and cleaning auditing; cohorting infants; mass screening infants and environment; and reduction of equipment in clinical areas. Our NNU has an active multidisciplinary simulation programme. Simulation is an effective educational tool to increase competence of healthcare providers [2]. We wanted to use simulation to highlight the ease of transmission of particles from a colonised infant.

Methods: The simulation involved a preterm 28-week infant corrected to 35-week gestation with numerous desaturation episodes. The baby was known to be colonised with pseudomonas. A 'monitored' low-fidelity manikin was placed in a cot in an isolation room. Candidates were unaware that the manikin was covered with ultraviolet powder. The manikin had numerous desaturation and bradycardic episodes necessitating airway and breathing support, clinical assessment, and septic screen. The spread of powder was assessed afterwards with a black-light.

Results: The simulation lasted just 8 minutes. There were exemplary unprompted infection-prevention measures with appropriate handwashing and personal protective equipment. Despite this the powder spread to staff facemasks, stethoscope, resuscitation equipment, patient trolley, and monitor.

Conclusion: This demonstrated the ease of transmission of particles to other surfaces despite adherence to infection prevention policies. Most striking was the transmission to candidates' facemasks which are not routinely changed, and could be a potential risk of carriage of microbes to other infants.

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SIMULATING COMMUNITY OBSTETRIC AND NEONATAL EMERGENCIES

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Background: Childbirth can be unpredictable in its timing and clinical course. Low-risk pregnant women can choose to deliver their infants at home, with 1 in 50 women in England and Wales choosing a home birth [1]. However, for those giving birth for the first time, there is an increased risk of adverse perinatal outcomes when compared to an obstetric unit – 5 in 1000 for a hospital birth compared to 9 in 1000 for a home birth [1], and 45% of nulliparous women are transferred to an obstetric unit [2]. Obstetric emergencies can occur and infants are born in poor condition. In these cases, every minute matters to reduce morbidity and mortality. Expertise and resources are also limited in the community; midwives and paramedic crews must work synergistically to achieve the best outcomes. Our aim was not only to show ideal clinical management of a combined neonatal and obstetric emergency but also to explore multidisciplinary team working, communication, and human factors of these complex situations.

Methods: The simulation involved a low-risk term pregnant woman who has chosen to have a home birth. It was filmed in a house for authenticity. In attendance were a community midwife and maternity assistant. The baby was born in poor condition: floppy, pale with no respiratory effort, and bradycardic. Neonatal life support was given up to and including chest compressions with good recovery of heart rate but no spontaneous breathing, therefore, requiring supraglottic airway insertion. The handover was given to the paramedics and the infant was conveyed to the neonatal unit. The scenario then unfolded with the mother also having a postpartum haemorrhage requiring oxytocin, syntometrine, misoprostol, tranexamic acid, and fluid resuscitation, utilising a second paramedic crew and transfer.

Results: The simulation was recorded as exemplary management of this situation. It will be used to deliver training to West Midlands Ambulance Service and community midwives; aiding as a discussion point for clinical management, communication strategies, team leadership, roles, and delegation. We will collate written feedback on its impact on both paramedic and midwifery confidence levels. The community midwife, midwifery assistant, and paramedics who attended stated how much it had increased their confidence in managing a dual emergency, and affirmed their roles and responsibilities in such cases.

Conclusion: We expect that with increased staff education and confidence, the outcomes of babies born in the community in unexpectedly poor condition will improve.

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WIDENING ACCESS TO SHINE (SIMULATION TO HELP IN NEONATAL EMERGENCIES) TO INCLUDE NEONATAL QUALIFIED IN SPECIALTY (QIS) COURSE STUDENTS

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Background: Simulation is known to improve clinical skills and team communication. A full-day neonatal emergency simulation course was established in 2018 for paediatric postgraduate doctors in training. It consists of four scenarios and two workshops for eight candidates; running 4 times per year. The candidates are split into 2 groups allowing each to 'lead' a scenario with traditionally faculty placed as nursing plants. In contrast, simulations run on our neonatal unit involve both nursing staff and medical candidates, allowing for true multidisciplinary working. Access and funding for simulation can be more difficult for nurses but it is known that the protected environment and the sense of security enhance nursing students' self-esteem and confidence, thus promoting learning [1]. The aim of the study was to make the SHINE course more authentic to real life with a multidisciplinary approach to the scenarios; to see if inviting