EPV-0718 - NEONATAL-SPECIFIC INFECTION PREVENTION AND CONTROL PRACTICES IN NICUS ACROSS THE WHO EUROPEAN REGION: RESULTS OF THE NEOIPC-UENPS SURVEY

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Kangaroo Care and beyond: are we integrating skin-to-skin contact, human milk and microbiome-informed care for preterm infants to optimise outcomes?

IMPORTANCE and OBJECTIVES

- Skin-to-skin (STS) contact, breastfeeding/milk feeds and probiotics are often treated as separate interventions, but they are biologically and clinically part of an interdependent system (Kangaroo Care).
- Little guidance on how to approach bundling these interventions appropriately.

- Characterise the current use and implementation of neonatal-specific infection prevention and control (IPC) measures across European neonatal intensive care units (NICUs).
- Identify patterns in practice variability, and inform international collaboration to promote the adoption of optimised neonatal-adapted IPC measures.

METHODS

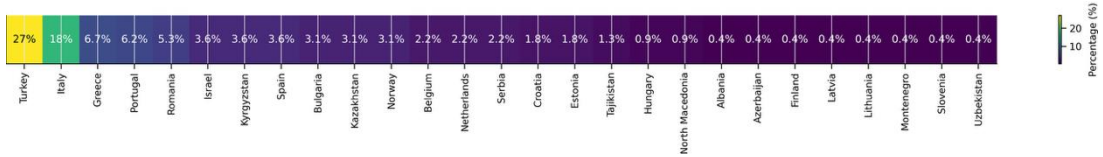
A large scale online survey was designed within the NeoIPC Project in collaboration with UENPS:

- distributed in Q4 2024 through national neonatal societies to NICUs within the WHO European region.

The survey verted on neonatal-specific IPC practices:
- skin-to-skin contact (STS)
- feeding
- probiotics.

RESULTS

400 questionnaires distributed --> 301 responses (response rate 75%) --> **224/288 unique interpretable responses from 27 countries in WHO EU.**



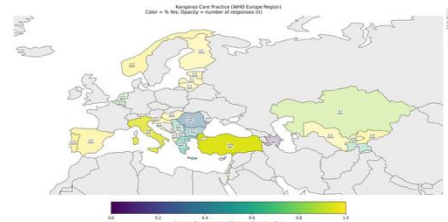
General characteristics:
Academic hospital NICUs: (170/224, 76%)
Birth centre NICUs: 205/224 (92%)
Neonatal surgery centres: 139/224 (62%)
Median [IQR] n. of intensive care cots: 15 [9, 24]
Median [IQR] n. of births (year 2023): 2183 [1215, 3578]
Median [IQR] n. of admitted neonates in the NICU (year 2023): 400 [250, 603]
Median [IQR] n. of admitted neonates born at <32 weeks gestation (year 2023): 70 [40, 127]
Highest Local Engagement in Southern WHO Europe (220/224, 98%)

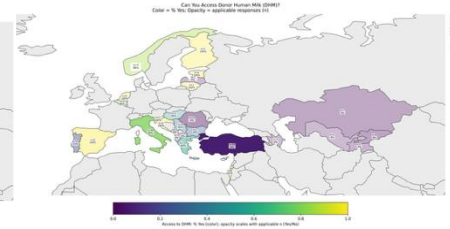
RESULTS

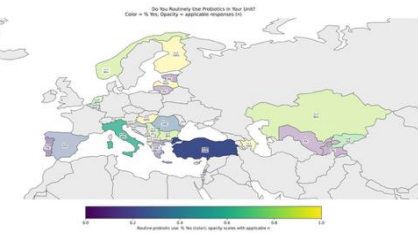
STS/KC (yes: n, %)
- practiced in **193/224** NICUs (**86%**)
- Offered from **27** [24.0, 28.0] **weeks' GA**
- Average **duration per session:** 120.0 minutes [60.0,145.0]
- **Long duration** STS: 15 (7%)
- **Written guidance** 113 (51%) vs **Training** 138 (62%)
- STS + **respiratory support**: **MV 108 (48%)** - **NIV** 184 (82%) - **O2** 192 (86%)
- STS + **lines and catheters**: **UVC 134 (60%)** vs **CVC** 171 (76%)
- STS + **colonisation status:** i**nfant colonised** 127 (57%) vs **carer colonised 66 (30%)**

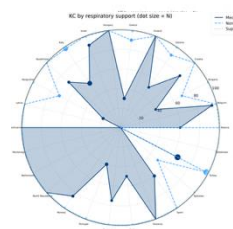
Feeding practices (yes: n,%)
- **Feeding policy** available: 194/224 (87%)
- MoM routinely pasteurised: 20 (9%)
- Use of **fresh unpasteurized human milk in preterm infants**: all preterm infants: 161 (72%) - above a specific GA (range 25-34 weeks) 22 (10%)
- **DHM access**: **96 (43%)**
- **DHM written policy**: **58 (26%)**
- DHM cutoffs: GA cut-off (weeks) Median (Q1, Q3): 32 [32, 33]; Weight cut-off (g) Median (Q1, Q3): 1500 [1500, 1500]

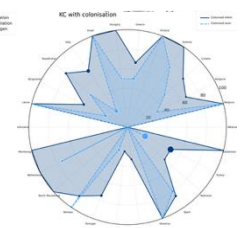
Probiotics (yes: n,%):
- **Routine use**: **93/224 (42%)**
- Probiotics cutoffs: GA cut-off (weeks) Median (Q1, Q3): 32 [28, 32]; Weight cut-off (g) Median (Q1, Q3): 1500 [1000, 1500]
- Most used probiotics: ***L. rhamnosus*** **50 (21.3%); *B. bifidum*** **49 (20.9%); *L. reuteri*** **42 (17.9%)**

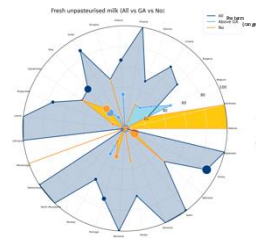


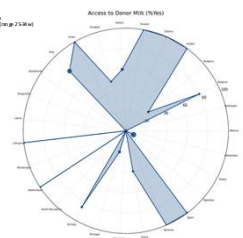


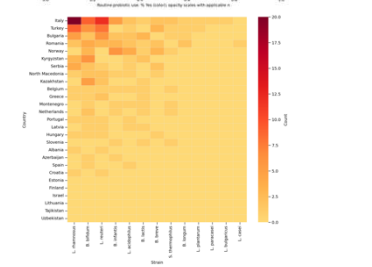












CONCLUSION

- Neonatal-specific IPC practices are variably implemented, sometimes widerly practices, but rarely optimised across respondent NICUs, reflecting safety concerns for preterm infants, limited availability of written policies, and potential structural, regulatory, or supply-related constraints (DHM, probiotics).
- **Importance of embedding STS/KC within a system that also addresses optimisation of human milk feeding and microbiome-informed care.**

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