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Shift in trends during lockdown: A study on veterinary pet animal practice

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Abstract

With a purview to curtail the spread of the COVID-19 pandemic in India, for the first time in over a century, the country has been put under a lockdown from 25 March, 2020 onwards. The present study was carried out to analyse the changes, trends and impact of lockdown on veterinary pet animal practice in select parts of India during this lockdown period, specifically over the month of April and to provide an insight into possible areas of improvisation. The study was carried out by telephonic interview with 30 pet animal practitioners across different States/Union Territories (Puducherry, Tamil Nadu, Karnataka, Maharashtra, Kerala, Telengana, Goa, Delhi NCR and Punjab) of the country using a structured pre-tested interview schedule. Majority of the veterinarians (60%) informed that there was a reduction in the number of cases they attended to or presented to them. Out of 30, 27 veterinarians (90%) did not change their consultation charges during the period and 46.67% of veterinarians had their working hours reduced to half. An increase of 23.33% of the veterinarians being asked to attend house visits during this period was observed. Invariably, all the veterinarians reported a seasonal increase in cases of parvovirus enteritis and tick menace. Out of 30, 20 practitioners (66.67%) reported that usual vaccines were short in supply while equal number of them reported that the cases of vaccination have also come down in number. Many veterinarians (73.33%) informed that the animal owners they dealt with have started to spend more time with the pets and consequently care more for the pets during the lockdown. There is a considerably short supply of vaccines, animal food, consumables and medicines during this period. Evident number of vaccine preventable diseases such as parvovirus enteritis can result in larger size of outbreaks of such diseases in this period as well as the near future due to the supply crisis of vaccines. The lockdown period has adversely impacted both pet animal practice and practitioners. This period can serve as a potential eye-opener for many pet animal practitioners and other authorities to reprioritize, stock up and mobilize resources prior to such situations if they happen in the future. Adoption of novel techniques such as telemedicine consultation can be explored by the practitioners along with other stakeholders during such situations in the future which will not only help them overcome crisis but also improve the service delivery and consequently sustain positive animal health care.

Keywords: Pet animal practice, lockdown, trends, supply crisis

Introduction

On March 11, 2020, the World Health Organization (WHO) declared COVID-19 (Corona Virus Disease 2019 - disease caused by SARS-CoV-2 virus) a pandemic (WHO, 2020) [1]. Many countries affected by the pandemic adopted lockdown as a public containment measure against the disease spread. With a purview to curtail the spread of the COVID-19 pandemic in India, for the first time in over a century, the country was put under a lockdown from March 25, 2020 onwards. The lockdown period in India has been characterized by a negative impact on formal and informal sectors as well as public and private sectors in terms of activity (Dev *et al*, 2020) [2].

Veterinary Service, primarily an essential service, has also borne the impact of lockdown. While very limited reports are available on impact of lockdown on animal husbandry and veterinary services in some parts of India, no such information is available with regard to impact of lockdown on veterinary pet animal practice or practitioners. On that note, the present study was carried out with two objectives. Firstly, to analyse the changes, trends and impact of lockdown on veterinary pet animal practice in select parts of India during the lockdown period, specifically after a month of the lockdown (April month of 2020). Secondly, the study tries to provide an insight into possible areas of improvisations so as to overcome similar kind of a crisis situation in the future.

Materials and Methods

The study was undertaken in the first week of May, 2020 in which thirty (30) pet animal practitioners from different States/Union Territories in India (Puducherry-4, Tamil Nadu-10, Karnataka-1, Maharashtra-2, Telengana-1, Goa-7, Kerala-2, Delhi NCR-2 and Punjab-1) were randomly contacted and telephonic interview was carried out after making a structured pre-tested interview schedule with both open and closed ended questions. The questions were framed to assess the change in work hours, change in number and kind of cases, logistical and availability issues of vaccines/medicines/consumables, economic impact, change in practice and the animal owner-animal interaction during the lockdown period specifically over the month of April in 2020. Based on answers, the results were categorized into variables. Elementary statistics have been used to arrive at the counts and percentages to depict the trends, number and change using charts as described by Snedecor and Cochran (1989) [3].

Results and Discussion

Majority of the veterinarians (60%) informed that there was a reduction in the number of cases they attended to either at their clinic or by house calls or both and only 4 veterinarians (13.33%) reported an increase while the rest felt there was no change in the number of cases after the lockdown was imposed (Figure 1). In comparison to before lockdown, an overall increase in trend of the pet practitioners being asked to attend house calls can be seen as seen (Figure 2). All the practitioners attended to only emergency surgeries during this period and other elective surgeries were postponed to a later date. The reason for the reduction in the number of cases can be attributed to the restriction of the movement of individuals as a result of lockdown and it also explains the upward trend of pet practitioners being asked to attend house visits for their service.

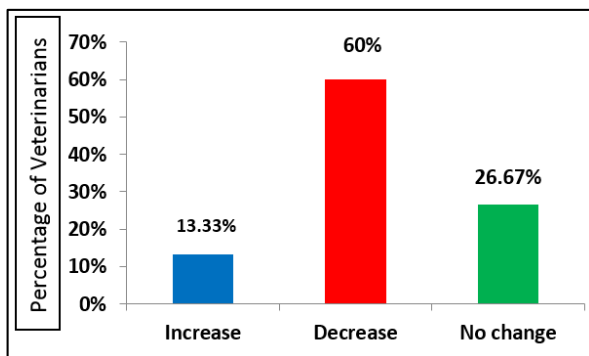


Fig 1: Change in number of cases attended to by the pet animal practitioners

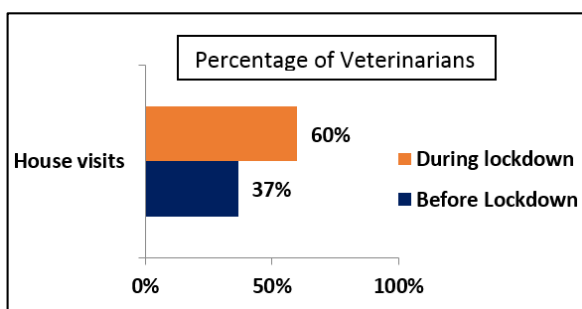


Fig 2: Change in type of practice during lockdown

With regard to working hours, 46.67% of the veterinarians reported that their working hours were reduced to half of the

time prior to lockdown while 36.67% of them have it reduced to less than half and the rest 16.66% had no change in the working hours. The working hours during lockdown are in relation to an average of 8 hours of work prior to lockdown (Figure 3). As many as 90% of the pet practitioners did not change their fee during the lockdown period and 80% of the total practitioners reported to have faced financial management issues during this period. The financial management issues during this crisis can be attributed to many factors such as problem in logistics, transport, restrictions, reduced number of cases, unchanged fee and so on which affect service delivery and consequently the finances and livelihood of the pet practitioners. Despite being an essential service, absence of adequate permissions and policies by the government compounded by restrictions, have not allowed private pet practitioners to attain same level of practice during lockdown as prior to it.

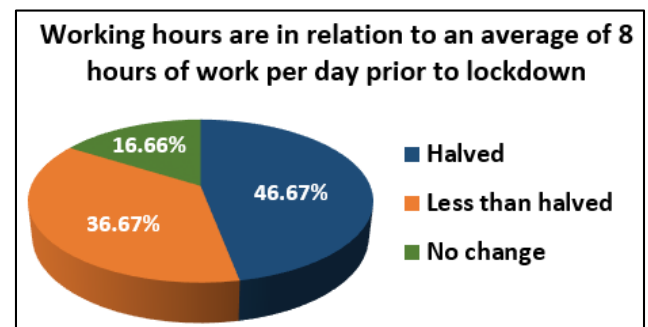


Fig 3: Change in work hours of pet practitioners during lockdown

On interaction with animal owners they attended to, 56.67% of the pet practitioners reported that animal owners (at least one) had enquired from them the zoonotic potential of the SARS-CoV-2. Though no extensive evidence is available on the zoonotic potential of the virus from pets, some studies do make a plausible clause regarding transmission from dogs (Goumenou *et al*, 2020) [4] while positive zoonotic potential from animals other than pets cannot be ruled out (Tiwari *et al*, 2020) [5]. With 43.33% of vets informing that no owner had asked them about zoonotic potential of the virus, it is suggestive that those animal owners seem to have an understanding or knowledge with regard to zoonotic spread. Also, 73.33% of the pet practitioners said that they have had at least one animal owner reporting to them about spending more time with his/her pet as a result of the lockdown. The finding is consistent with a similar study done in pet animal owners in Barcelona (Spain) during lockdown by Bowen *et al*, (2020) [6]. Pet animals tend to become a vulnerable and suppressed group leading to their abandoning during a time of crisis and also react to the changes in behaviour of their owners (Vincent *et al*, 2020) [7]. Reduced interaction between humans and confinement of humans in their home during this period has made the pet owners to care more and spend more time for their pet/s. Though this may better the human-animal bond, confinement may become both a source of boredom and affect physical activity of animals and humans. Though increased sanitation and clean practices were followed by all the veterinary pet practitioners in line with government guidelines or standard operating procedure during lockdown, only 40% of the veterinarians reported animal owners informing them increased sanitary measure at their home with regard to the pet/s. There cannot be a conclusive point with regard to this as there might not be a usual conversation regarding home sanitation between animal

owner and the veterinarian.

Out of thirty (30), 20 practitioners (66.67%) reported that routine vaccines were short in supply and an equal number of them reported that the proportionate cases of vaccination have also come down in number (Figure 4 & 5). Invariably, all the veterinarians reported a seasonal increase in cases of parvovirus enteritis and tick menace. Sixty three percent (63.33%) of the veterinarians also reported a reduction in supply of medicines, pet food and other consumables during this period. The economic impact due to transport hurdles and import of vaccines/medicines/consumables/pet food during the lockdown period continues to affect service delivery of private pet practitioners (Dev *et al*, 2020) [2]. The short supply of vaccines but evident number of vaccine preventable diseases such as parvovirus enteritis during lockdown period can result in larger size of outbreaks of such diseases in this period as well as the near future. There can also be an increase in incidence of tick borne diseases in the upcoming time. There is also shortage of animal food, medicines and consumables from manufacturers. There is a need to reprioritize the veterinary services sector and make available necessary vaccines, medicines, consumables and animal feed by the competent authorities by mobilizing resources during such strained times.

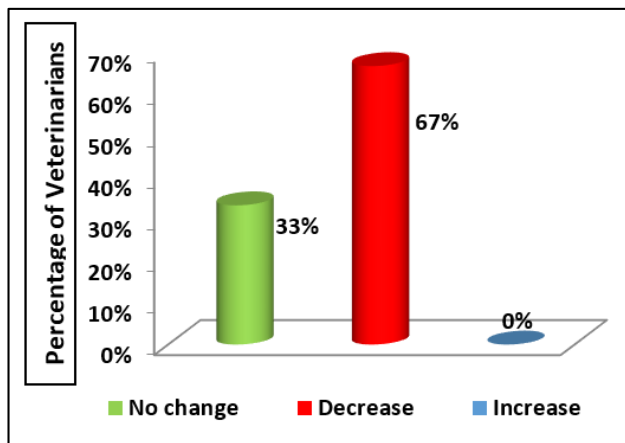


Fig 4: Trend in vaccine availability during lockdown

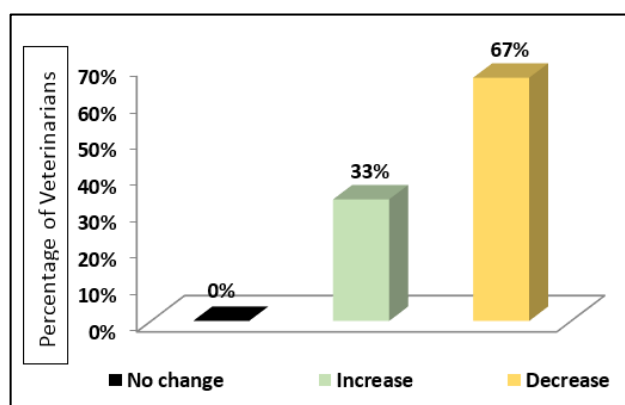


Fig 5: Change in proportionate number of vaccination cases attended

The improvisations which pet animal practitioners can adopt during such periods in future to enhance their service delivery include exploring novel areas such as telemedicine and mobile phone based pet care applications but they must assess in mind the cost-benefit analysis of the same (Waters, 2020) (Hagar *et al*, 2020) [8] [9]. As undertaken in a study in Mississippi in the U.S.A, disaster preparedness of pet animal practitioners and their practice can be assessed beforehand

and symposiums or workshops can be conducted in collaboration with various associations/groups to train this group of professionals to face a similar kind of crisis situation in the future (Huston *et al*, 2020) [10].

While the differences in the various observations may also be due to state administrative factors, the heterogenic sampling provides an insight into various zones of the country where a majority trend in each aspect is observed. The study leaves scope for analysis of other parameters and their interplay and co-relation with respect to how they affect the pet animal practice and cause a shift in the trends.

Conclusion

The lockdown period has adversely impacted pet animal practice and practitioners as well. The effect on livelihood of pet practitioners and on the healthcare of animals due to inadequate resource mobilization is imminent. Larger size of outbreak of vaccine preventable diseases and tick borne diseases (which include potentially zoonotic ones also) due to reduced vaccine supply and turnout can be expected in the near future. The main learnings from the impact of the lockdown on the pet animal practice is that it can serve as a potential eye-opener for many pet animal practitioners and other authorities to reprioritize, stock up and mobilize resources prior to such situations if they happen in the future. Adoption of techniques on the lines of telemedicine consultation and mobile clinics can be explored by the practitioners along with other stakeholders during such situations in the future which will not only help them overcome crisis but also improve the service delivery and consequently sustain positive animal health care.

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