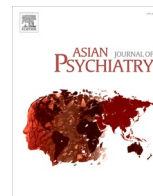




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Letter to the Editor

Recognizing the role of animal-assisted therapies in addressing mental health needs during the COVID-19 pandemic



The current pandemic of Corona Virus Disease (COVID-19) has affected millions of lives across the world (Tandon, 2020a, 2020b). The majority of the countries have implemented a course of action such as lockdowns of cities to contain the infection spread. The pandemic and lockdowns, the isolations, quarantines combined have an immense psychological impact (Ransing et al., 2020; Tandon, 2020a). A review study has shown elevated stress, anxiety, depression, and panic among the general population including the health care workers. People with pre-existing psychiatric illness, elderly and pregnant women, homeless people are more vulnerable to psychiatric morbidities (Rajkumar, 2020; Shoib et al., 2020).

Since prehistoric times there is a bond between humans and pets. Pets are known to provide a sense of companionship and security. Studies have shown human-animal interaction have a potential role in reducing the stress, fear, anxiety, depressive symptoms and promoting calmness and social interaction. Increased oxytocin levels during human-animal interaction is one of the proposed mechanism (Andrea et al., 2012). Pets can also act as a companion to prevent loneliness (Rew, 2000). Another study suggested pets were implicated in providing intimate and secure relationships and proposed pets should be considered as the main source of support (Brooks et al., 2016). Systematic review on Animal-assisted interventions (AAIs) canines, farm animals, equines showed a wider range of applications in depression, anxiety, including severe mental illness schizophrenia. AAI also noted to enhance coping skills, improving self-efficacy (Maujean et al., 2015). There are certain methodological limitations in these available studies like small sample size, controls, and blinding.

There is also a concern regarding the risk of transmission of COVID-19 infection from animals to humans, even though millions of people in the world have been affected by COVID-19 infection, however, there are only a few reports of pets testing positive for the virus and no robust evidence related to pets transmitting the infection to their owners, and no available guidelines for COVID-19 testing in pets (Parry, 2020).

There is a pressing need for timely intervention to prevent these mental health morbidities. Its challenging task in low and middle-income countries as there is minimal access to health care and scarce resources. Identifying and using the existing resources such as pets to address loneliness and mental health concerns is one feasible option. There is a paucity of literature in this field, immediate attention needed to recognize the role of pets through systematic and experimental studies. The role of pets in addressing mental health seems to be promising in this regard.

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Declaration of Competing Interest

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References

- Andrea, B., Kerstin, U.-M., Henri, J., Kurt, K., 2012. Psychosocial and psychophysiological effects of human-animal interactions: the possible role of oxytocin. *Front. Psychol.* 3, 1–15.
- Brooks, H., Rushton, K., Walker, S., Lovell, K., Rogers, A., 2016. Ontological security and connectivity provided by pets: a study in the self-management of the everyday lives of people diagnosed with a long-term mental health condition. *BMC Psychiatry* 16, 409. <https://doi.org/10.1186/s12888-016-1111-3>.
- Maujean, A., Pepping, C.A., Kendall, E., 2015. A systematic review of randomized controlled trials of animal-assisted therapy on psychosocial outcomes. *Anthrozos* 28, 23–36. <https://doi.org/10.2752/089279315X14129350721812>.
- Parry, N.M.A., 2020. COVID-19 and pets: when pandemic meets panic. *Forensic Science International: Reports* 2, 100090. <https://doi.org/10.1016/j.fsir.2020.100090>.
- Rajkumar, R.P., 2020. COVID-19 and mental health: a review of the existing literature. *Asian J. Psychiatr.* 52, 102066. <https://doi.org/10.1016/j.ajp.2020.102066>.
- Ransing, R., Adiuoku, F., Pereira-Sanchez, V., Ramalho, R., Orsolini, L., Teixeira, A.L.S., et al., 2020. Mental health interventions during the COVID-19 pandemic: a conceptual framework by early career psychiatrists. *Asian J. Psychiatr.* 51, 102085. <https://doi.org/10.1016/j.ajp.2020.102085>.
- Rew, L., 2000. Friends and pets as companions: strategies for coping with loneliness among homeless youth. *J. Child Adolesc. Psychiatr. Nurs.* 13, 125–132. <https://doi.org/10.1111/j.1744-6171.2000.tb0089.x>.
- Shoib, S., Nagendrappa, S., Grigo, O., Rehman, S., Ransing, R., 2020. Factors associated with COVID-19 outbreak-related suicides in India. *Asian J. Psychiatr.* 53, 102223. <https://doi.org/10.1016/j.ajp.2020.102223>.
- Tandon, R., 2020a. COVID-19 and mental health: preserving humanity, maintaining sanity, and promoting health. *Asian J. Psychiatr.* 51, 102256. <https://doi.org/10.1016/j.ajp.2020.102256>.
- Tandon, R., 2020b. The COVID-19 pandemic, personal reflections on editorial responsibility. *Asian J. Psychiatr.* 50. <https://doi.org/10.1016/j.ajp.2020.102100>, 102100–102100.

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