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Editorial

The COVID-19 pandemic and perinatology in Lithuania

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"There is no shortcut to life.
To the end of our days, life is a lesson imperfectly learned."
Harrison Salisbury

Keywords

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2020 will go down in history as the year that the COVID-19 pandemic took over the world. This infection caused many changes to the entire population's private and social lives, and posed a serious challenge to the healthcare systems. Some countries dealt with the pandemic well, while the others struggled quite a bit [1]. During the first COVID-19 wave, there were not many cases in Lithuania, but the second wave impacted Lithuania quite strongly. According to the morbidity rates, we became one of the worst affected countries in Europe [2].

Perinatology, as one of the areas of healthcare, was also affected by this pandemic. We had to reorganize the working principles of the hospitals that provide perinatal medicine. Specialized, isolated wards, where SARS-CoV-2-infected women gave birth, were installed. However, once the second wave spread, these departments were not able to handle it anymore, so the SARS-CoV-2-infected women gave birth in almost all of the country's hospitals. Out of the 25 hospitals that provide perinatal healthcare, there were SARS-CoV-2-infected women in 17 of them. According to the recommendations, all women who arrive at the hospital for childbirth are asked about experiencing COVID-19 clinical symptoms, and they get the SARS-CoV-2 tests done to diagnose the infection. The mothers also have to wear face masks during childbirth, breastfeeding, and their entire stay at the hospital [3-5].

There is not an official registry of SARS-CoV-2-infected pregnant women and mothers with newborns in Lithuania. For this article, the data about SARS-CoV-2-infected mothers and their newborns were collected by contacting all the Lithuanian hospitals that practice perinatal medicine. We do not have the official 2020 statistics about childbirth and the number of newborns yet. In 2019, there were 24,796 babies born in Lithuania [6]. Since the number of babies born in Lithuania is steadily declining, fewer babies were likely born in the country in 2020 [7, 8]. In 2020, out of the country's 2.794 million citizens, 151 SARS-CoV-2-infected women gave birth [9]. Most of them were asymptomatic, and a few had light-to-medium symptoms. Two women had a severe form of COVID-19. One gave birth during the 21st week of pregnancy, and the other gave birth during the 32nd week of pregnancy. Both babies died before they were born. All of the mothers who had COVID-19 recovered successfully.

There were 10 SARS-CoV-2-infected babies in 2020 in Lithuania. The newborns were tested if the mother was SARS-CoV-2-positive. Following the UENPS recommendations, the newborns were nursed in the rooms next to their mothers [10]. The frequency of transmission of the virus was about 6.6% of all the SARS-CoV-2-positive mothers. All of the babies got the infection from their mothers after being born. Two of the SARS-CoV-2-positive newborns (20%) got sick. In one newborn, the infection came with a fever, abundant secretion from the nose, grunting; in the other newborn, it came with dehydration and thermoregulation issues. Both babies recovered well and went home. The remaining eight newborns did not have clinical symptoms and were discharged. The symptoms did not appear at home either. Compared to the published data, the percent of SARS-CoV-2-infected newborns is the most similar to that of the Spanish cohort, which had 6.9% of infected newborns born to SARS-CoV-2-positive women [11]. The United Kingdom had a smaller percentage, 5% (12/265), while the United States only had 1.9% (44/2,287) of SARS-CoV-2-infected newborns born to SARS-CoV-2-positive women [12, 13].

COVID-19 changed the tactics of both delivery and newborn care in the hospital. Childbirth is a significant moment in a family. Most women want to have their husband or another family member by their side during the process of delivery. At the beginning of the pandemic, when the mechanisms of the virus and the way it spread were unclear, the number of people who were allowed into the hospital was limited with the hopes of protecting both the patients and the staff. So, for a while, women gave birth only in the care of medical professionals, without their family members present, which caused dissatisfaction in the women and their families. The recommendations to wear face masks during birth also were not acceptable to some of the mothers. In Lithuania, the principles of nursing sick or preterm newborns are family-oriented. During the stay at the hospital, the mother or both parents are next to the child the whole time. They are the first people to nurse the baby, while the healthcare professionals guide and advise them. During the pandemic, the family-oriented policy suffered because the second parent's hospitalization was not allowed anymore due to the restrictions. However, as time passed and we found out more about the COVID-19 infection, learned how to control it better, and started doing more extensive tests, the mother's family members were

once again allowed to be there during childbirth. The fathers' hospitalization along with the mother and the baby was also partially renewed, restarting the use of family-oriented newborn care principles.

Another change was the reorganization of the work of the people in perinatal assistance. We had to start working in cycles in hopes of minimizing contacts, minimizing the number of people who have to self-isolate in case of a SARS-CoV-2-positive employee in the department. We had to learn to work while wearing protective equipment and face masks. We had to minimize contact with patients and nurses, group the medical procedures that were being done to the patient. We had to reorganize the hospital spaces and the streams of patients, so that SARS-CoV-2-infected patients would not spread the disease through the hospital. It required much effort and psychological resilience both from the workers and the administrative personnel.

At the beginning of the pandemic, the Ministry of Health of the Republic of Lithuania, along with professional associations of perinatal medicine (the Lithuanian Association of Obstetricians and Gynecologists and the Lithuanian Neonatology Association), published national guidelines with which they hoped to help perinatal specialists correctly identify COVID-19 symptoms, provide help, apply algorithms and protect themselves and the patients from this infection [14-17].

On the 27th of December, 2020, the first medical workers in Lithuania were vaccinated with Pfizer and BioNTech vaccines against the COVID-19 virus. Hopefully, it will be an effective way to combat the infection.

So, the COVID-19 pandemic created an unprecedented challenge for the world's healthcare systems. Discoveries in the field of scientific research provided us with a new understanding of this infection. Still, there are many unanswered questions. Every country's healthcare systems have to be flexible and be able to react quickly to new information, to apply it in every area of medicine, perinatology included.

Declaration of interest

The Author declares that there is no conflict of interest.

References

1. World Health Organization. Coronavirus disease (COVID-19) pandemic. Available at: https://www.who.int/emergencies/diseases/novel-coronavirus-2019, last access: 11 January 2021.
2. World Health Organization, Regional Office for Europe. COVID-19 weekly surveillance report. Data for the week of 28 Dec – 3 Jan 2021 (Epi week 53). Available at: https://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/weekly-surveillance-report, last access: 11 January 2021.
3. The American College of Obstetricians and Gynecologists. COVID-19 FAQs for Obstetrician-Gynecologists, Obstetrics. Available at: https://www.acog.org/clinical-information/physician-faqs/covid-19-faqs-for-ob-gyns-obstetrics, last access: 11 January 2021.
4. Royal College of Obstetricians and Gynaecologists; The Royal College of Midwives. Coronavirus (COVID-19) Infection in Pregnancy. Information for healthcare professionals. Version 12. Available at: https://www.rcog.org.uk/globalassets/documents/guidelines/2020-10-14-coronavirus-covid-19-infection-in-pregnancy-v12.pdf, date of publication: 14 October 2020, last access: 11 January 2021.
5. Stephens AJ, Barton JR, Bentum NA, Blackwell SC, Sibai BM. General Guidelines in the Management of an Obstetrical Patient on the Labor and Delivery Unit during the COVID-19 Pandemic. Am J Perinatol. 2020;37(8):829-36.
6. Institute of Hygiene Health Information Centre; The Lithuanian Academy of Sciences; Vilnius University Medical Faculty; Children's Hospital, Affilate of Vilnius University Hospital Santaros Klinikos, Neonatology Centre. Medical Data of Births, 2019. Available at: https://www.hi.lt/uploads/pdf/leidiniai/Statistikos/Gimimu/gimimai_2019.pdf, last access: 11 January 2021.
7. Institute of Hygiene Health Information Centre; The Lithuanian Academy of Sciences; Vilnius University Medical Faculty; Children's Hospital, Affilate of Vilnius University Hospital Santaros Klinikos, Neonatology Centre. Medical Data of Births, 2018. Available at: https://www.hi.lt/uploads/pdf/leidiniai/Statistikos/Gimimu/gimimai_2018.pdf, last access: 11 January 2021.
8. Institute of Hygiene Health Information Centre; The Lithuanian Academy of Sciences; Vilnius University Medical Faculty; Vilnius University, Centre of Neonatology. Medical Data of Births, 2017. Available at: https://www.hi.lt/uploads/pdf/leidiniai/Statistikos/Gimimu/gimimai_2017.pdf, last access: 11 January 2021.
9. Oficialiosios statistikos portalas. Lietuvos gyventojai (2020 m. leidimas). Gyventojų skaičius ir sudėtis. Available at: https://osp.stat.gov.lt/lietuvos-gyventojai-2020/salies-gyventojai/gyventoju-skaicius-ir-sudetis, last access: 11 January 2021.
10. Italian Society of Neonatology; Union of European Neonatal and Perinatal Societies. SARS-Cov-2 infection: SIN recommendations endorsed by UENPS. Available at: https://www.uenps.eu/2020/03/16/sars-cov-2-infection-sin-recommendations-endorsed-by-uenps, date of publication: 16 March 2020, last access: 11 January 2021.

11. Martínez-Perez O, Vouga M, Cruz Melguizo S, Forcen Acebal L, Panchaud A, Muñoz-Chápuli M, Baud D. Association between mode of delivery among pregnant women with COVID-19 and maternal and neonatal outcomes in Spain. JAMA. 2020;324(3):296-9.
12. Knight M, Bunch K, Vousden N, Morris E, Simpson N, Gale C, O'Brien P, Quigley M, Brocklehurst P, Kurinczuk JJ; UK Obstetric Surveillance System SARS-CoV-2 Infection in Pregnancy Collaborative Group. Characteristics and outcomes of pregnant women admitted to hospital with confirmed SARS-CoV-2 infection in UK: national population based cohort study. BMJ. 2020;369:m2107.
13. American Academy of Pediatrics, Section on Neonatal-Pernatal Medicine. SONPM National Registry for Surveillance and Epidemiology of Perinatal COVID-19 Infection. Available at: https://my.visme.co/view/ojq9qq8e-npc-19-registry, last access: 11 January 2021.
14. Lithuanian Association of Obstetricians and Gynecologists. Kas COVID-19 pandemijos metu žinotina nėščiosioms? Available at: http://www.lagd.lt/naujienos/kas-covid-19-pandemijos-metu-zinotina-nesciosioms/165, date of publication: 22 April 2020, last access: 11 January 2021.
15. Lithuanian Neonatology Association. Naujagimio priežiūra, žindymas ir COVID-19 infekcija. Available at: https://neonatologija.lt/naujagimio-prieziura-zindymas-ir-covid-19-infekcija/, last access: 11 January 2021.
16. The Ministry of Health of the Republic of Lithuania. Atnaujintos rekomendacijos dėl kūdikio žindymo koronavirusu sergančioms mamoms. Available at: https://sam.lrv.lt/lt/naujienos/atnaujintos-rekomendacijos-del-kudikio-zindymo-koronavirusu-sergancioms-mamoms, date of publication: 31 December 2020, last access: 11 January 2021.
17. Lithuanian Association of Obstetricians and Gynecologists. COVID-19 infekcija ir nėštumas. Available at: http://lagd.lt/data/public/uploads/2020/10/d1_covid-19-infekcija-ir-nestumas_atnaujinta-2020-09-18.pdf, date of publication: 18 September 2020, last access: 11 January 2021.