ATTUALITÀ

COVID-19 and pregnancy, childbirth, and breastfeeding: the interim guidance of the Italian National Institute of Health

IT VERSIONE ITALIANA DISPONIBILE ON-LINE

COVID-19 e gravidanza, parto e allattamento: le indicazioni ad interim dell'Istituto superiore di sanità

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This summary is based on the 2nd edition of the "Interim guidance on pregnancy, childbirth, breastfeeding and care of infants (0-2 years) in response to the COVID-19 emergency. Update of the INIH COVID-19 Report n. 45/2020", published on 5 February 2021.[1]

INTRODUCTION

In the early days of the pandemic, the care pathways and the support networks for pregnant women, mothers, fathers, and newborns needed to be rapidly reviewed and reorganised, due to new and urgent emerging problems. Between January and March 2020, however, scientific evidence on COVID-19 and pregnancy was still scarce and not always consistent. Indeed, the initial epidemiological pressure caused by the pandemic led regional health services to define care paths based on the organisational and logistical local availability. Currently, the available literature indicates that practices for the clinical care and management of women with suspected or confirmed SARS-CoV-2 virus infection are well established. In February 2020, the Italian National Institute of Health (INIH) started systematically reviewing the literature and returning a weekly updated summary of the available evidence on COVID-19 and pregnancy, childbirth, puerperium, and breastfeeding.[2] The Italian scientific community of neonatologists, paediatricians, gynaecologists obstetricians, midwives, and anaesthetists (SIN, SIMP, SIP, ACP, SIGO, AOGOI, AGUI, SIAARTI and FNOPO) joined the INIH initiative, sharing its methodology and contents and contributing to the dissemination of the weekly INIH updates through their own channels.

As the evidence has become more consolidated, the interim guidance was updated and published with the aim to provide current information for health professionals and decision-makers.

The World Health Organization (WHO),[3] the Royal College of Obstetricians & Gynaecologists together with the Royal College of Midwives, the Royal College of Paediatrics and Child Health, the Royal College of Anaesthetists, and the Obstetric Anaesthetists' Association[4] COVID-19 ad interim documents were used as reference for the INIH guidance. The Italian epidemiological data supporting the guid-

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ance are taken from the prospective, population-based study of the Italian Obstetric Surveillance System (ItOSS).[5-7]

KEY RECOMMENDATIONS

Care during pregnancy

- The prevalence and clinical manifestations of COVID-19 disease in pregnancy appear to be substantially similar to those of the general population.
- All women, even SARS-CoV-2 positive women, should be enabled to participate in their care choices. The presence of a person chosen by the woman must be guaranteed.
- Pregnant women with a mild, suspected, or confirmed COVID-19 infection should receive care at home in coordination with the Local Health Authorities (LHA) services. Hospitalisation should be reserved for cases of rapidly-worsening clinical conditions or when a hospital cannot be promptly reached. It is always advisable to go to the COVID birth facilities that have been set up in each Region.
- Pregnant women should be made aware of maternal and neonatal signs, including signs of worsening COVID-19 symptoms and reduced active foetal movements, which require assistance.
- Vaccinations planned during pregnancy (flu and pertussis) are also recommended for COVID-19 positive women.
- Vertical transmission of SARS-CoV-2 virus is possible. Even though the evidence is still scarce, it is considered a rare event to date. The ItOSS study found that, during the first wave of the pandemic, between 25 February and 31 July 2020, infants who were not separated from their mothers at birth, roomed-in, and received breastmilk had as good outcomes as the infants who were separated from their mothers after birth.
- The pregnancies of women infected with SARS-CoV-2 appear to be associated with a higher frequency of preterm delivery. The ItOSS study showed that the average preterm birth rate was 14.4%, with a decrease during the observation period.
- SARS-CoV-2 infection can be a risk factor for venous thromboembolism (VTE) and pregnancy is a known hypercoagulable state. Nevertheless, prescribing thromboprophylaxis treatment during pregnancy should be assessed on a case-by-case basis.

Care during labour and delivery

- All women must be guaranteed the presence of an asymptomatic support person of their choice during labour, childbirth, and hospital stay. This person takes on the role of carer/caregiver in all respects and is not a 'visitor'. During the first wave of the pandemic, 51.9% of Italian mothers were able to have a support person of their choice during labour and delivery.[7]
- A multidisciplinary team should be available to provide care for a pregnant woman, including a gynaecologist, an anaesthetist, a midwife, a neonatologist, a paediatric nurse, and an infectious disease specialist.
- The decision process on labour and birth positions is the same as it was before COVID-19, taking into account the woman's preferences.
- The indication, timing, and methods of foetal heart rate monitoring using cardiotocography (CTG) must be assessed on an individual basis, taking into account gestational age and foetal conditions. SARS-CoV-2 positivity in asymptomatic women is not in itself an indication for continuous monitoring of foetal heart rate by CTG.
- The induction of labour, episiotomy, or operative vaginal birth require assessments on an individual basis, taking into account all possible risks and benefits.
- COVID-19 positivity does not in and of itself constitute an indication for an elective caesarean section. During the first wave of the pandemic, the Italian rate of caesarean section of COVID-19 positive women was 33.7%.[7]
- The choice of delivery mode should be discussed with the woman, taking into consideration her preferences and the obstetric and anaesthetic indications, if any.
- At present, labour and water births are not recommended in symptomatic women (cough, fever, general malaise).

Post-partum care

- For all newborns, skin-to-skin contact, including kangaroo mother care for preterm and low birth weight infants, is recommended, as the health benefits for the infant, including early breastfeeding, overcome the hypothetical risk of transmission.
- All mothers, including COVID-19 positive ones, and their babies should be enabled to stay together, practice skin-to-skin contact and rooming-in day and night, especially at birth and during breastfeeding, except when the mother's or infant's clinical conditions are severe.
- If the newborn needs the Neonatal Intensive Care Unit (NICU), the mother and father should have no restrictions for visiting their baby in a dedicated and separate area, using preventative measures.

Breastfeeding

- Breastfeeding benefits outnumber the risks of passing infection from mother to infant.
- When breastfeeding and when coming into close contact with the baby, the COVID-19 positive mother can consider using a mask.
- Mothers who cannot start breastfeeding within the first hour after delivery, for example after general anaesthesia or in a very unstable clinical condition, must be offered assistance to start breastfeeding as soon as possible or should be encouraged and assisted to hand-express their breastmilk to feed to their babies safely.
- Should the mother not be able to breastfeed, the best alternatives for newborns and nursing babies, taking into account the mother's preferences, are hand-expressed or pumped breastmilk (even for newborns in the NICU) or donated breastmilk (in particular for very or moderately preterm newborns). If mother's or donated breastmilk is not

available, consider the use of a formula supplement, making sure that it is correctly and safely prepared.

COVID-19 vaccination

- Together with the medical personnel assisting them, pregnant women should evaluate the potential benefits and risks of being vaccinated.
- Breastfeeding women should be included in the vaccination schedule and should be advised not to interrupt breastfeeding after the vaccination.

Conflicts of interest: none declared.

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Stato dell'arte e prospettive della medicina di genere nella pandemia di COVID-19

State of the art and prospects of gender medicine during the COVID-19 pandemic

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Durante l'ultimo convegno dell'Associazione italiana di epidemiologia, tenutosi dal 2 al 6 novembre 2020, il gruppo di lavoro su salute e medicina di genere, costituitosi in quei giorni, in collaborazione con il Centro nazionale per la medicina di genere dell'Istituto superiore di sanità, ha organizzato un webinar sullo stato dell'arte e le prospettive della medicina di genere nella pandemia di COVID-19.

La medicina di genere rispecchia una dimensione interdisciplinare della medicina e richiama l'attenzione sullo studio dell'influenza di sesso e genere su fisiologia, fisiopatologia e patologia umana. Con l'approvazione del Piano per l'applicazione e la diffusione della medicina di genere, nel giugno 2019, il concetto di "genere" in medicina viene inserito per la prima volta in Italia come garanzia di cure appropriate e personalizzate da erogarsi in modo omogeneo a livello nazionale. La pandemia di COVID-19 ha colpito in modo differenziale la popolazione anche sulla base del genere e, durante il webinar, sono state presentate le principali differenze di genere riscontrate, partendo dai meccanismi biologici e arrivando ai dati epidemiologici.

Hanno contribuito al webinar: Alessandra Carè ed Elena Ortona, del Centro nazionale per la medicina di genere dell'Istituto superiore di sanità di Roma; Eliana Ferroni, del Servizio epidemiologico regionale del Veneto; Patrizio Pezzotti, del Dipartimento di malattie infettive dell'Istituto superiore di sanità di Roma; Isabella Tarissi de Jacobis, dell'Ospedale pediatrico Bambin Gesù di Roma; Cristina Mangia, dell'Istituto di scienze dell'atmosfera e del clima del Consiglio nazionale delle ricerche; Emilio Gianicolo, dell'Universitätsmedizin di Mainz in Germania.

Con la medicina di genere si rafforza il concetto di «centralità del paziente e di personalizzazione delle cure». Con questo importante concetto, **Alessandra Carè** ha cominciato la sua relazione introduttiva sulla salute e medicina di genere, sottolineando l'importanza di tenere conto delle differenze di genere a tutti i livelli della medicina, da