## Impact of COVID-19 pandemic lockdowns on retinopathy of prematurity services at a tertiary eye care center in India

## Dear Editor,

Coronavirus disease 2019 (COVID-19) pandemic has disrupted ophthalmic care and retinopathy of prematurity (ROP) care services in particular across the country.<sup>[1-3]</sup> In a retrospective review, we studied ROP babies referred and treated at a tertiary eye care hospital 3 months prior to first lockdown (December 24, 2019– March 23, 2020), first lockdown (March 24, 2020– June 23, 2020), and at starting of the currently ongoing second lockdown (April 24, 2021–May 23, 2021).

The average monthly referral of outborn babies decreased from 117 babies to 31 (-73%) to 12 (-89.7%) in these three periods, respectively. The babies undergoing treatment (laser/ anti-VEGF injections/surgery) also significantly reduced from 44 to 16 (-63.6%) to 5 (-88.6%) in these three periods, respectively [Table 1]. Thus, there was a major reduction in the number of babies referred to the center seeking ROP care during lockdown periods. The second more severe COVID-19 wave in India is ongoing and the second lockdown restrictions were clearly more disruptive to ROP services. After the lockdown reopening, many of these babies might present with ROP sequelae or advanced stage 4/5 ROP with resultant visual impairment or blindness. The helplessness of the parents is palpable and deep anguish following vision loss of small sick newborns can be devastating for the family and they may need psychological support as well.

Babies are lost to follow-up due to numerous logistic and personal reasons like ignorance among parents, travel restrictions, lack of transport, quarantine issues, safety concerns, or the hospitals have temporarily ceased to provide ROP care. Often parents continue to wait for the lockdown to lift till the next hospital visit. Yet sometimes parents might have no/ limited accessibility to a trained ophthalmologist for screening and treatment of ROP despite them trying desperately to find them. Also, this does not necessarily mean that the babies that did not come to the center did not have evaluation or treatment, and they could well have gone to another center closer to their home.

It is essential to maintain a contact list of ongoing follow-ups and contact them to stress the importance and need for timely follow-up. Centers which are closed/converted to COVID-19 care should suggest alternative arrangements to parents for follow-up. The role of telescreening programs gains importance here as local screening continuity can possibly be maintained. Preferred practice patterns and new innovations to prevent aerosol exposure have helped to protect ROP teams.<sup>[4,5]</sup> COVID-19-positive babies can continue to undergo treatment in dedicated COVID-19 facilities.

Thus, it is essential to maintain continuity of ROP services to ensure that these babies continue to be screened and treated on time. The lockdowns last for a limited few weeks only, but if the narrow window for ROP screening and treatment is missed, the poor visual outcomes will last a lifetime and increase socioeconomic burden on the families. Ongoing data collection is needed to assess the changing spectrum of ROP from damage to ROP care caused by the COVID-19 pandemic.

Table 1: Comparison of impact on ROP services during the first and second lockdown		
New outborn babies referred/month	Babies treated/month	
117*	44.3*	
30.7* (-73%)	15.7* (-63.6%)	
12 (-89.7%)	5 (-88.6%)	
	New outborn babies referred/month 117* 30.7* (-73%)	

\*Average babies/month

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**Conflicts of interest** 

There are no conflicts of interest.

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