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RCM Clinical Briefing Sheet – Waterbirth during the COVID-19 Pandemic

Topic

This briefing explores the current evidence about the safety of waterbirth during the current COVID-19 pandemic.

New evidence continues to evolve and this briefing will continue to be revised in line with emerging evidence.

Potential impact of COVID-19 in this topic area

In the early days of the COVID-19 pandemic, knowledge about how the virus was transmitted was very limited. Our knowledge has continued to grow since then but remains incomplete.

As the virus had been found in two studies in a faecal stool sample, there is an identified potential risk of transmission through faeces (Wang et al, 2020; Zhang et al, 2020). As women often pass stools during the later stages of labour and birth, there is a theoretical risk that a woman could pass the virus to her baby or her attending midwife during the birth process, if infected stools led to the water in the birth pool becoming contaminated. Consequently, in late March 2020, the RCM and RCOG took the precautionary approach of advising that women with suspected or confirmed COVID-19 should be advised against the use of a birthing pool during labour.

In the intervening weeks since the publication of our first waterbirth briefing in April 2020, more information has emerged about the virus and how it is transmitted. This includes:

- It appears that the virus is less likely to be readily transmitted in respiratory droplets propelled into the air from one person to another in warm and humid rather than cold and dry environments (Wang et al, 2020a; Qi et al, 2020).
- The virus is less likely to be readily transmitted in respiratory droplets from one person to another in a well-ventilated room than in a closed room with very still air (Morawska and Milton, 2020).
- There have been no known or recorded cases of the virus being transmitted via faeces and no recorded cases of oral-faecal transmission (WHO, 2020).
- Transmission appears to be more frequently through droplet or aerosol transmission from the respiratory system of a carrier to the respiratory system of a recipient, than through fomite transmission (virus on surfaces then being transferred to a recipient through their mucus membranes when they touch their face and eyes) (CDC, 2020).
- Research indicates that the virus SARS-CoV-2 that causes COVID-19 is extremely unlikely to survive and remain active in clean drinking water supplies, although it has been found in waste water supplies and sewage systems (Kitajima et al, 2020) although it is not clear whether the virus can be transmitted via waste water (Carducci et al, 2020).

In the period since April 2020 until July 2020, there have been several developments in systems and services:

- A significant proportion of women in England are being offered a test for SARS-CoV-2 in early labour, though the results are not always known during the labour.
- There are no current reported concerns about the supply of PPE for midwives in the UK caring for women in community or hospital settings in water or on dry land. All midwives can access and are

advised to wear PPE when caring for all women in active labour regardless of the woman's COVID-19 status.

Current key guidance for this topic – clinical care and advice for women

Birthing pools, water and infection prevention and control

Good hygiene with proper cleaning, as is always the case with the use of birthing pools, will increase the safety of water immersion. For inflatable birthing pools, it is essential to use a new disposable liner for each use. Advice and guidance on infection control and cleaning procedures for birth pools, at home and in hospitals, have been developed and revised over several decades, in light of any emerging concerns and case studies and should be rigorous enough to prevent risks of cross contamination between use (Public Health England (PHE), 2014).

The US Centers for Disease Control and Prevention (CDC) states, *“There is no evidence that COVID-19 can be spread to humans through the use of pools and hot tubs. Proper operation, maintenance, and disinfection...of pools and hot tubs should remove or inactivate the virus that causes COVID-19”* (CDC, 2020). In the UK DEFRA are currently coordinating work on this.

Safety of midwives caring for women in labour in the pool

PHE (2020 and 2020a) has produced guidance on the use of PPE for health professionals providing care with possible or suspected Covid-19 during labour and birth, which has been adopted across the UK and can be viewed here:

In

hospitals: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/879107/T1_poster_Recommended_PPE_for_healthcare_workers_by_secondary_care_clinical_context.pdf

For

homebirth: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/878750/T2_poster_Recommended_PPE_for_primary_outpatient_community_and_social_care_by_setting.pdf

Midwives must always be familiar with the up to date UK wide infection prevention and control guidance and have access to the appropriate PPE when providing care (PHE, 2020c). The recommended PPE includes: single use disposable gloves, a plastic apron, a gown, a fluid resistant surgical mask and eye/face protection. It is recommended that this PPE would be used for a water or land labour and birth.

RCM/RCOG Guidance

The RCM and RCOG overall COVID-19 pregnancy guidance (version 11) now recommends the following: Waterbirth is not contraindicated for women who are asymptomatic of COVID-19 and presumed or confirmed SARS-CoV-2 negative, providing adequate PPE can be worn by those providing care. For women who are symptomatic of COVID-19 with a cough, fever or feeling unwell, labour and birth in water is not recommended.

For women who are asymptomatic of COVID-19 but test positive for SARS-CoV-2, there is inadequate evidence about the risk of transmission. Advice should be sought from Infection Prevention and Control authorities.

- Midwives providing care for women in water should reduce the risk of transmission to them through careful infection prevention and control practices, including wearing appropriate PPE (waterproof and splash proof gowns and gloves, which may include long gauntlet gloves), and through the implementation of adapted care practices to reduce their risk of coming into contact with faeces.

- In the absence of evidence, for women who are asymptomatic but test positive for SARS-CoV-2, an individual risk assessment and discussion should take place, considering both the views of the woman and the midwife providing care.
- For women who are symptomatic of COVID-19 with a cough, fever or feeling unwell, labour and birth in water is not recommended (RCM & RCOG, 2020).

Key considerations:

- Practice should continue to be guided by all emerging evidence through the pandemic. As any new evidence emerges, practice and guidance may require to be amended.
- The current evidence does not indicate a need for the cessation of the use of water in labour or waterbirth for all women during the COVID-19 pandemic.
- The current evidence remains inconclusive about whether asymptomatic women who test positive for the virus should always be advised not to use water during labour and birth. Individualised risk assessment about the appropriateness of providing labour or birth care in the pool room should be undertaken for each woman by the midwifery team in discussion with the woman, based on the woman's individual presentation and the pool environment within the labour setting. The decision will be based on a range of factors including the size of the labour room (enabling or otherwise physical distancing) and the ventilation available in the room. If a woman has current symptoms of diarrhoea, she should be advised that the use of the pool would not be appropriate, as this brings a higher risk of the pool water becoming contaminated.
- Midwives already make professional judgements about their own safety and the safety of the women they care for and they should continue to use the same decision-making process flexibly. 'The Health & Safety at Work Act' (H&SAWA) 1974, puts a legal duty on employers to conduct risk assessments based on both the environment in which a worker operates and the tasks they undertake. They also have a duty to tell workers about the risks and the preventative measures they are taking. Whatever the circumstances, though, the employer has a responsibility to assess the risks and mitigate them (UK Public General Acts, 2020).
- It has been suggested that the nature of labouring in a birth pool can assist with establishing social distancing during labour as the woman is contained in her own space (Burns et al, 2020).
- The guidance for women with current symptoms of COVID-19 remains that they are advised not to labour and birth in water. Women with a pyrexia should not labour in water, as this may lead to an increase in their temperature and it may be necessary to undertake continuous electronic fetal monitoring. Women with a cough and any breathing difficulties should be provided with regular oxygen saturation monitoring and may require oxygen support during labour. Such care and monitoring cannot practically be provided in a pool.

Practical approaches to reduce potential risks:

- Screen all women in early labour for symptoms of COVID-19; ask about symptoms including high temperature and new and persistent cough; take the woman's temperature, respiration rate and pulse on admission.
- Where women describe symptoms or have a current pyrexia or cough, or have current diarrhoea, they should be advised that the recommendation is that they do not use water during the labour and birth, due to the potential small risk of infection to their baby and their care team.
- Normal risk assessment of women for labour and birth in the pool should be undertaken.
- Ensure that the pool room is well ventilated. This may include having the door or window open, with curtains or a screen across the door. Consideration should be given to reducing this ventilation at the time of birth and to the needs of maintaining thermoregulation of the newborn by reducing drafts.
- The midwife should wear PPE and adhere to appropriate physical distancing for as much of the care as possible – unless needing to provide hands on care.

- Long gauntlet gloves or wearing ordinary gloves one size too small to improve the seal may be worn by the midwife when providing hands on care in the water (Burns et al, 2020).
- The midwife wearing PPE is likely to become very warm in a pool room and should have access to fluids to drink and regular breaks (NHS Employers, 2020) and to change their mask if it becomes damp or wet.
- Approaches can be used to reduce the number of times that the midwife places their hands into the water. The woman may be asked to raise her abdomen above the water in order to have the fetal heart rate auscultated or the woman or her partner can be instructed how and where to place the handheld monitoring device on the abdomen to assist auscultation.
- Where a woman passes a stool into the pool, the midwife will need to assess whether the water is likely to have become contaminated. If it is not considered possible to effectively remove the stool, it may be necessary to ask the woman to leave the pool to enable it to be emptied and cleaned before returning.
- It may be beneficial to have a second member of the team in the room to write notes to enable the midwife to maintain infection control measures, particularly during the second stage of labour.
- Reduce procedures that involve the midwife placing her hands and arms into the pool – for example, the use of mirrors and digital examination.
- Discuss with the woman and her partner in early labour on how to lift their baby to the water's surface after birth, with the midwife's verbal instruction. The midwife is close at hand to physically assist should any difficulties arise at the time of birth.
- It can be possible for a woman to remain in the pool for a physiological third stage. The third stage should be non-touch, without oxytocin and the mother guided with supported not directed pushing. Once the placenta delivers it can be "caught" by using a plastic sieve, which reduces the need for the midwife to put her hands under the water.
- If the woman wishes or requires an actively managed third stage using oxytocin, it will be necessary for her to leave the pool for the third stage.

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