CORRESPONDENCE



Letter to the Editor on the original article "Lack of changes in preterm delivery and stillbirths during COVID-19 lockdown in a European region" by Juan Arnaez

Sunitha Vimalesvaran 1 • Manjunath Shetty 2 • Minesh Khashu 2

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To the Editor:

We read, with interest, the article entitled "Lack of changes in preterm delivery and stillbirths during COVID-19 lockdown in a European region" by Arnaez et al. [1]. Their study investigated the potential link between national lockdown measures and a change in preterm births and still births. They concluded that they did not find any link between prematurity and stillbirths with the lockdown period. However, we think that these results should be interpreted with due consideration for other studies with different results [2–4].

High rates of preterm birth have been reported in women with acute severe respiratory syndrome coronavirus 2 (SARS-COV-2). Nationwide data from Denmark suggests that extreme premature birth rates have significantly reduced during the lockdown period compared to previous 5 years [3]. Similarly, significant reduction in preterm birth of very low birth weight infants was observed in one health region of Ireland during the COVID-19 lockdown [4]. Whilst the authors address the limitations of the published studies and the variable approach the studies adopted for prematurity rate research, there remains a need to address the potential impact of sociodemographic and environmental factors on birth rates.

Our data from a medium-sized neonatal unit in the UK showed a statistically insignificant decrease in preterm births (58.2/1000 vs. 64.6/1000 live births, p=0.47), but a significant decrease in post-term births (12.7/1000 vs. 28.1/1000 live births, p=0.0002), during lockdown period compared to the previous 7 years, which needs further investigation in terms of

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Minesh Khashu minesh.khashu@nhs.net

London, UK

² Poole Hospital NHS Foundation Trust, Poole, UK

possible causes. We also showed no statistically significant difference in rates of stillbirths or neonatal encephalopathy.

We believe that the association between prematurity, postmaturity and stillbirths with lockdown measures remains a subject of debate and needs further scrutiny. If we can better understand the modifiable factors that can impact the timing of birth, it can potentially have a huge impact on neonatal outcomes, family experience and health care provision and costs.

Author contribution SV, MS and MK contributed to the analysis of the results and writing of the correspondence. MK contributed to the final review of this manuscript.

Availability of data and material Data is available for review upon request.

Declarations

Ethics approval and consent to participate Ethics committee approval and informed consent were not required as per U.K. Health Research Authority guidance, but local research and information governance clearance was obtained.

Consent for publication All authors consent to publication of this data.

Conflict of interest The authors declare no competing interests.

References

- Arnaez J, Ochoa-Sangrador C, Caserío S, Gutiérrez EP, Jiménez MP, Castañón L, Benito M, Peña A, Hernández N, Hortelano M, Schuffelmann S, Prada MT, Diego P, Villagómez FJ, Garcia-Alix A (2021) Lack of changes in preterm delivery and stillbirths during COVID-19 lockdown in a European region [published online ahead of print, 2021 Feb 12]. Eur J Pediatr 1–6. https://doi.org/10.1007/ s00431-021-03984-6
- Been JV, Burgos Ochoa L, Bertens LCM, Schoenmakers S, Steegers EAP, Reiss IKM (2020) Impact of COVID-19 mitigation measures on the incidence of preterm birth: a national quasi-experimental



2004 Eur J Pediatr (2021) 180:2003–2004

study. Lancet Public Health 5(11):e604–e611. https://doi.org/10. 1016/S2468-2667(20)30223-1

- Hedermann G, Hedley PL, Baekvad-Hansen M, Hjalgrim H, Rostgaard K, Poorisrisak P, Breindahl M, Melbye M, Hougaard DM, Christiansen M, Lausten-Thomsen U (2020) Danish premature birth rates during the COVID-19 lockdown. Arch Dis Child Fetal Neonatal Ed 106:93–95. https://doi.org/10.1136/archdischild-2020-319990
- Philip RK, Purtill H, Reidy E, Daly M, Imcha M, McGrath D, O'Connell NH, Dunne CP (2020) Unprecedented reduction in births

of very low birthweight (VLBW) and extremely low birthweight (ELBW) infants during the COVID-19 lockdown in Ireland: a 'natural experiment' allowing analysis of data from the prior two decades. BMJ Glob Health 5(9):e003075. https://doi.org/10.1136/bmjgh-2020-003075

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