



Letter to Editor

Asian Pacific Journal of Tropical Medicine

journal homepage: www.apjtm.org



doi:10.4103/1995–7645.291042

Impact Factor: 1.94

COVID–19 and leprosy–hurdles and possible solutions

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Leprosy, an age old disease known to the mankind, is a chronic infectious disease affecting skin and nerves predominantly[1]. As of 2016, with the constant efforts of the National Leprosy Elimination Program with the implementation of Multi-Drug Therapy (MDT), the prevalence rate was reduced to 0.66/10 000 in India[2]. As of 2018 data, Dadra and Nagar Haveli have a total of 202 cases with 0.37% grade II deformities, Lakshadweep with 15 cases and no deformities, Chhattisgarh 6 499 cases with 4.32% deformities, Odisha 6 325 cases with 4.87% deformities, Bihar 14 338 cases with 3.77% deformities and Jharkhand 3 979 cases with 2.47% deformities reported to have prevalence more than 1/10 000 and Dadra and Nagar Haveli being the most dreaded union territory with the highest prevalence rate of 4.85/10 000[3]. It is also to be mentioned that all the registered cases are receiving proper regular treatments. On the other hand, the number of COVID-19 positive cases in the above mentioned leprosy prevalent areas were 0, 0, 36, 94, 223, 57, respectively[4]. To the best of the information available in the various state and central health portals, there are no data available regarding co-infected COVID-19 and leprosy cases. This article elucidates the hardships faced by the leprosy community during this COVID-19 pandemic. Leprosy patients are usually home bound or tend to stay in old age homes or rehabilitation centers. The treatment of leprosy involves MDT (rifampicin, dapson, clofazimine) for 6 months in case of paucibacillary leprosy or 12 months in case of multibacillary leprosy[5]. The treatment course is a long and tedious process. Patient compliance is crucial in completing the treatment course. Patients usually get Blister Calendar Pack for each month. Patients with ongoing MDT who develop lepra reactions need expert opinion and treatment from any of the higher level centers. Leprosy patients with deformities should reach the health care institutions for prompt management. Many of the leprosy patients are employed in small scale industries to run their daily lives. Deformity adversely affects their working

efficiency. Leprosy patients tend to develop trophic ulcers of the extremities. Proper wound debridement at regular intervals is necessary for better wound healing. Leprosy patients with systemic illnesses like type 2 diabetes mellitus, hypertension can get their monthly medications only from health care institutes free of cost. Furthermore, most leprosy patients avail free transportation (bus/train) passes to get access to the nearest health care facility. But it is severely affected due to inadequate transportation facility during this lockdown. The patients' panic increases for the fear of missing their monthly medications. Special queue system for the ease of getting medical care should be made for them. As a solution to this, we can adopt WHO guidelines specifying the treatment of paucibacillary leprosy should be completed within 9 months and multi bacillary leprosy within 18 months. This information must be conveyed to the patients with strong positive reinforcement so that they don't panic about their treatment schedule. This can be communicated by healthcare workers/doctors merely by contacting the patients over mobile phones. Another strategy is delivering MDT by healthcare workers to the respective patients in person or by calling them in an easily accessible area nearest to their locality. The latter method will be most beneficial to the patients who are taking the treatment discreetly. If the patient is not nearby to the healthcare facility, they can be provided MDT for two to three months extra

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How to cite this article: Thangaraju P, Arulmani M, Venkatesan S, Gurunthalingam MP, Thangaraju E. COVID-19 and leprosy-hurdles and possible solutions. Asian Pac J Trop Med 2020; 13(10): 472-473.

Article history: Received 20 April 2020

Revision 28 April 2020

Accepted 16 May 2020

Available online 14 August 2020

with proper health education in continuing the treatment (like accompanied MDT in special situations). The next major concern is that the treatment of lepra reactions is affected adversely. Severe lepra reaction/neuritis is usually treated with steroids and the dosage is calculated according to the severity and the body weight as per expert opinion. There should be a registry which holds the data of the patients with lepra reaction during the pandemic. Those patients should be contacted by the treating leprologist and be assessed for further need of steroids in relation to dose adjustments. Since steroids could be obtained from any pharmacy as an over the counter (OTC) drug, they may be advised for the same. If the patients cannot obtain the steroids as OTC, the same should be delivered by the healthcare workers taking care of the patients near his locality. For this, a system should be organized at this crucial time of pandemic. Patients who are taking thalidomide for severe type 2 lepra reaction will be adversely affected as the drug is not only costly, but also not available as an OTC drug. But this category is very small as most of the patients will be treated as in-patients in hospitals and only a few patients under special circumstances get the drug on an outpatient basis with proper consent. Since the Ministry of Health and Family Welfare approves the usage of telemedicine during this pandemic, dose adjustments and severity assessment can be made by telephonic consultation[6]. But for most of the cases, hospitalization is required and for such patients free ambulance service must be made available for easy transportation. Social distancing, proper hand hygiene and respiratory etiquettes are the key factors in mitigating the transmission of COVID-19. Leprosy patients as such lead a secluded life among their peer group and also with the general public due to the social stigma and fear of humiliation and thus it indirectly prevents them from contracting COVID-19. Visitors to the old age home and rehabilitation centers will be reduced, which will affect their emotional stability. Leprosy patients with deformities of hand or prosthesis are restricted from touching other parts of the body and also other objects in the surroundings ensuring a safe practice during the pandemic. Hand washing will be affected to many individuals with leprosy due to deformities and ulcers, thus adding to the panic of the patients. Any pandemic is unexpected and usually hospital resources and facilities are mainly employed to combat the emergencies rather than focusing on the routine ailments. At the same time, special focus has to be given for certain diseases like leprosy, as their concerns and problems go unnoticed during the

pandemic. The data regarding their problems are also insufficient in the literature. Let us not wait for the next pandemic to realize the hardships faced by the leprosy community and take this pandemic as an opportunity for framing guidelines on the treatment of specific diseases like leprosy during the pandemic which will be much more useful in the future.

Conflict of interest statement

The authors declare that there is no conflict of interest.

Acknowledgements

The authors would like to thank the World Health Organization for providing the data about leprosy treatment regimens.

Authors' contributions

TP,VS contributed in the conception or agreed for all aspects of the work. AM, TE, GMP contributed in the literature review, revision of the manuscript for important intellectual content, approval of the final version of the manuscript.

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