

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.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

## Rural areas at risk during COVID-19 pandemic



An expert in rural health advises governments to take a systematic approach to tackling the coronavirus crisis rather than focusing solely on urban areas. Peter Ranscombe reports.

One of the most striking images of the coronavirus disease 2019 (COVID-19) pandemic came after India's government initiated a 3-week lockdown on March 24, 2020, forcing millions of migrant workers to flood out of its cities on foot and return to their homes in the countryside, amid promises of financial help for casual labourers. Days later, Indian Prime Minister Narendra Modi used his weekly radio address to beg for forgiveness from the poorest members of society, who were being left without jobs and food due to the shutdown.

That movement of people is being repeated throughout the world and is a concern for Peter Williams, President of the International Institute of Rural Reconstruction (IIRR), New York, USA. "Infectious diseases spread along transportation routes", he explaines. "People are moving from major places of concentration, like cities, into less densely populated communities." While cities may be the economic centres that drive national economies. Williams calls on governments not to overlook the plight of rural areas and peri-urban areas—those that sit on the fringes of cities, in places such as Bangladesh and many parts of Africa during the pandemic. "It would be quite a short-sighted measure for governments to focus their attention on cities," he said. "The IIRR doesn't believe in the either/or dichotomy. We always believe in taking a systemic approach to challenges. Urban environments such as cities and towns do require a particular approach but at the same time and not afterwards you need to be putting in approaches that are specific and nuanced to a peri-urban environment as well as a rural environment. That means contact tracing—tracking how people are moving, where they're going toand understanding how these rural and peri-urban communities are then affected by the movement of people that were once in cities and have now returned to the countryside."

Williams believes that adopting a systematic approach should include examining the sociomedical, socio-economic, and sociopolitical implications of tackling the pandemic. He thinks that education is key to make sure that communities understand how the disease spreads, but without using complex technical language. "It took some time, but we eventually saw examples of the importance of education during the Ebola crisis, when it wasn't until Liberians in particular began to understand the extent to which this epidemic was something that would affect their lives and their families and their children" he explains.

He points to models used by the IIRR to disseminate information in rural communities, such as recruiting village leaders, religious figures, and even traditional healers to help spread public health messages. With the median age of sub-Saharan Africans sitting at 19, Williams highlights the need to recruit younger authority figures too. He argues against suggestions that Africa's younger demographic profile could shield the continent from the worst ravages of the virus, and instead underlines the threat from comorbidities, such as malnutrition and tuberculosis.

Williams said that international institutions have a role to play alongside national governments to ensure resources were deployed to meet the basic needs of rural communities, such as water to enable hand washing. He believes that the outbreak could still be tackled in rural areas. "You need to halt the movement

of people. I'm well aware of what that means—it means you're grinding to a literal halt a national economy and the global economy. But that's sadly what's necessary. That's the bold action that is needed."

Demographics also have a role to play when it comes to reacting to COVID-19 in rural areas within developed countries. Dr Sarah-Anne Munoz, Reader and Acting Head of the Division of Rural Health & Wellbeing at the University of the Highlands & Islands (UHI), UK, is concerned about the age profile of the population in the Scottish Highlands. "In the Highlands and islands in general, much higher proportions of our population are older", she explained. "One of the concerns about rural areas is that if we do get the virus then we are less able to treat it because we have fewer hospitals and other statutory healthcare facilities."

Munoz was encouraged by community responses to the outbreak, including youngsters buying shopping for older people so they do not have to leave their homes. She highlighted the importance of community groups using digital methods to communicate with each other and the role that staying in touch online can play in counteracting feelings of isolation and other mental health issues during the lockdown, emphasising the need for good broadband and mobile phone connections. Munoz added: "They have experience of dealing with rural traumas, such as bushfires and draughts, so there are learnings we can share, particularly on mental health, about how they cope with community-wide trauma in rural areas".

Peter Ranscombe



Published Online April 17, 2020 https://doi.org/10.1016/ \$1473-3099(20)30301-7