

OKINAWA AT COVID-19 CROSSROADS

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The first aim of government is to secure our right to life.

This is usually understood as securing the safety of fellow citizens and preserving the independent nation state.

In our modern societies it also includes provision of a reasonably advanced health care system, equipped to protect the people and hence save lives.

Okinawa is renowned as one of our planet's five 'Blue Zones'. We have one of the highest proportions of centenarians in the world.

You might therefore conclude that Okinawa's health and social care infrastructure is exemplary. And this might well be so, under normal conditions.

But conditions now are far from normal.

Many Okinawan lives are endangered by the global COVID-19 pandemic.

Indeed, the higher percentage of older people vulnerable to the virus makes Okinawa's outlook especially grim.

This explains the difficult but necessary announcement made in recent days by Governor Denny Tamaki. Scientific analysis supports his urgent intervention.

Modelling studies by a team of OIST researchers, led by Simone Pigolotti, confirm that Okinawa now faces the same rate of infection spread as the city of Wuhan prior to containment measures.

By analyzing the current rate of hospitalization, our scientists estimate that over the last month each infected person transmitted the coronavirus to an average of 2.5 more people. Our modeling shows that reducing this

number to less than one is key to pulling us back from an unprecedented public health crisis. If we make no effort to halt the spread, the worst-case estimate is that Okinawa could experience a cumulative death count of between 14,000-20,000 people by the end of 2020. The Prefecture would need around 2700 intensive care beds at the peak of the outbreak.

But immediate, serious containment effort could greatly reduce the overall number of deaths and prevent our hospitals from being overwhelmed.

For this reason, Governor Tamaki is urging people to adopt tough measures and restrict their daily lives.

If his advice is not taken seriously, evidence shows that COVID-19 will not be contained effectively.

We know that government in Japan cannot use the law to compel people to change their routines. But this is also true in countries like Germany. There, the people cannot be forced to change their lifestyle by the law. Nevertheless, Germans have followed public health and safety advice with rigor, given the gravity of the threat.

Action to stop the spread of COVID-19 in Okinawa has to be urgent when the number of hospital beds available for critical cases is low and cannot rapidly be increased.

Testing only those patients with advanced and serious symptoms means many infected with COVID-19 in Okinawa remain undetected. Based on data published in other countries, we calculate the true rate of infection to be up to fifty times higher. People infected with COVID-19 are unknowingly spreading the virus to all around them.

Scientific analysis convinces us that Okinawan people must take steps immediately to “flatten the curve”. Slowing the rate of COVID-19 infection can only be achieved in Okinawa through “lockdown” – significant restrictions on daily life – until at least May 6, 2020.

This means – as the Governor has urged – remaining at home wherever possible, and leaving the house for only essential trips, like buying food,

medicine, or taking daily exercise. Shops, bars and restaurants will have to close, but given the vastly reduced number of tourists visiting Okinawa, business is already at a virtual standstill.

OIST brings together top scientific talent from across Japan and from more than fifty nations. We have been able to analyze responses to COVID-19 in countries around the globe and we are in a strong position to provide recommendations on best practice to help reduce the impact. Our duty is to provide society with advice, based on available evidence and sound methodology.

Quite rightly, elected politicians make the essential decisions which affect all our lives.

Our analysis supports the restrictions being urged by Governor Tamaki.

We need to do the utmost to save as many lives as possible. This includes a drastic increase in testing, providing more intensive care beds, and – above all – through people staying at home to contain the spread.

Researchers at OIST have built UVC sterilization units which will allow hospitals to re-use face masks up to ten times. We are applying technology to manufacture protective equipment including 3D-printed face shields. OIST-made chemical solutions are helping partners like Onna Village Office, and our scientists are striving to deliver advances in testing.

We have a duty to provide scientific advice. But it is our determination to contribute all we can to help Okinawa through the difficult period ahead.