

COVID 19: IMPACT ON PREGNANCY- ANTENATAL INTRANATAL AND POSTNATAL HEALTH

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ABSTRACT

Impact of novel covid 19 on antenatal and postnatal services to support them during the evolving coronavirus pandemic. This is to implement which elements of routine antenatal and postnatal care are essential and which could be modified. Providing a safe and responsive antenatal and postnatal care service is essential. Where women require a face to face consultation due to the need for physical examination and/or screening, a system should be in place for evaluating whether she has symptoms that are suggestive of COVID-19, or if they meet current 'stay at home' guidance.

INTRODUCTION

If a woman attends an antenatal appointment but describes symptoms, she should be advised to return home immediately. A member of clinical staff should then make contact with the woman to risk assess whether an urgent home antenatal appointment is required, or whether the scheduled appointment can be delayed for a period of 7 or 14 days.

Many elements of antenatal care may require in-person assessment, in particular blood pressure and urine checks, measurement of fetal growth, and blood tests. Routine antenatal care is essential to detecting common complications of pregnancy such as pre-eclampsia, gestational diabetes, and asymptomatic urine infection. Remote consulting enables greater compliance with social distancing measures recommended for pregnant women and maternity staff, while enabling a pregnant woman to have a partner, family member or friend join the appointment for support.

Clinics can be run effectively using telephone or video consultations instead of face to face encounters. Remote appointments will be appropriate for a range of consultations, including some routine or specialist antenatal and postnatal appointments supporting women at risk of or currently experiencing mental health problems, maintaining contact with families living with a range of vulnerabilities or where there are safeguarding concerns provision of breastfeeding support and early parenting advice and guidance.

Role of home visits

Home visits may be preferable, provided the woman and everyone in her household is well. Maternity staff attending homes should be mindful of exposure to COVID-19 in a home visit and should adhere to strict infection control procedures when entering and leaving homes. It has been shown that the coronavirus can survive on surfaces for up to 17 days. Maternity staff should be provided with appropriate personal protection equipment as per PHE guidelines when providing care for women with suspected infection or when entering homes where other members of the household have symptoms.

Modifications to NICE Schedule of Antenatal Care for Low Risk women

The antenatal appointment schedule will need to evolve in light of the impact of the pandemic on staffing levels. In areas where the spread of the pandemic is in earlier stages and staffing allows, all of the as staffing shortages increase during the course of the pandemic, services will need to consider reducing appointments.

In line with recommendations made in RCOG/RCM guidance 'Coronavirus infection in pregnancy', all women should be asked about their mental wellbeing at every visit during pregnancy.

	Visit	Who	What	Modifications
1	Booking visit	All women	Full history, initial screening for medical, psychological and social risk factors	Virtual booking where possible, or onestop visit, with dating scan and all testing in maternity unit
1+	Dating scan	All women	Combined antenatal screening, all blood tests, BP and urine testing to be taken at dating scan appointment	Virtual booking where possible, or onestop visit, with dating scan and all testing in maternity unit
	16weeks	All women	Review results of screening review, discuss and record the results of all screening tests. Reassess planned pattern of care for the pregnancy and identify women who need additional care. Give information about ongoing care	Virtual appointment or omit as necessary
2	18-20 weeks	All Women	Routine anomaly scan Check BP and Urine at this visit instead of 16 week appointment	Maternity unit or community unit with ultrasound facilities 25 weeks Nulliparous
	25 weeks	Nulliparous women	Measure fundal height, BP and urine; review scan results.	Omit unless staffing allows or additional concerns
3	28 weeks	All women	Discuss current health. Enquire about fetal movements. Discuss mental wellbeing, and offer advice and sources of further support and information. Follow up any safeguarding concerns. Discuss plans for antenatal classes (remote access). Measure fundal height, BP and test urine; repeat blood tests to screen for anaemia and RBC allo-antibodies; anti-D prophylaxis for Rh negative women	Maintain appointment
	31 weeks	Nulliparous women	Omit – replaced with 32/40 for all.	
4	32 weeks	All women	Measure fundal height, BP and test urine; discuss results of investigations at 28 weeks; discuss plans for birth. Discuss wellbeing, fetal movements. Follow up safeguarding issues	Maintain appointments. If need to reschedule due to illness/ quarantine, see or contact all women within 3 weeks of previous contact.
5	36 weeks	All women	Measure fundal height, BP and test urine; discuss fetal movements and wellbeing, discuss plans for birth and all usual care	Maintain appointments. If need to reschedule due to illness/ quarantine, see or contact all women within 3 weeks of previous contact.
	38 weeks	Nulliparous Women	Measure fundal height, BP and test urine and all usual care	Maintain appointments. If need to reschedule due to illness/ quarantine, see or contact all women within 3 weeks of previous contact.
6	40 weeks	All women	Measure fundal height, BP and test urine; give information about options for prolonged pregnancy	Maintain appointments. If need to reschedule due to illness/ quarantine, see or contact all women within 3 weeks of previous contact.
	Post dates from 41+0	All women	Measure fundal height, BP and test urine; discuss fetal movements and wellbeing	Appointment to be coscheduled with offered outpatient / inpatient IOL to avoid a further attendanceT

Screening for possible coronavirus infection

Assessment of women presenting for screening and/or scanning. All women should be asked to attend alone if possible or with a maximum of one partner/visitor.. All

women should be initially screened before entering the department to see if they have symptoms that are suggestive of COVID-19, or if they meet current 'stay at home' guidance. If a woman currently meets 'stay at

home' guidance the appointment should be rebooked after the isolation ends.

Living with others who have symptoms of coronavirus: rebook after 14 days (all household members must stay at home for the duration). The local service should decide how best to manage rebooking of appointments (blood tests and/or scans), the woman should be informed of their new appointment. The woman should be informed that if she remains symptomatic or develops symptoms she must not attend her appointment, instead she should phone her maternity service for advice.

Relation of smoking and corona virus infection in pregnancy

People who smoke have an increased risk of more severe respiratory infections. It has therefore never been more important for a pregnant woman to look after her respiratory health, and it is vitally important that we help smokers to quit. It is recommended that all women are still asked about their smoking status at antenatal appointments and given appropriate advice and support. Midwives and doctors should still ask about and document smoking status at booking and 36 weeks, provide very brief advice and refer women who smoke to specialist stop-smoking support on an opt-out basis. Advise women that they are much more likely to stop smoking with support. Continue to provide or recommend women use nicotine replacement as part of their quit attempt. e.g. a patch as well as a faster-acting product, such as inhalator, gum or spray.

WHO Guidelines for covid 19: antenatal intranatal and postnatal health



Fig. 1: Antenatal precautions to be taken.



Fig. 2: Intranatal precautions to be taken.

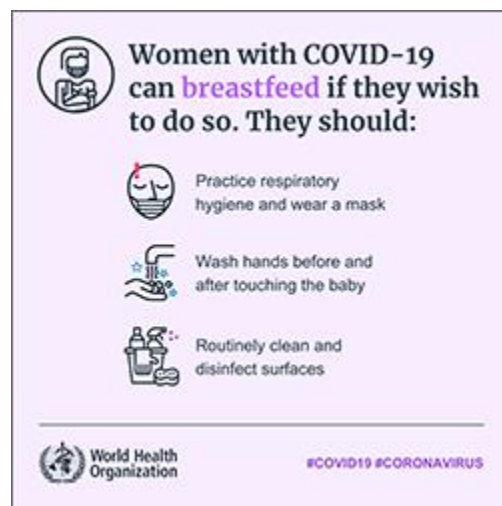


Fig. 3: Postnatal precautions to be taken.

Postnatal care

Postnatal care should be individualised according to the woman and newborn's needs. The minimum recommended number of contacts is three: at day 1, day 5 and day 10. Maternity services should offer a combination of face-to-face and remote postnatal follow-up, according to the woman and baby's needs. Prioritise face-to-face visiting for women with: Known psychosocial vulnerabilities, Operative birth, Premature/low birthweight baby, Other medical or neonatal complexities.

The most important step is to practice excellent hand hygiene by frequently washing hands with soap and water for 20 seconds. Avoid touching your face, especially your eyes, mouth, and nose. Public health officials urge people to tightly limit gatherings and to stay home as much as possible. Social distancing is important to limit the spread of the virus. It's safe to go out for walks — just try to remain six feet away from anyone who doesn't live with you. Many states now require people to wear a cloth mask in public, especially in places where it's hard to carefully observe social distancing. Even a cloth mask, when used to cover the

mouth and nose completely, helps protect you and others. If you have a mild cough or cold, stay at home and limit exposures to other people. Sneeze and cough into a tissue that you discard immediately, or into your elbow, to avoid making others sick. Hydration and adequate rest also are important in maintaining the health of your immune system.

It is recommended avoiding all travel at this time, given the concerns that the virus could be widespread, and changing travel restrictions. While a baby shower is a joyous and important occasion, public health agencies such as the Centers for Disease Control and Prevention (CDC) recommend social distancing to limit the spread of the virus. Particularly in large gatherings, the risk of possible exposure and infection is quite high. We recommend limiting social gatherings at this time.

The first step is to call your doctor's office to inform them of your symptoms, travel, or contact with someone who has a confirmed case of COVID-19. Do *not* simply go to your doctor's office. It is very important to limit the spread of the virus. Particularly if you have symptoms, it is best to call your doctor first to determine whether you need testing and/or to come in for evaluation.

Covid 19 and Pregnancy

An increased risk of miscarriage or fetal malformations has not been documented in pregnant women who are infected with COVID-19. A study of nine pregnant women who were infected with COVID-19 and had symptoms showed that none of their babies was affected by the virus. The virus was not present in amniotic fluid, the babies' throats, or in breast milk. It is unclear whether these newborns were infected while in the womb or if these infections were acquired after birth, as the newborns were tested when they were days old. The possibility of vertical transmission (passing the virus from mother to baby) has not been ruled out. The risk of passing the infection to a fetus appears to be very low. Currently there is no evidence of any fetal malformations or effects due to maternal infection with COVID-19. If a woman has an infection with a high fever during the first trimester, it's safest to use acetaminophen to lower temperature to avoid risk to the developing fetus.

CONCLUSION

Prenatal visits are important to ensure maternal and fetal health. However, given the current global pandemic we are facing, many obstetricians are either increasing the interval between visits or encouraging telehealth visits. Hospital staff and your obstetric team are trying to minimize the number of people who come to the hospital. There are rules to make sure that anyone who needs to be evaluated for COVID-19 will be isolated from other patients. In the hospital, many precautions are being taken to minimize exposure risks. It may be possible to go home sooner than one normally would after birth, as long as one feels well and birth was

uncomplicated. Currently, there is no evidence of the virus in breast milk. Given that the virus is spread through respiratory droplets, mothers should wash their hands and consider wearing a face mask to minimize infants' exposure to the virus.

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