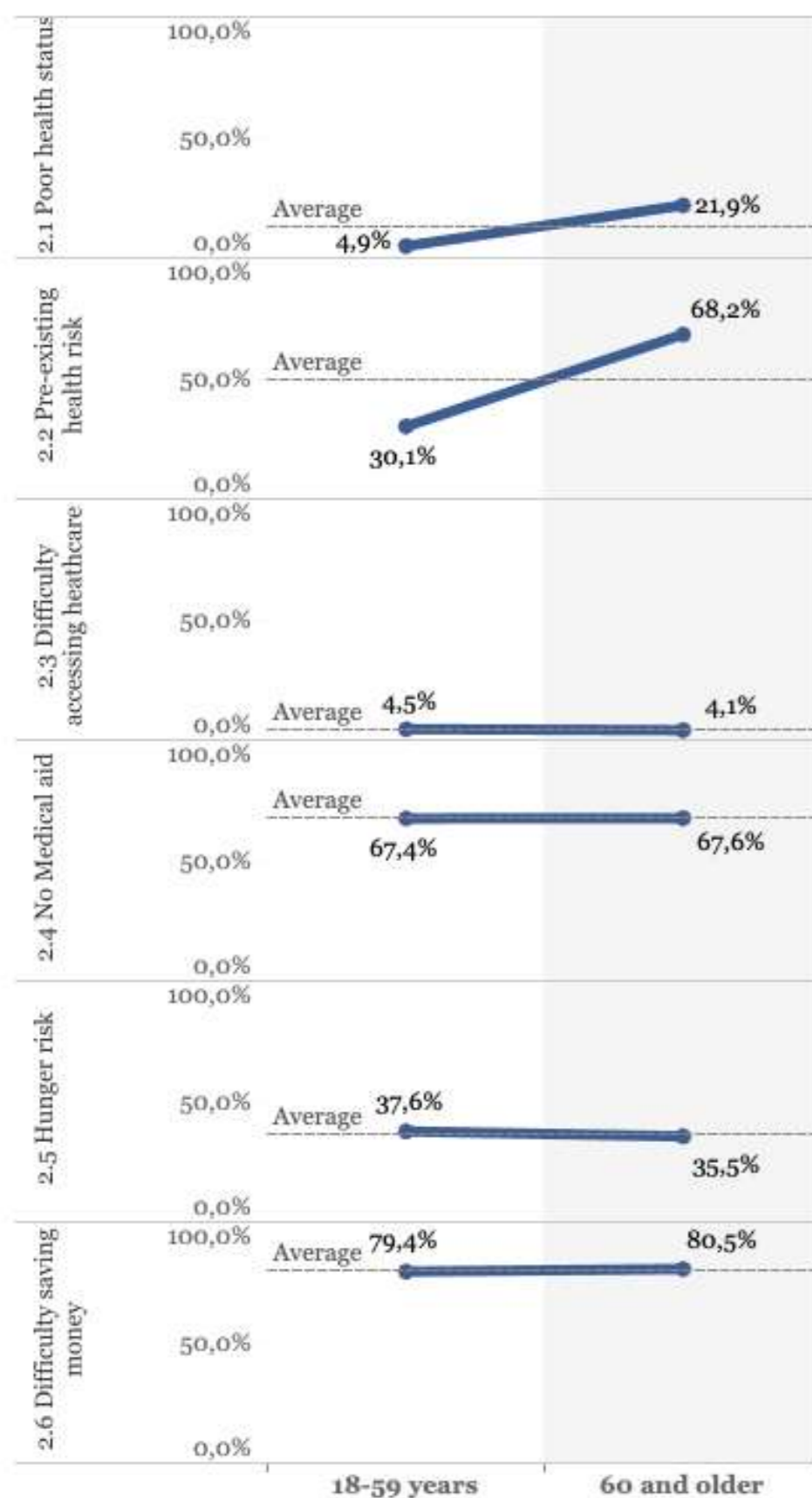
Age group & Index 1 Social distancing risks



The elderly (aged 60 years and older) are slightly less vulnerable than other adults in relation to risk factors maintaining social distancing and preventative measures. They are less likely to live in crowded conditions and to rely on public transport. However, their increased health risks are clearly shown in relation to risk factors to social and health vulnerability during lockdown. They are more likely to have a poor health status and to live in households with pre-existing health conditions that exacerbate the symptoms of COVID-19.

Key interventions would be to ensure safe access to public health care for existing health conditions.

Age group & Index 2 Lockdown vulnerabilities

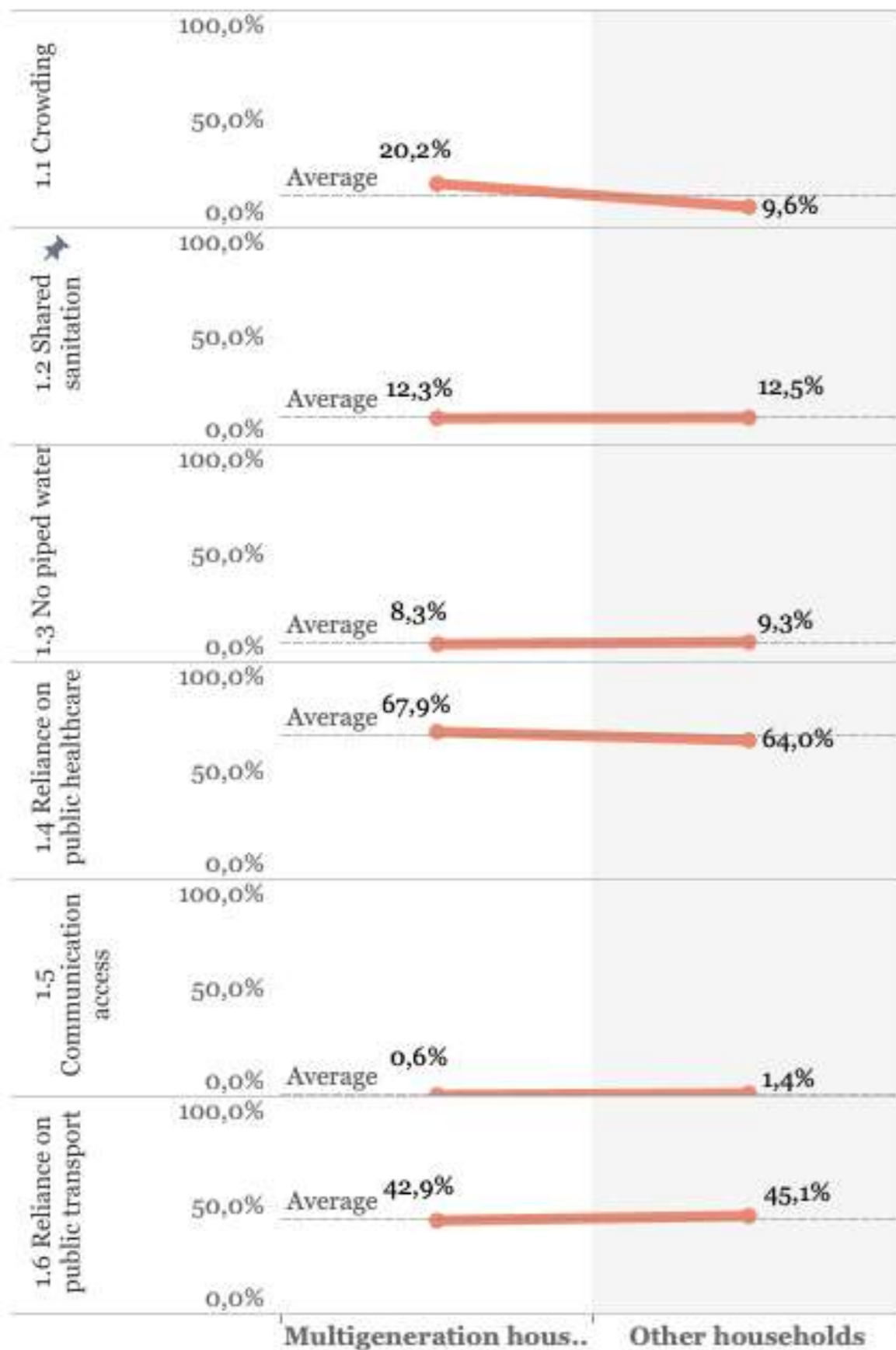


Multigenerational households



Multigenerational households & Index

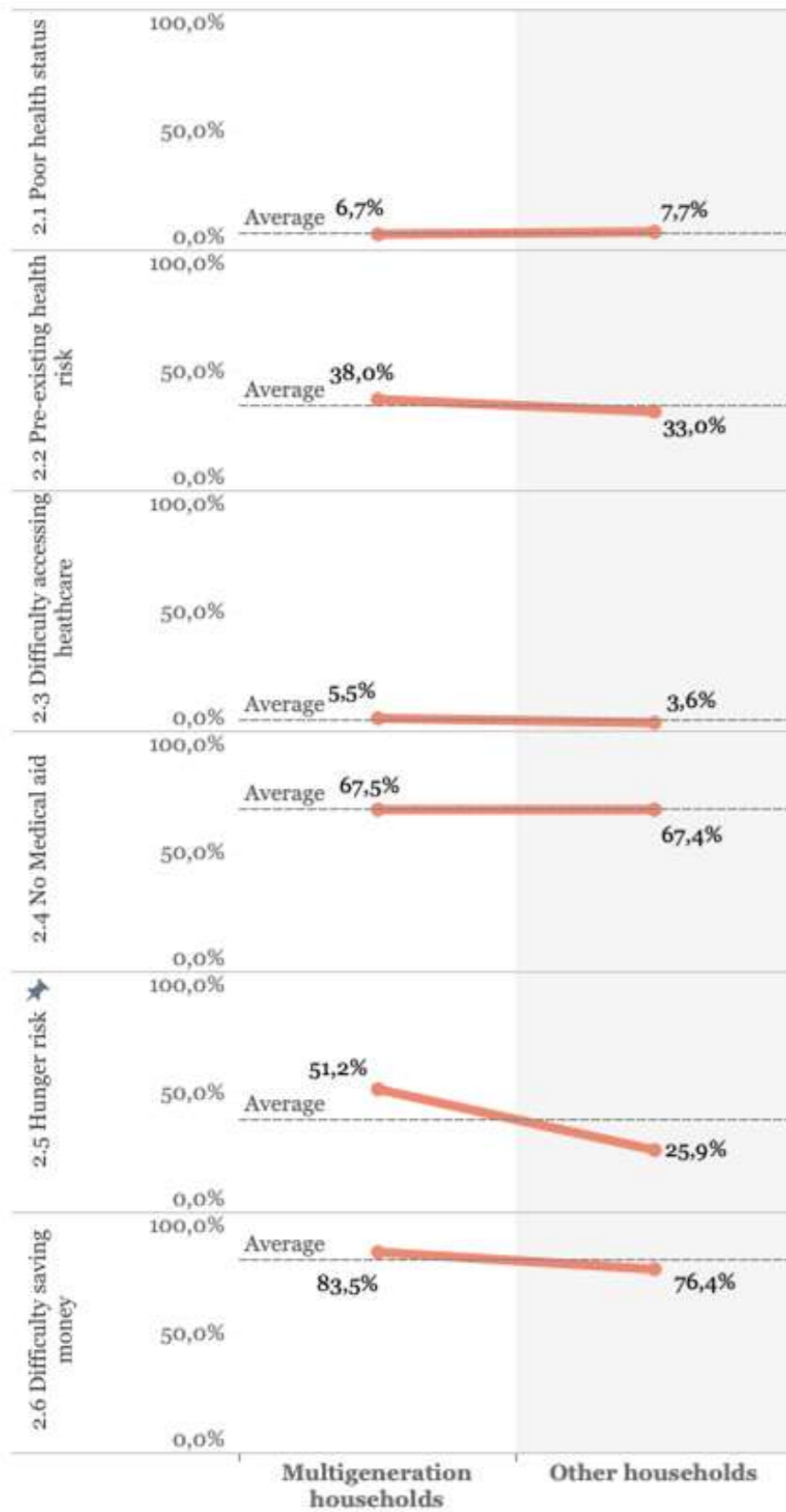
1 Social distancing risks



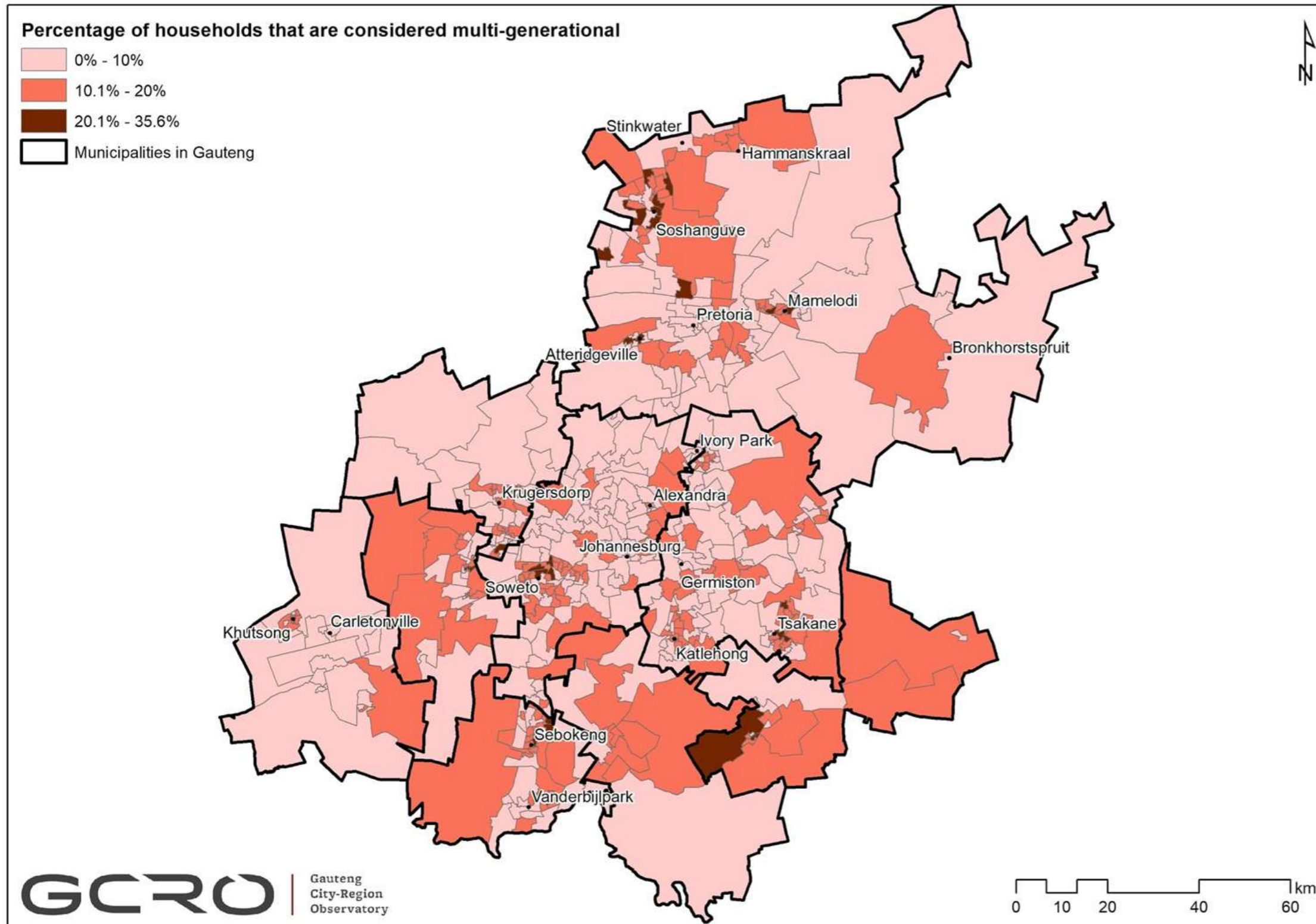
Multigenerational households do not differ enormously from other households although they are much more likely to experience hunger than other household characteristics. Multigenerational households intersect with those respondents who are 60 years and older and so it is important to understand that these households may be more vulnerable should the elderly members fall ill and die.

Key interventions would include food support and accessing health care safely for older members of the household.

Multigenerational households & Index 2 Lockdown vulnerabilities



Multigenerational households



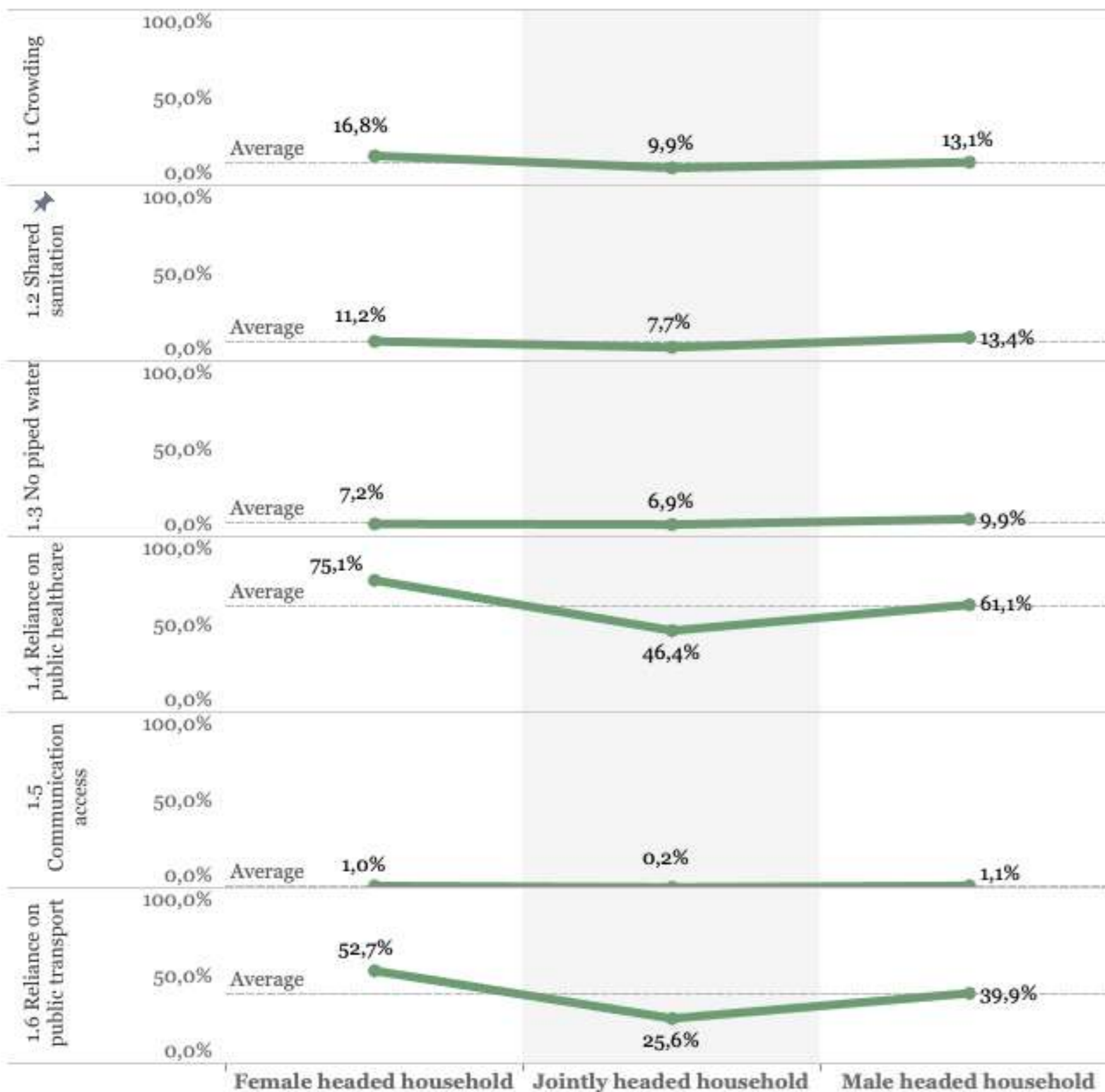
Nearly half (45%) of all households in Gauteng are multigenerational. Multigenerational households may be larger and therefore resources may be more stretched or crowding may be more likely.

The wards shaded dark russet are where more than 20% of the households are multigenerational. Many of these are to the north-west of Tshwane and around townships such as Tsakane, Mamelodi and Soweto.

Household headship

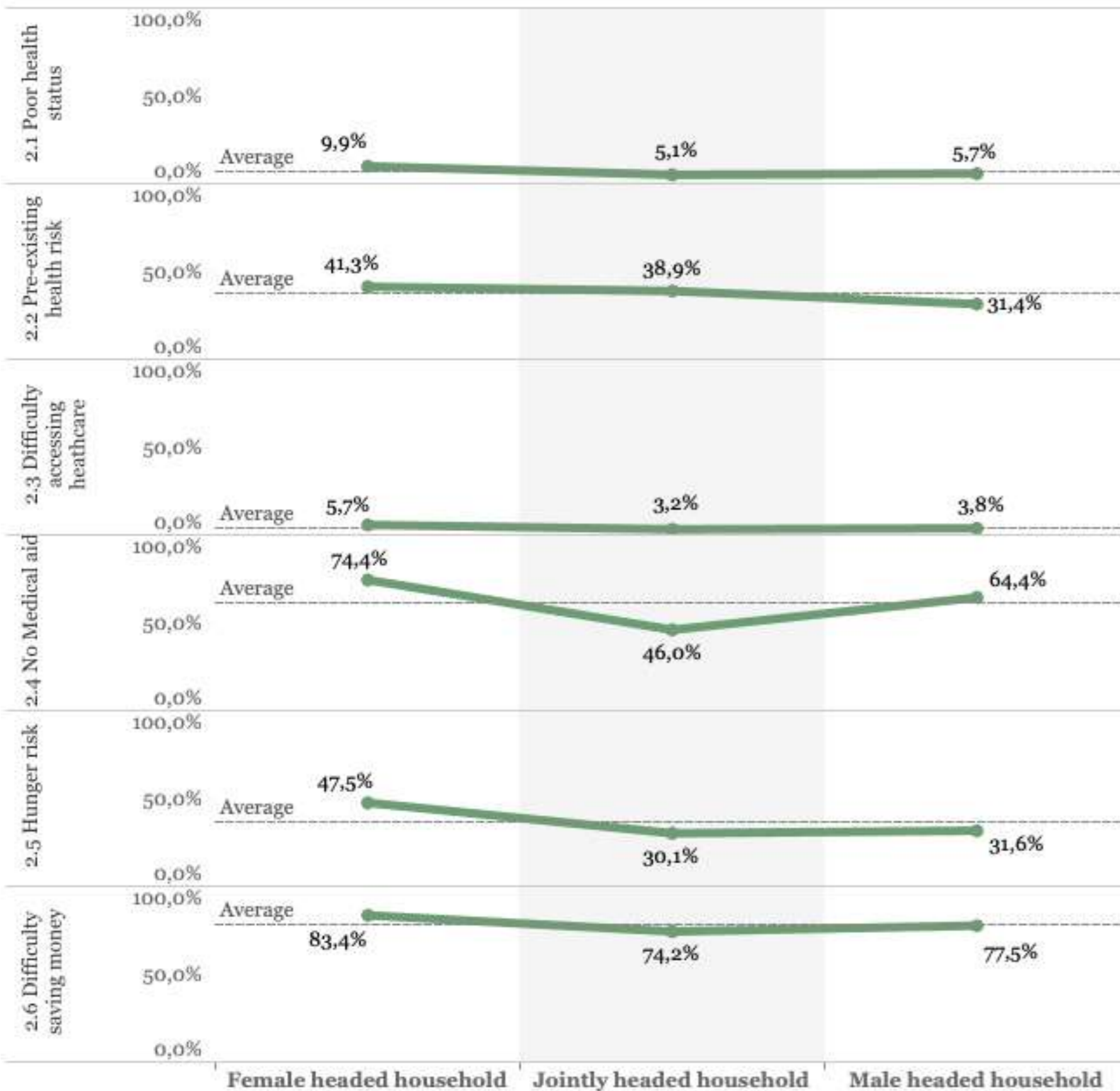


Heads of households & Index 1 Social distancing risks

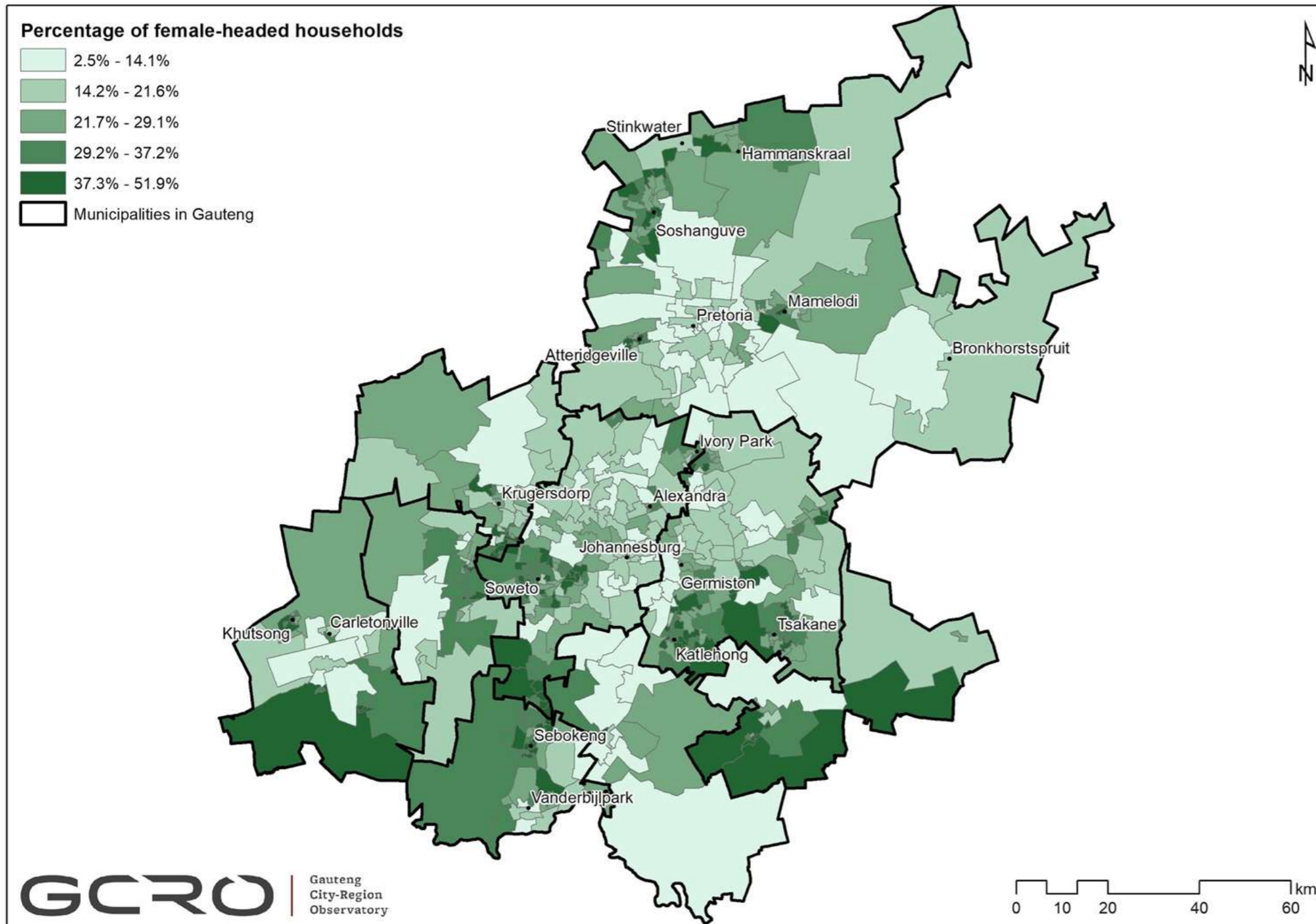


Female respondents who are the heads of households are more likely to rely on public healthcare and public transport than other household head structures. Female respondents who are the head of their households are more likely to have a poor health status, live in households with pre-existing health conditions, have no medical aid, have difficulty saving money and are more likely to experience hunger. Female headed households are also more likely to be larger households with more children and so these risks intersect with the risks discussed above.

Head of households & Index 2 Lockdown vulnerabilities



Female-headed households



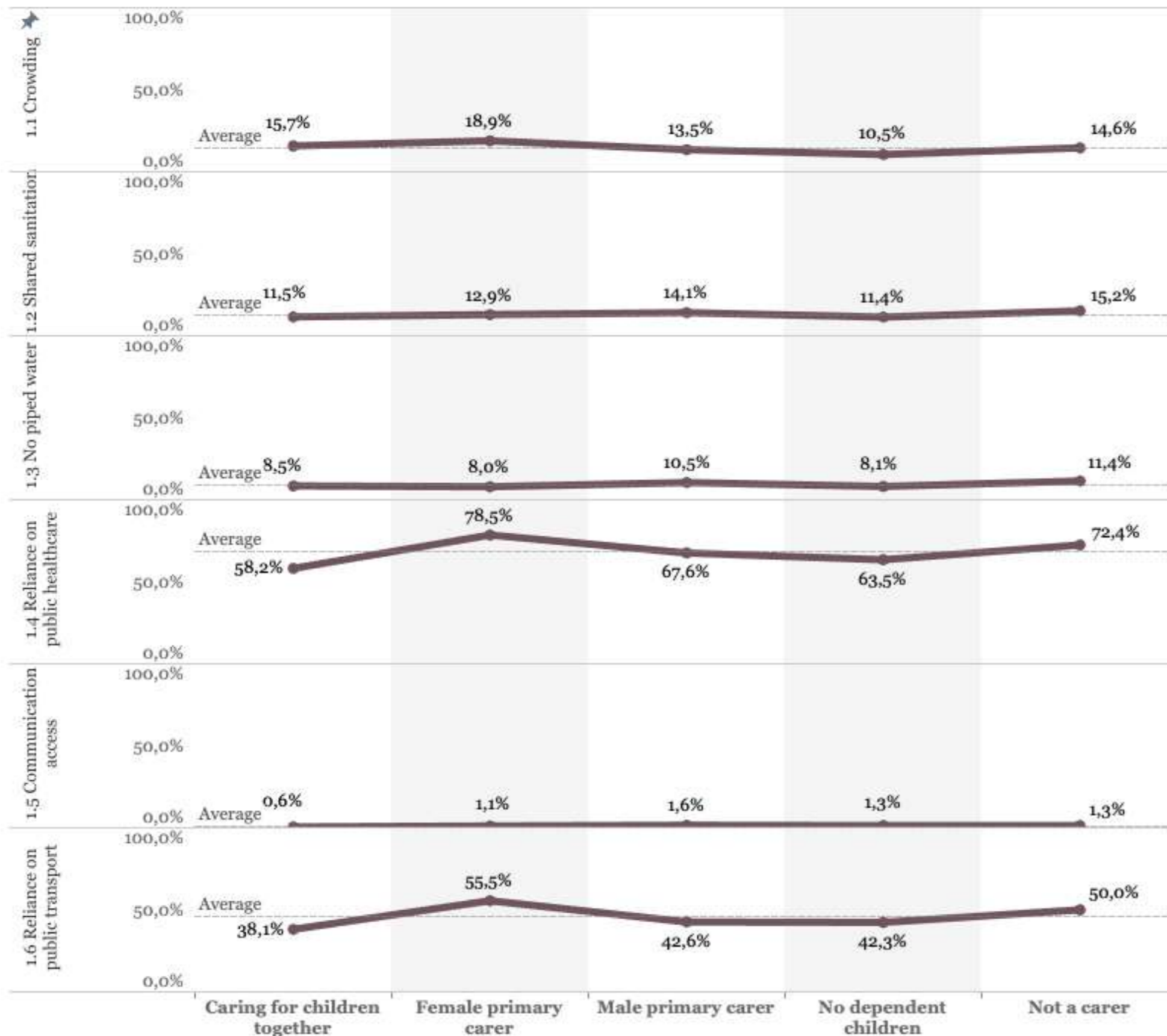
Approximately 36% of households in Gauteng are headed by females. Female-headed households are more likely to be poorer due to systemic gender bias in the labour market and are more likely to have more children in the household.

Wards shaded dark green are where nearly half of the households are headed by women. Similar to some of the other patterns mentioned in this Insight, female-headed households are more often than not in township wards.

Primary carer of dependent children

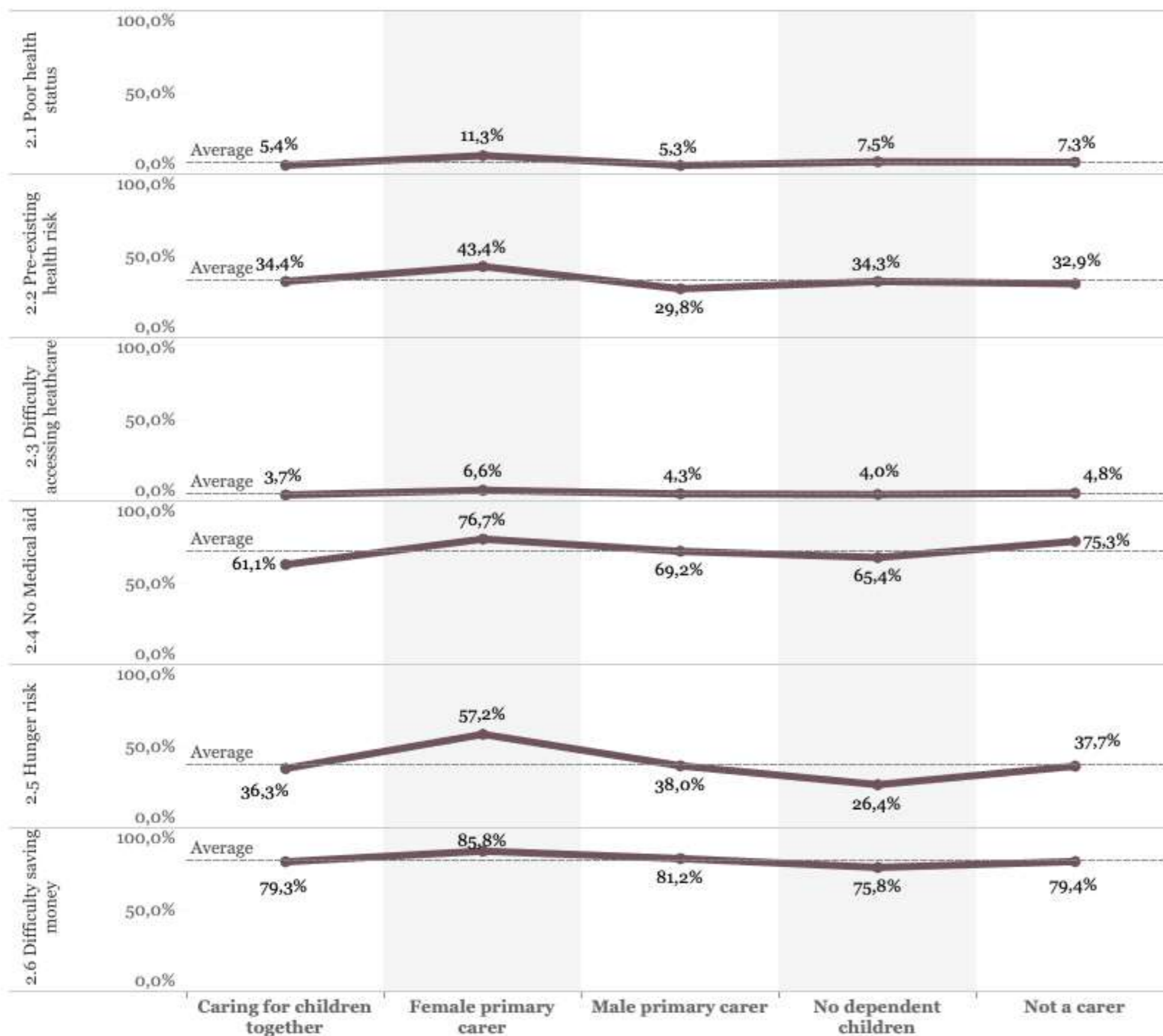


Primary carer & Index 1 Social distancing risks



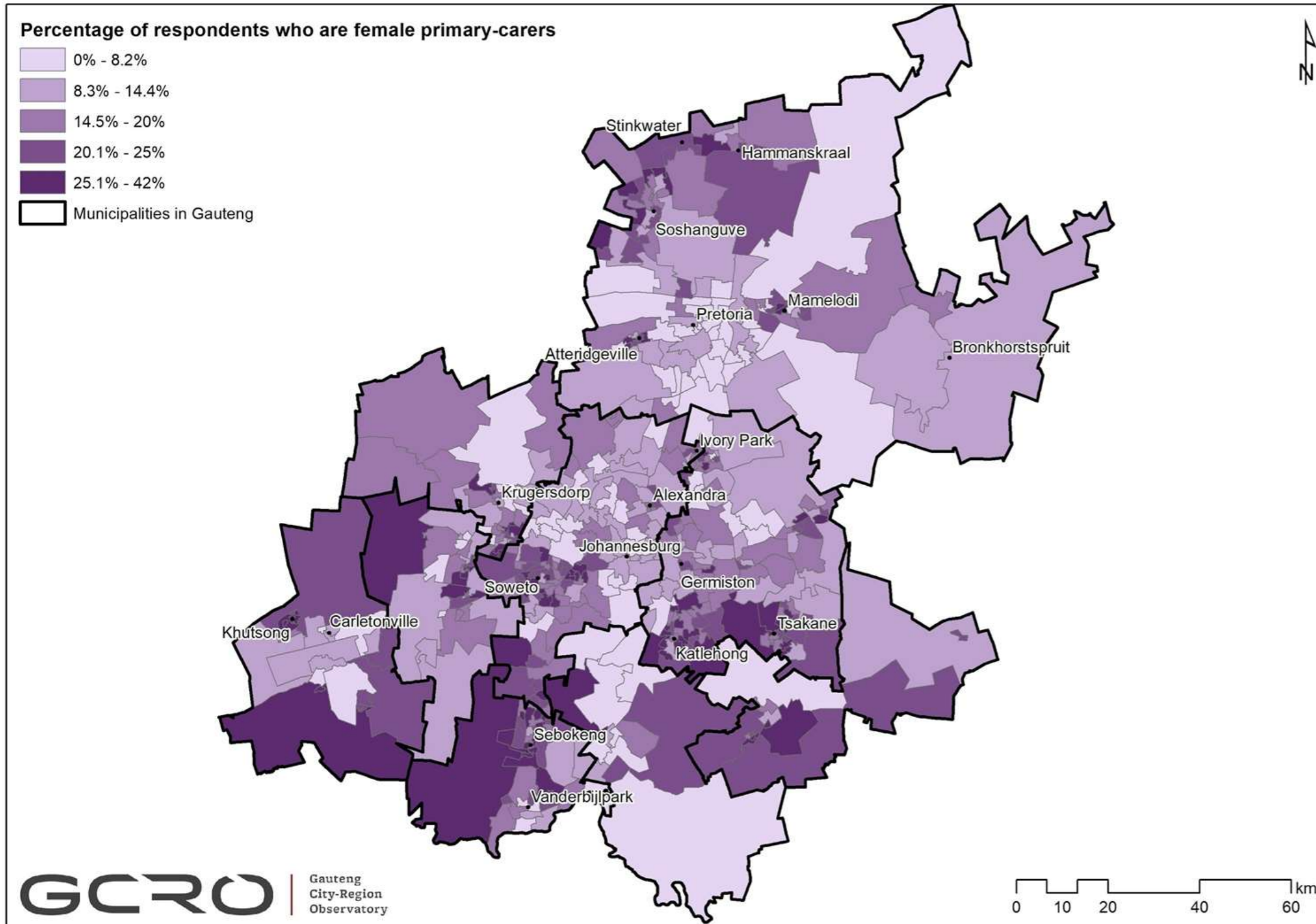
Female primary carers of dependent children are more at risk than other respondents whether they are caring for dependent children or not. Female primary carers are more reliant on public healthcare and public transport.

Primary carer & Index 2 Lockdown vulnerabilities



Female primary carers are more likely to have poor health status and to live in households with pre-existing health conditions. They are more likely not to have access to medical aid and to experience hunger.

Female primary carers



A quarter (25%) of all Gauteng respondents are women caring for children on their own or 35% of all respondents with dependent children.

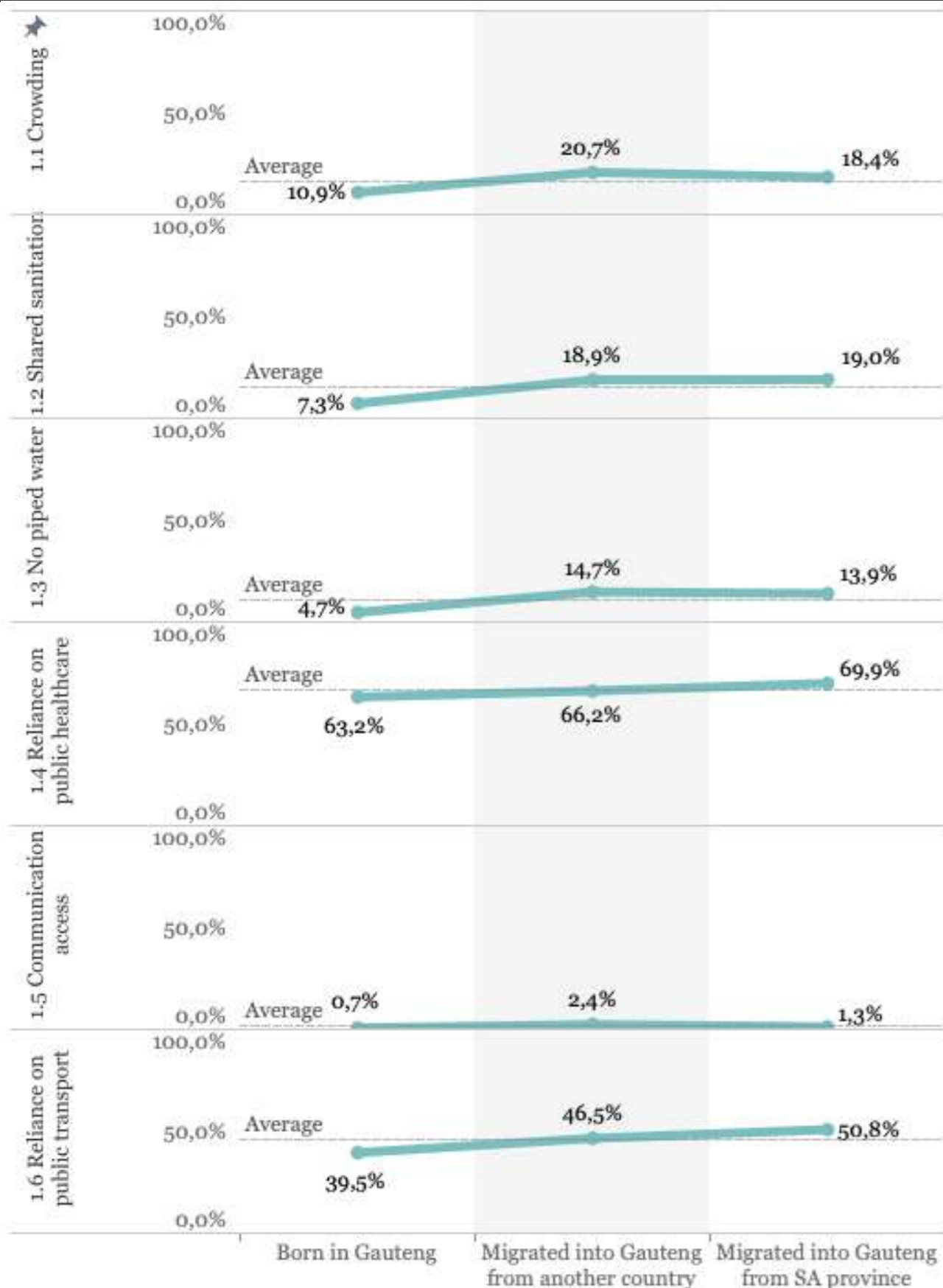
These women are more likely to be earning less and will also struggle to care for their children should they become ill.

The wards shaded dark purple are where households with female primary carers are greater than a quarter of the households in that ward. These wards are mostly located in southern Ekurhuleni and north-west Tshwane.

Migrants

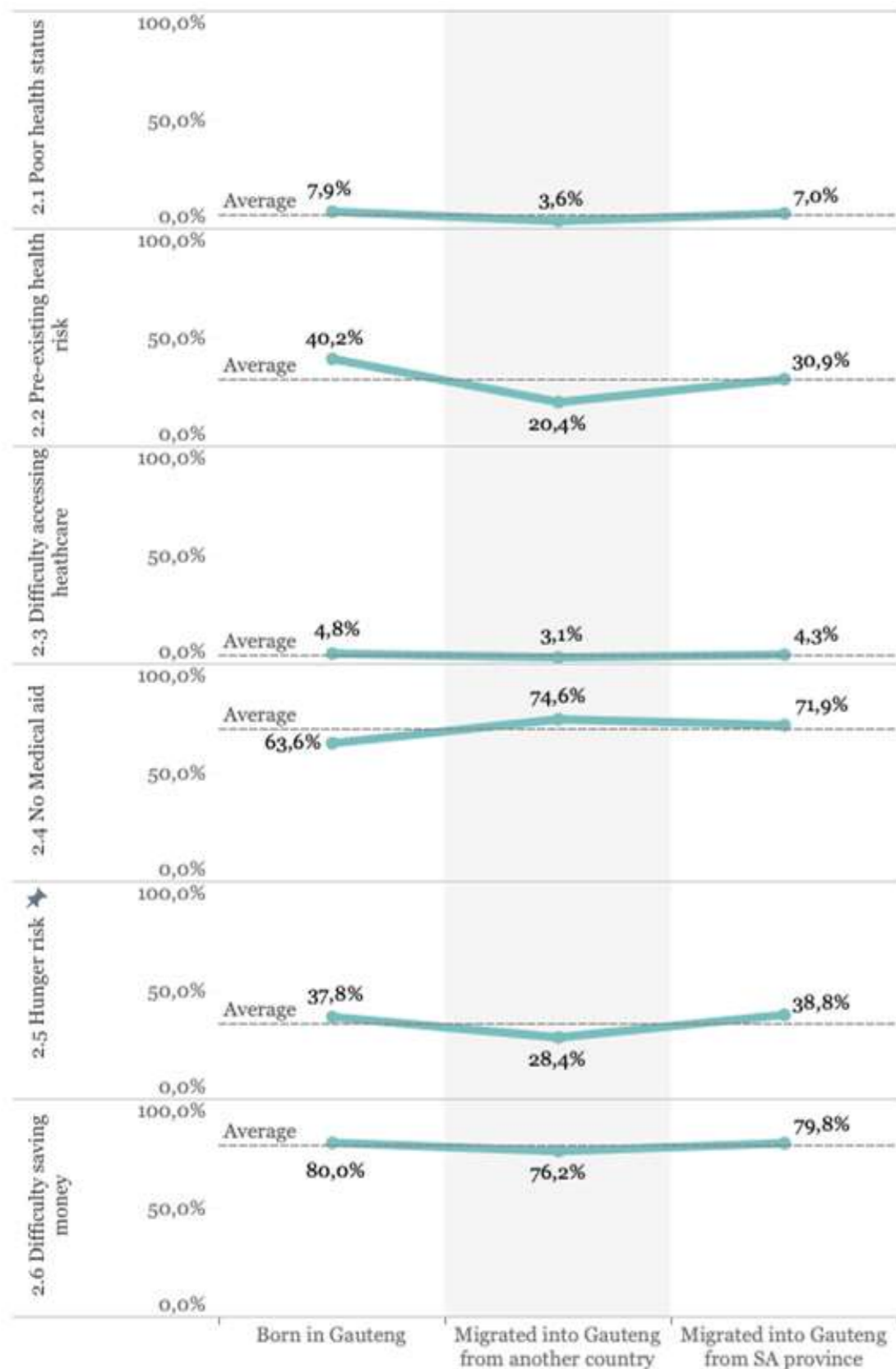


Migrants & Index 1 Social distancing risks

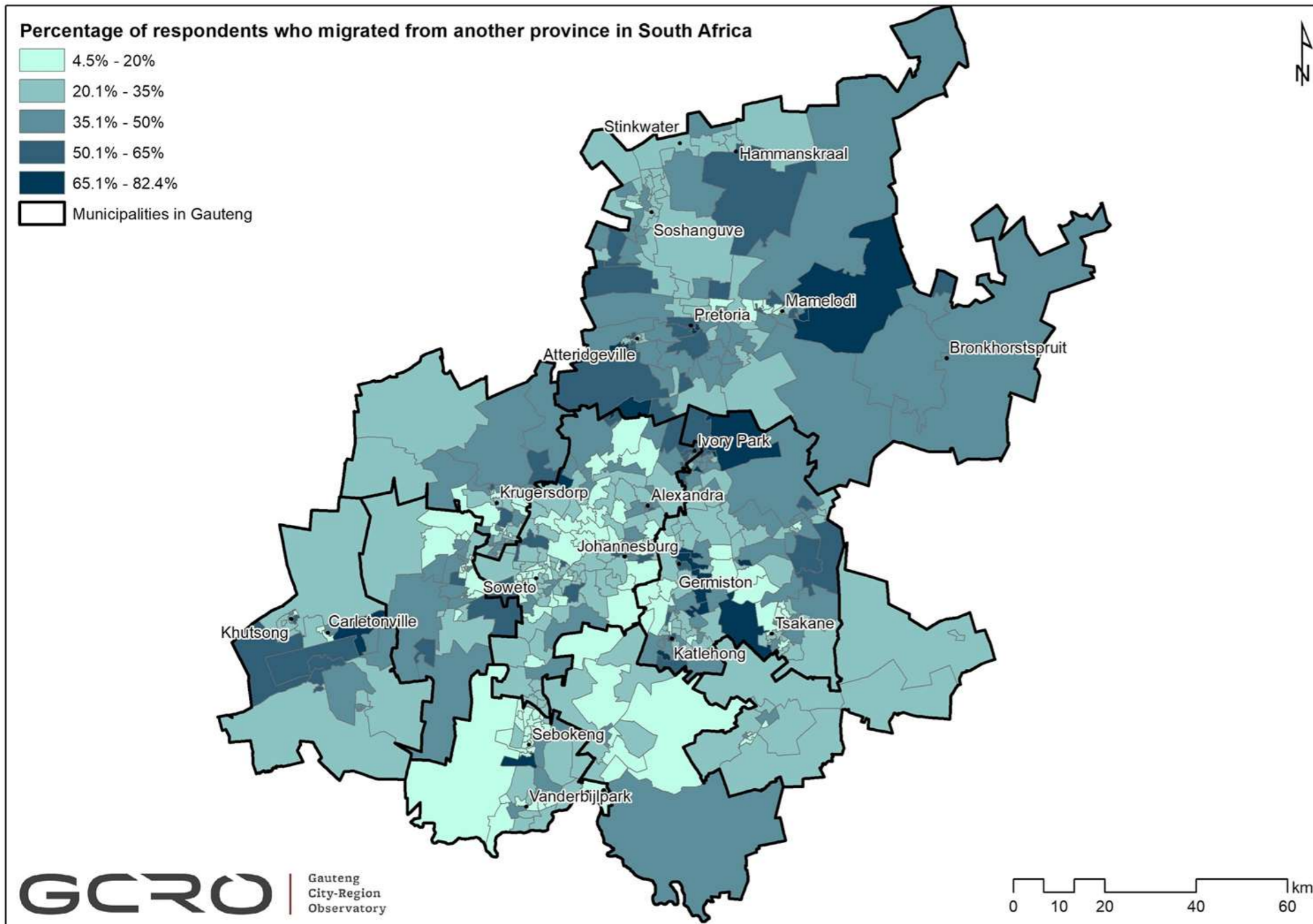


Respondents born in Gauteng are slightly less at risk than internal migrants and international migrants in terms of risk factors to maintaining social distancing and preventative measures. Internal migrants are more likely to experience hunger than those born in Gauteng or foreign nationals. In contrast, respondents born in Gauteng are more likely to live in households with pre-existing health conditions that exacerbate the symptoms of COVID-19. The risks that migrants face are quite mixed and do not differ enormously between the different groups.

Migrants & Index 2 Lockdown vulnerabilities



Migrants from other provinces



Some 35% of respondents in Gauteng migrated into the province from other South African provinces.

As mentioned previously, they are more likely to live in single person households and in informal dwellings.

In the dark blue shaded wards on the map, the proportion of households with internal migrants is greater than 65%. Some of these wards included those surrounding Carletonville, Tsakane, Mamelodi and Ivory Park.