

# EXPERT OPINION: Fighting COVID-19: A veterinary perspective

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As a veterinary professional with experience in disease control, I have been following the various measures implemented by the South African government as we attempt to navigate through the COVID-19 pandemic.

It is unfortunate that the National Coronavirus Command Council (NCCC), the Department of Health, and the Cabinet, have to date not involved the veterinary profession in soliciting inputs and advice on how to manage the pandemic. There are a number of veterinary experts (veterinary epidemiologists, virologists and disease control experts) whose skills gained from dealing with various pandemics in the animal health field, such as rinderpest and foot-and-mouth disease outbreaks, could be useful in the fight against COVID-19. Luckily it is not too late for government to consider involving a core team of veterinary experts, even if as a sub-committee of the NCCC.

Taking into account lessons learned from pandemics in animal populations, here are some ways in which the second wave of the COVID-19 pandemic might be tackled differently if veterinary experience was considered:

- After the new COVID-19 was detected in the Eastern Cape, and as the **second wave** escalated in the Western Cape, Eastern Cape and KwaZulu-Natal, veterinary experience would have suggested: the closure of all borders in RSA during November and December 2020; moving the three worst-hit provinces to lockdown level four or five, accompanied by deployment of police and soldiers to enforce regulations; an increase in road blocks at all ports of entry or exit; stopping inter-provincial travel into and out of the three provinces; and increasing the number of health personnel to focus on increasing awareness, testing and surveillance.
- In **hospital wards** handling COVID-19 cases in the other provinces, besides the current biosecurity measures, we would have suggested the following: A system similar to an ALL-IN and ALL-OUT system, whereby only specifically identified health professionals are allowed to enter into a ward, and remain inside until they are replaced at a certain time, with food and water delivered following strict biosecurity measures. Any health professional entering a ward must shower (with hot water at specific temperature, and using soap) and remove personal clothing to change into specific PPE (personal protective equipment) clothing, and they must also shower when leaving the ward before putting on their personal clothing. Hospitals should also dispose of new patients' clothing as they are admitted – the clothing should be treated as infected, and family should not be allowed to collect it.
- Regarding **hospital mortuaries and funeral parlours**, it's surprising that the government is only now acknowledging that funerals are often super-spreader events. It was clear to many early on that funeral parlours and funerals would be one of the major sources of infection and spread. Therefore, besides the biosecurity measures implemented by funeral parlours and mortuaries, we need to do the following: Use an ALL-IN and ALL-OUT system (as indicated above) for all people entering and leaving the mortuary or funeral parlour; administrative personnel must also wear PPE, instead of working in their ordinary clothing; change into new PPE regularly, with no re-use of PPE.
- **Funerals** are a very sensitive matter, but although bereaved families are stressed and experiencing emotional pain, one must also be considerate of the health and safety of the extended family and friend circle. Therefore one must consider the following: Any death at home should be treated as a COVID-19 case, unless proven otherwise; funeral parlours must be compelled to immediately inform relevant health authorities to disinfect houses

affected, requiring an increase in the number of health personnel at local level; only one family member (complying with the ALL-IN and ALL-OUT system) to identify a body at a funeral parlour; irrespective of cause of death, the deceased's coffin must not be allowed to be taken to the family home the night before the funeral; only close family members should be allowed at the funeral, with a maximum of ten people in attendance (this should be monitored by an authorised Health Department representative); all ten people must wear appropriate PPE on top of their normal clothing, and not only face masks; this would apply until we manage to vaccinate 70 to 80% of the population.

- While one acknowledges the positive intention behind giving first priority for **vaccination** to healthcare and other frontline workers, my approach would have been different and as follows: In the **first phase**, target the initial 1,5 million doses of vaccine (although insufficient) to specific areas, including hotspot areas as identified, as well as mining areas and their towns. Vaccine coverage should also include a 30 to 60km radius around the hotspot and mining areas. Two groups of teams should drive the vaccination campaign as follows: The first team starts from inside going out from the centre of the hotspot and mining areas, while the second team starts vaccinating from outside the 30 to 60km radius of the hotspot/ mining area going inside. All people in the town/ radius should be vaccinated.
- In the **second phase**, the next batch of vaccines should focus on health and frontline workers, essential workers and the elderly. This could apply to all health and essential workers in the rest of the country, with the starting point being, again, a radius of 60km beyond the first 30-60 km radius vaccinated during the first campaign.
- In the **third phase**, all remaining residents should be vaccinated to target an 80% coverage in the population.

I know that a number of people will argue that treating and managing people is different from animals. However I would argue that:

- Dealing with diseases (bacteria and viruses) which cause pandemics does not differentiate between animals and human beings, and most of the causes of such diseases are zoonotic (originate from animals). Scientific literature indicates that more than 70% of diseases in humans originate from animals.
- Veterinary professionals deal with diseases which might cause pandemics on a regular basis, and are well experienced to utilise the skills acquired over the years. It is thus unfortunate that their knowledge and skills have not been called on.
- It is common knowledge that a number of international drug companies, flying in the face of the push to reduce the practice, still use animals (rodents and monkeys) to develop and test the vaccines and medicine developed for human use.
- The above measures, even though some might be viewed as drastic, would reduce the spread and contain the disease until herd immunity is attained in South Africa.

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