The aesthetic nature of the birthing room environment may alter the need for obstetrical interventions – an observational retrospective cohort study

The concept of sensory delivery rooms was introduced in 2013. These rooms offer programmable calming lights, restful blurred pictures displayed on a wall-sized big screen, and sound effects. The primary aim of this observational study was to analyse the risk of obstetrical interventions among women giving birth for the first-time in a sensory delivery room vs. a standard delivery room. We included nulliparous, term pregnant women having a single baby with a cephalic presentation who were in spontaneous labour and gave birth between March 1st 2014 and July 1st 2015 in North Zealand Hospital, Hillerød. A total of 789 women were included in the study, 313 gave birth in a sensory room and 476 in a standard delivery room. The risk of a caesarean delivery was significantly decreased when giving birth in a sensory room compared with a standard delivery room (OR, multiple adjusted: 0.44; 95% CI 0.22–0.87); furthermore, the use of oxytocin infusion was also reduced (OR, multiple adjusted: 0.71; 95% CI 0.50–1.03). This observational cohort study suggests that giving birth in a sensory delivery room could lower the risk of caesarean delivery, potentially reducing the number of such deliveries by one for every 23 patients.