Objective To assess the knowledge and practice of pulse oximetry screening for critical congenital heart defect in newborn infants by paediatricians in Benin.

Method This was a phone survey or a direct interview that interested pediatricians in Benin. The data included examined the seniority of pediatricians, their location, their knowledge and practice of pulse oximetry screening for critical congenital heart defect in newborn infants. The data has been analyzed with EPI info 3.5.4 software.

Results We have identified 84 pediatricians but only 55 (65.47%) participated in this survey. The average duration of paediatric practice was 10.6 ± 8.04 years (1–29). Most of them exercised in LITTORAL district (n = 34) and in private clientele (n = 22). Respondents reported hearing about pulse oximetry screening for critical congenital heart defect in newborn infants in 65.45% of cases. Only 12.73% were aware of a screening protocol and 16 pediatricians routinely practised it. Only one respondent had a program for screening of critical congenital heart defects by pulse oximetry at its center. The exercise time was inversely associated with knowledge of this screening (p = 0.003). This knowledge did not influence the practice of screening critical congenital heart defect in newborn infants (p = 0.18).

Conclusion Pulse oximetry screening for critical congenital heart defect in newborn infants is few used by paediatricians in Benin. Its systematization would improve the screening.

### P438 DESIGN OF AN ASSESSMENT TOOL TO EVALUATE NEONATAL CARE PRACTICE ACROSS A RURAL PROVINCE IN CAMBODIA AND SUBSEQUENT INITIATION OF A COMPREHENSIVE NEONATAL TRAINING PROGRAMME FOR MIDWIVES, NURSES AND DOCTORS

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Introduction The neonatal mortality rate (NMR) in Cambodia is 18 per 1000 births. The NMR in rural areas is higher, with a reported rate of 25 per 1000 in the province being studied. A large-scale programme ‘The Saving Babies Lives Programme’ is currently being piloted to decrease neonatal deaths in Cambodia. An assessment of the current neonatal care practice was necessary to highlight areas for improvement. Our aim was to create an assessment tool to obtain a comprehensive overview of neonatal services to inform the implementation of a sustainable improvement strategy including a comprehensive training programme for midwives, nurses and doctors.

Methods An assessment tool was adapted from the KAP survey model (Knowledge, Attitudes and Practice). Two further sections were added; Equipment and Staffing, forming a ‘KAPES survey’. Tablet-based questionnaires were created using KoboCollect Toolbox. Surveys were written in English and translated into Khmer. National and international guidelines and teaching materials were reviewed to decide core teaching topics and the level of care to be provided at each facility. The research team were trained as instructors and mentors.

Results Knowledge and attitude questions were developed across key domains depending on staff member (midwife, nurse or doctor) in the format of multiple choice questions (MCQs) and statements with a Likert scale. Practice, Equipment and Staffing (PES) included multiple question types and be the most painful procedures (4–5 points Likert scale). Statistically significant differences among nurses and physicians were found between their perception of pain intensity during intravenous cannulation and heel pricks (p = 0.001; p = 0.009, respectively). Physicians considered tracheal suctioning (p = 0.02) to be the most painful procedure. All staff considered gastric tube insertion (p = 1.0) to be the procedure with minimal pain (1 points Likert scale). All professionals took pharmacological measures for pain relief during chest drainage (p = 0.8), tracheal intubation (p = 0.8), lumbar puncture (p = 1.0). The most reported non-pharmacological measure for neonatal pain therapy was oral glucose both for nurses and physicians (84% vs 75%, respectively). Majority of nurses reported of non-pharmacological pain relief measures used for all routine painful procedures irrespective of pain intensity.

Conclusion The survey showed that the neonatal pain assessment is not systematic, pharmacological measures for pain management are used limitedly due to reservations about analgesic-related neurotoxicity, despite of pain intensity. Non-pharmacological methods are more used according to the staff, especially nurses, reports.