Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Letter to the Editor

The risk of COVID-19 transmission in favelas and slums in Brazil

At a time when the coronavirus disease-2019 (COVID-19) pandemic affects a large part of the continents, populations who live in subnormal clusters, especially in developing countries, appear as an additional concern.

Subnormal clusters is a group of at least 51 housing units, arranged in a disorderly and dense manner, lacking essential public services, occupying land owned by others; commonly called favelas, invasions, caves, lowlands, communities, villages, undertow, irregular subdivisions, huts, and stilts.[1]

In Brazil, these areas were home to 11,425,644 people, or 6% of the Brazilian population, in accordance with the 2010 population census, the last conducted in the country. It is known that 5.6% (3,224,529) of the total Brazilian households are located in these areas. In the country, 6329 subnormal clusters were identified, in 323 municipalities.[1]

The Southeast region, the most populous in the country, concentrated in 2010 the largest number of homes in these types of agglomerates (49.8% of the total in Brazil), with greater concentrations in the States of São Paulo (23.2%) and Rio de Janeiro (19.1%). Then, the Northeast region concentrated 28.7% of the Brazilian subnormal agglomerates, the North region, 14.4%; the South region, 5.3%; and the Midwest, 1.8%.[2] Geometric estimate of the growth of slum dwellings in Brazil shows an average growth trend of 6.93% in these numbers, between 2010 and 2020, reaching up to 11.7% in the Northeast region.[3]

The average demographic density in Brazilian settlements is 67.5 inhabitants/hectare (inhab./ha); reaching up to 99.1 inhab./ha, as observed in the Southeast region. About 72.6% (2.3 million) of the households in these agglomerations coexist without spacing between them.[3] The profile of people living in these settlements shows that the average age in these areas was 27.9 years in 2010. The range from 0- to 14-years-old corresponded to 28.3% and the range of 60-years-old or older was 6.1%.[2]

Subnormal agglomerations have a high demographic density, so it is inevitable the agglomeration of socio-economically vulnerable people, with low education, in precarious conditions of basic sanitation and with less access to health goods and services, which predisposes its inhabitants to a greater risk of contracting the new coronavirus and to perpetuate the spread of the disease.[4]

COVID-19 cases have spread throughout the country, with a tendency to exponentially increase the number of infected people in all Brazilian regions. In times when isolation of cases, quarantine of contacts and social detachment are the most effective strategies to contain the pandemic, Brazil faces a challenge that is unknown to European countries: the living conditions in the subnormal agglomerations.

In these types of houses, social distance becomes almost impossible because residents must coexist, in quarantine, within a space that does not hold all residents together at the same time. Isolating sick individuals within multigenerational households, in which five or more individuals share the same room and bathroom, becomes impractical. The precarious conditions of basic sanitation in the houses mean that there is even a lack of drinking water and minimal hygiene. The poor socio-economic conditions do not allow adequate availability of sanitizers and disinfectants, not even soap.[4]

Although the impact of the spread of COVID-19 on these clusters is not noticed, little is discussed between government and the population about these communities. There are few proposals for coping with COVID-19 in these communities, which lack differentiated strategies, considering their particularities and their spatial distribution.[4]

Health authorities have not considered the inevitable agglomeration in conditions of economic fragility and in unequal territory, which hinder the dissemination and understanding of the minimum information on hygiene and protection against the virus, and which often also make the acquisition and use of disinfectant agents unfeasible.

In this way, the peculiarities of populations living in subnormal agglomerations emerge as a major public health challenge, especially in the face of a pandemic, which can spread to these communities, with irreversible consequences for an entire country, including the inhabitants of urbanized regions.

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