The responses needed to contain coronavirus are clear: regular and rigorous hand-washing and physical isolation from others. But what happens when a significant proportion of a population has no hand-washing facilities at home? What happens when physical isolation is an impossibility?

As COVID-19 sweeps the globe, it pays no heed to financial status or social position. But those who are already poor and marginalised face immediate risks not shared by those who are well off. As coronavirus moves to countries of the global South, it is essential that we understand the ways in which poverty makes people especially vulnerable, and unable to take measures to protect themselves. We also need to find ways of responding to the magnitude of the public health challenge that results.

In 2018, a team of researchers from The Australian National University led a study of multidimensional poverty in South Sulawesi, Indonesia. Here we draw on data from one district, where 2881 women and men over the age of sixteen years were surveyed.

Using the Individual Deprivation Measure (IDM), we assessed the ways in which poverty is experienced by individuals across fifteen dimensions. The results are relevant now, as responses to the pandemic include increased hygiene, particularly handwashing, and physical distancing or isolation.

BARRIERS TO HAND-WASHING

One of the dimensions of the IDM is sanitation. The survey asks individuals if they have toilet and hand washing facilities, with adequate water. One quarter of people surveyed reported having no place in their house or yard to wash their hands. There is a clear urban-rural divide: just over 30 percent of people living in rural areas had no place in their home to wash their hands, compared to approximately eight percent in urban areas.

Access to hand-washing facilities varied dramatically between regions. As might be expected, the more remote the region and the more difficult access, the greater the level of deprivation. The islands off the west coast of South Sulawesi are remote – indeed, so remote that they are often missed from household and poverty surveys. The IDM study found that 59 percent of people living in the islands had no access to hand-washing facilities at home. Here, as in other regions, women were more likely to have no access. In Indonesia, where the gendered division of roles and responsibilities remains quite rigid, it is women who are required to cook for their families. Men are expected to be working outside the family home, exposing them to different types of risks. Thus, these findings indicate high levels of individual deprivation, and have serious implications for family and public health. They also suggest the potential social impacts of gender-based inequality.

Having to go outside one’s house in order to wash hands has serious health implications, showing that people are unable to maintain standards of hygiene necessary to protect themselves and their families. In the context of COVID 19, it may be deadly.

Most people involved in the IDM study were able to access water, albeit outside the home for one quarter of the population. Access to soap is more challenging. Around 13 percent of people reported not being able to use soap to wash their hands; the percentage of people unable to use soap was higher in urban areas than in rural areas. People in rural areas were far more likely to lack both soap and water. These findings show that poverty prevents people from exercising levels of hygiene needed to stem the spread of coronavirus in both rural and urban areas – but the issues are different in each, and so must be the responses.
BARRIERS TO PHYSICAL ISOLATION

The IDM survey also asks about issues that will prevent people from being able to effectively isolate themselves. A lack of access to private toilet facilities is a significant reason for people having to go into public spaces. Almost one quarter of respondents did not have access to private toilet facilities (in their own house or yard). Lack of access to toilets was concentrated in rural areas, where almost 29 percent of people reported no access, compared to less than three percent in urban areas. Almost nine percent of respondents used only public toilets, with men more likely than women to rely on public toilets; while almost six percent used toilets shared with other households. Women were more likely than men to use private shared toilets. In these situations, it is not possible for people to physically isolate. **The most basic human functions require people to interact in spaces shared with others - and in conditions of poor hygiene.**

Our findings indicate that over one quarter of people surveyed need to regularly collect water for household use - this increased to one third of people in rural areas and was just over 10 percent of people in urban areas. People in rural areas were twice as likely as those in urban areas to report not always having water for domestic use (such as washing clothes and dishes). **Almost 13 percent of respondents reported not having enough containers to carry or store enough water for more than one day.** For these people, who must go into public spaces daily to fulfill their or their household’s needs for water, physical isolation impossible.

Almost nineteen percent of respondents in the IDM survey reported that their home was too crowded to be able to live comfortably. This was more likely to be a problem in rural areas, but even so, one in ten people in urban areas reported significant overcrowding in their homes. This poses a very significant problem: even if people can remain in their homes, overcrowding means they must be in very close physical proximity to others.

THE CHALLENGE

The pressures to go into public spaces for water or to access toilets, combined with overcrowding within homes indicates the high risks faced by those who are poor. The option to physically isolate is simply not available. The challenges facing Indonesia are enormous. With sufficient political will, planning, and resources it is possible to ensure that people have soap for handwashing, particularly in urban areas where logistic and access issues are less acute. Providing people with access to hand-washing and toilet facilities in their homes is a massive infrastructure and social equity project that cannot be achieved in the short-term. **Providing safe, public access points is now a matter of urgency.**

Two broader lessons can be drawn from our research in Indonesia. First, despite these sobering findings, Indonesia is better placed than many countries. Poverty (measured by consumption expenditure) has been declining over time and fell below 10 percent of the population in 2019. In many countries around the world, income or consumption poverty is far higher – and the challenges will be far greater.

The second lesson is that - in a context of pandemic - our usual way of measuring poverty does not tell us enough. We need to know not only about people’s income or expenditure – we also need to know how multidimensional poverty plays out. **We need to know how poverty impacts on issues like access to handwashing and toilet facilities, we need to know the barriers to people being able to physically isolate.** The Individual Deprivation Measure gives us this information – and the results are disturbing. They also demand immediate response.

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