

**Perinatal Care at the threshold of viability Part II: Decision-making at the threshold of viability and ethical challenges at Neonatal Intensive Care Units (NICUs)**

**Hawlik K, Stanak M**

The aim of this project was to provide decision support for resource planning of NICUs in Austria. We collected evidence on decision-making practices (guidelines, good practice models, and communication strategies) and ethical challenges at the limit of viability.

A mixed method approach was applied to answer the research questions on good practice models, social factors, and ethical challenges in NICU decision-making. The systematic literature search followed the MIP (Methodology, Issue, Participants) question and was conducted in six databases (Medline via Ovid, Embase, The Cochrane Library, CRD, PsycInfo, CINAHL). The search was not limited to a specific study design, but to specific languages (German and English). The search was complemented by interviews with the heads of departments of neonatology of five perinatal care centres and a clinical ethicist to gather the data specific to the Austrian neonatal context.

The literature review on decision-making practices found that the limit of viability oscillated between 22 and 25 weeks of gestational age (GA). Weeks 23 and 24 of GA remain to be the grey zone of viability where shared decision-making with parents particularly takes place, and where there was no recommendation in 23% of cases, comfort care in 30% of cases, individual decision in 30% of cases, and parental wishes in 18% of cases. Furthermore, communication with parents was shown to play an important role in the decision-making processes as the spectrum of cognitive biases at play at both sides, among NICU professionals as well as among parents, seem to be partly responsible for the between-hospital variations in outcomes.

The ethical challenges in Austrian NICUs operate at the backdrop of the Kantian philosophy of deontology, Christian culture, the legal requirement of prolonging life without caring about its quality, socio-economic inequalities, and current migration challenges. The main challenges concerned discerning what the best interest is and what makes up a just decision in the light of great uncertainty. The topic of institutionalisation of legal support as part of ethics committees was mentioned in the interviews as well as structural ethics support that can help in allowing the team members to recognise ethical dilemmas, improve team cohesion, and the quality of care provided.

Decision-making at the limit of viability is, to a large extent, context dependant. Different countries issue different guidelines that operate at the backdrop of different contexts. Cognitive biases, however, influence decision-making processes, especially in the grey zone where shared decision-making with parents is involved. The role of ethics support also varies with context, but its role in supporting NICU professionals in decision-making as well as in the challenges encountered when facing these ethical dilemmas is inevitable.

**The full English version is available  
under**

**[http://eprints.hta.lbg.ac.at/1148/1/HTA-Projektbericht\\_Nr.97b.pdf](http://eprints.hta.lbg.ac.at/1148/1/HTA-Projektbericht_Nr.97b.pdf)**