

UNIVERSITA' DEGLI STUDI DI PADOVA

DIPARTIMENTO DI SALUTE DELLA DONNA E DEL BAMBINO

CORSO DI LAUREA IN OSTETRICIA

Presidente Prof. Erich Cosmi

**STIMOLAZIONE DEL NEONATO ALLA NASCITA:
CONFRONTO TRA DUE TECNICHE IN UN
SETTING A RISORSE LIMITATE**

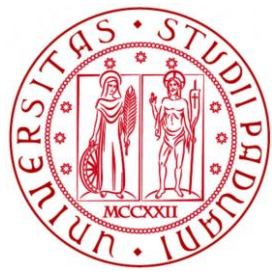
Relatore: Prof. Perilongo Giorgio

Correlatore: Prof. Trevisanuto Daniele

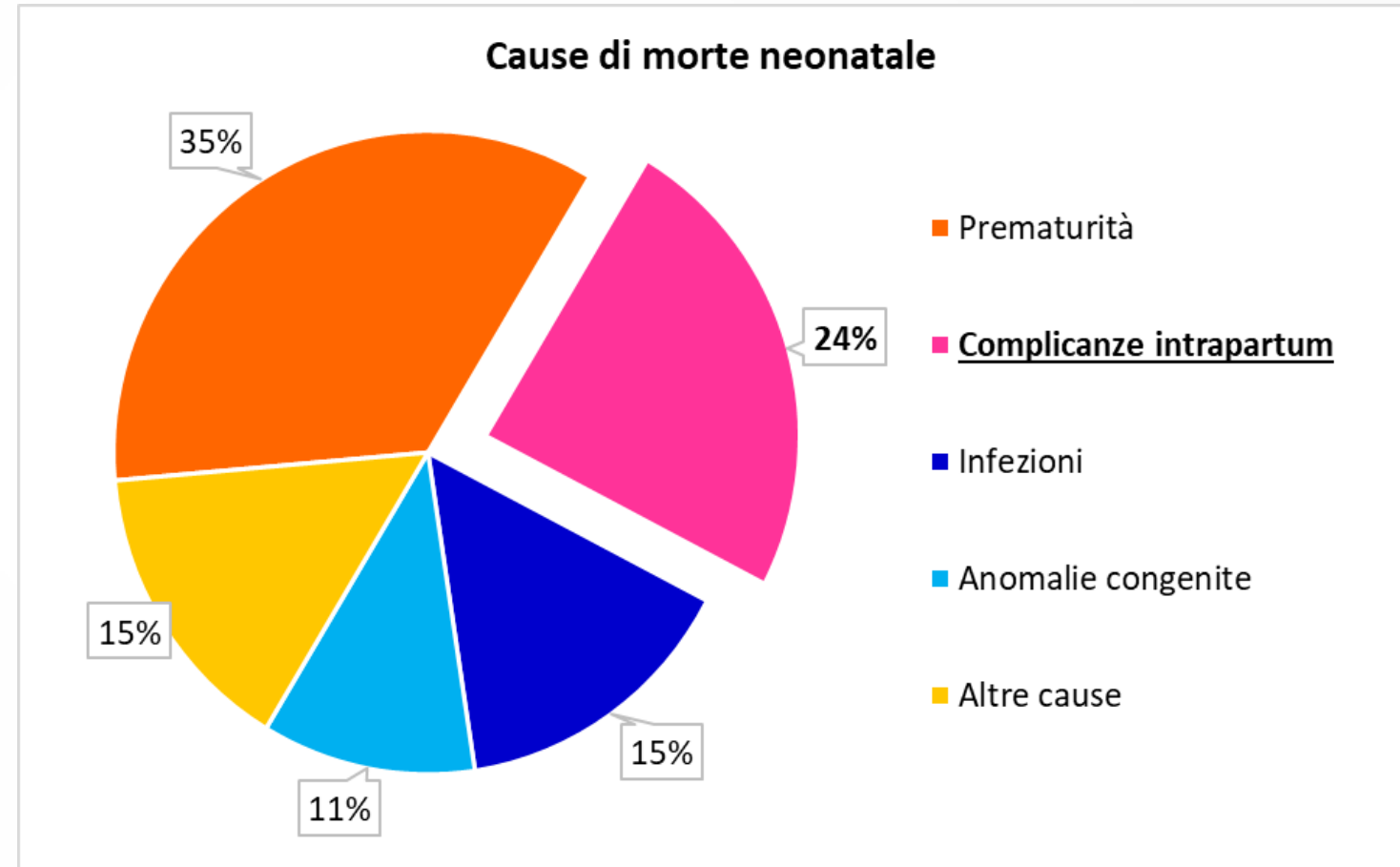
Laureanda: Gatto Elisa

ANNO ACCADEMICO 2018/2019

INTRODUZIONE



- 47% dei decessi tra i bambini sotto i 5 anni avviene nel periodo neonatale (0-28 giorni) ⁽¹⁾
- 1/3 nel primo giorno di vita ⁽²⁾
- Complicanze intrapartum
↓
24% delle morti neonatali



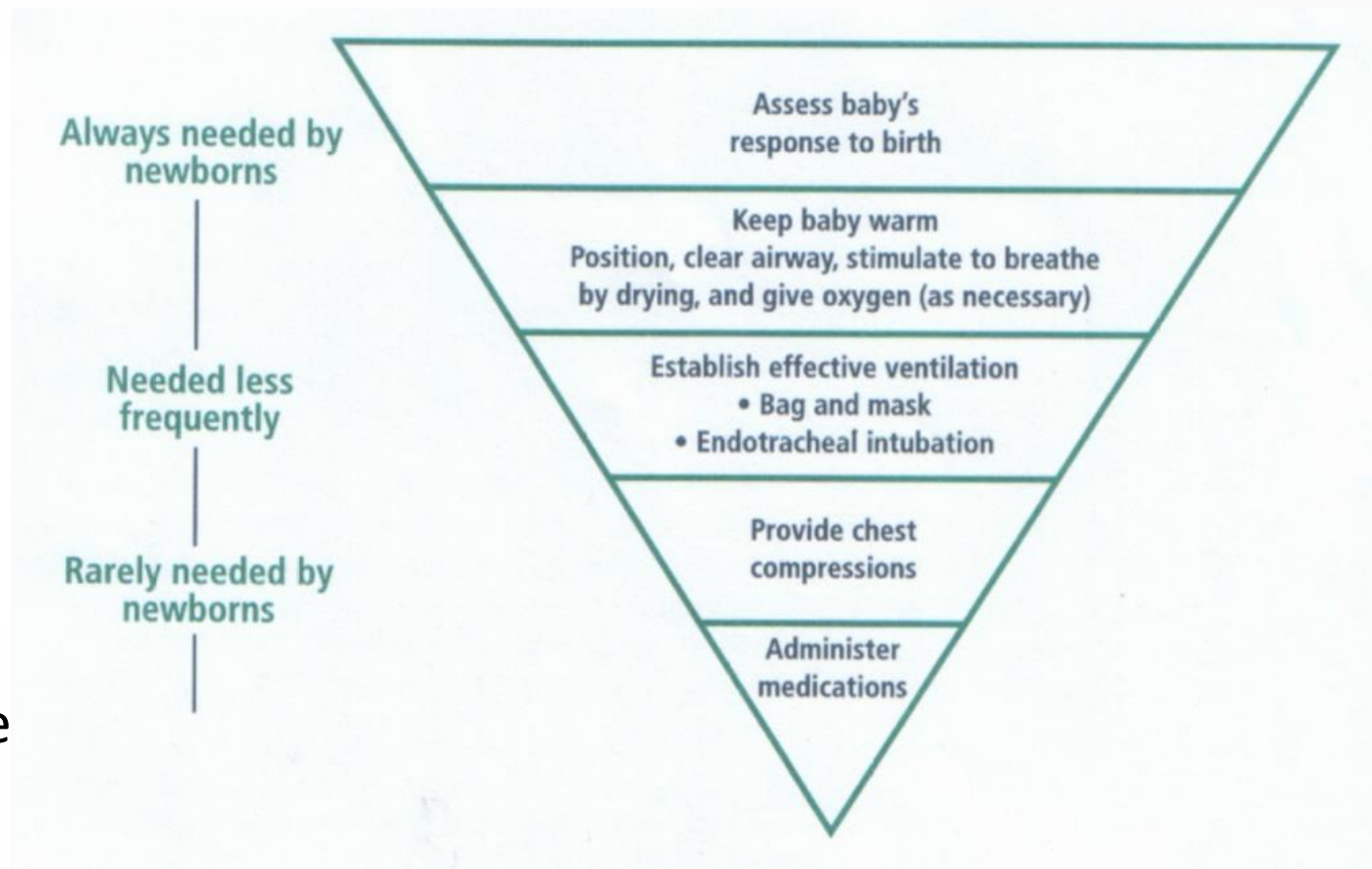
(1) UNICEF; WHO; World Bank Group; United Nations., 2019

(2) Sankar MJ et al. , Journal of Perinatology, 2016

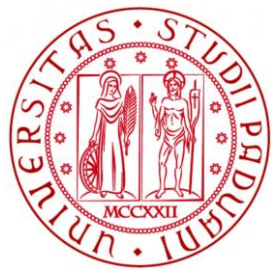
INTRODUZIONE



- ❖ Il **90%** circa dei neonati affronta la transizione dalla vita intrauterina a quella extrauterina senza difficoltà.
- ❖ Il **10%** necessita di assistenza per iniziare a respirare
 - ↳ **STIMOLAZIONE TATTILE**
- ❖ Meno dell'**1%** ha bisogno di manovre rianimatorie avanzate.



INTRODUZIONE



STIMOLAZIONE TATTILE

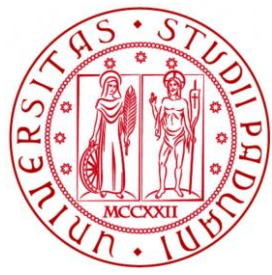
- ❖ Raccomandata da tutte le Linee Guida sulla rianimazione neonatale ⁽³⁾ ⁽⁴⁾
- ❖ Previene la necessità di ventilazione e altre manovre rianimatorie

Due tecniche di stimolazione raccomandate



(3) AHA, Circulation, 2015
(4) HBB Program, AAP, 2015

INTRODUZIONE

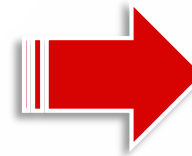


- ❖ 3 studi osservazionali
- ❖ 2 High-resource settings
- ❖ 1 Low-resource settings

Dekker J et al. Tactile stimulation to stimulate spontaneous breathing during stabilization of preterm infants at birth: A Retrospective Analysis. Front Pediatr. 2017 Apr;

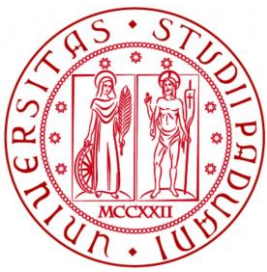
Gaertner VD et al. Physical stimulation of newborn infants in the delivery room. Arch Dis Child Fetal Neonatal Ed. 2018;

Pietravalle A et al. Neonatal tactile stimulation at birth in a low-resource setting. BMC Pediatr. 2018;



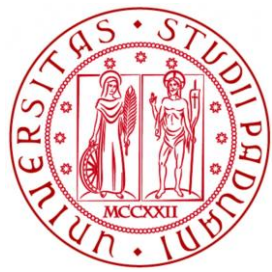
DORSO > PIANTA DEI PIEDI?

SCOPO DELLO STUDIO



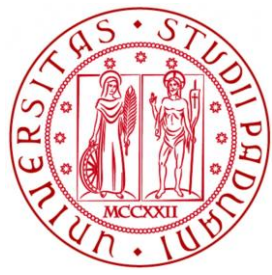
Determinare se una delle due tecniche raccomandate è maggiormente efficace nel ridurre la necessità di ventilazione a pressione positiva

MATERIALI E METODI



- ❖ **Disegno dello studio: Studio controllato randomizzato (RCT)**
- ❖ **Periodo di raccolta dati: Giugno – Luglio 2019**
- ❖ **Setting: Single-center (St. Luke Catholic Hospital, Wolisso, Etiopia)**
- ❖ **Approvazione CE locale**

MATERIALI E METODI

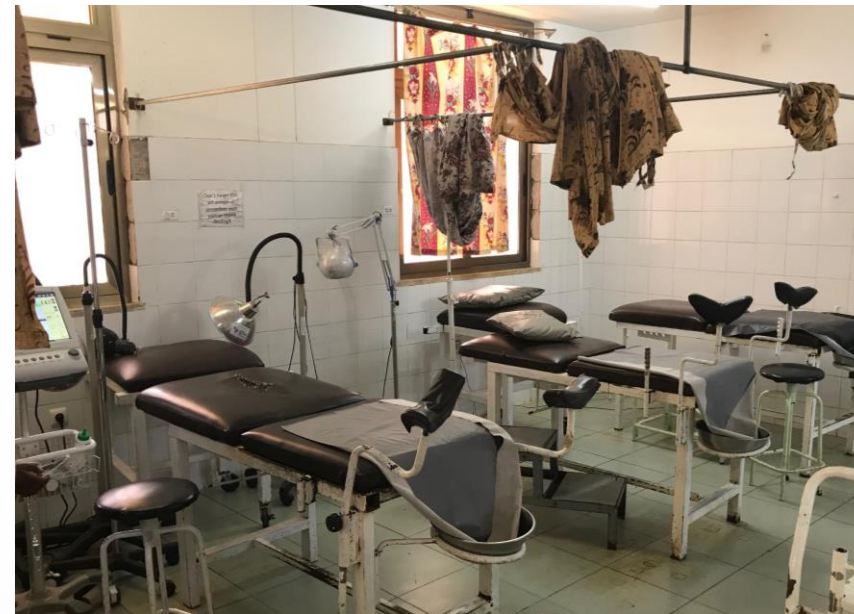


ETIOPIA

N. di medici per abitante	1 ogni 40.000
N. di infermieri/ostetriche per abitante	1 ogni 4.000
Mortalità neonatale	41/1000

ST. LUKE CATHOLIC HOSPITAL

N. di parti totali	4630/anno
Cesarei	661/anno (14%)

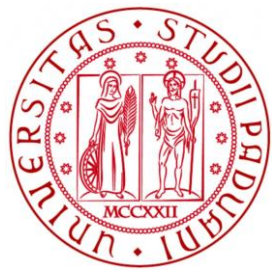


Sala Parto dell'ospedale di Wolisso



Stanza rianimazione neonatale

MATERIALI E METODI

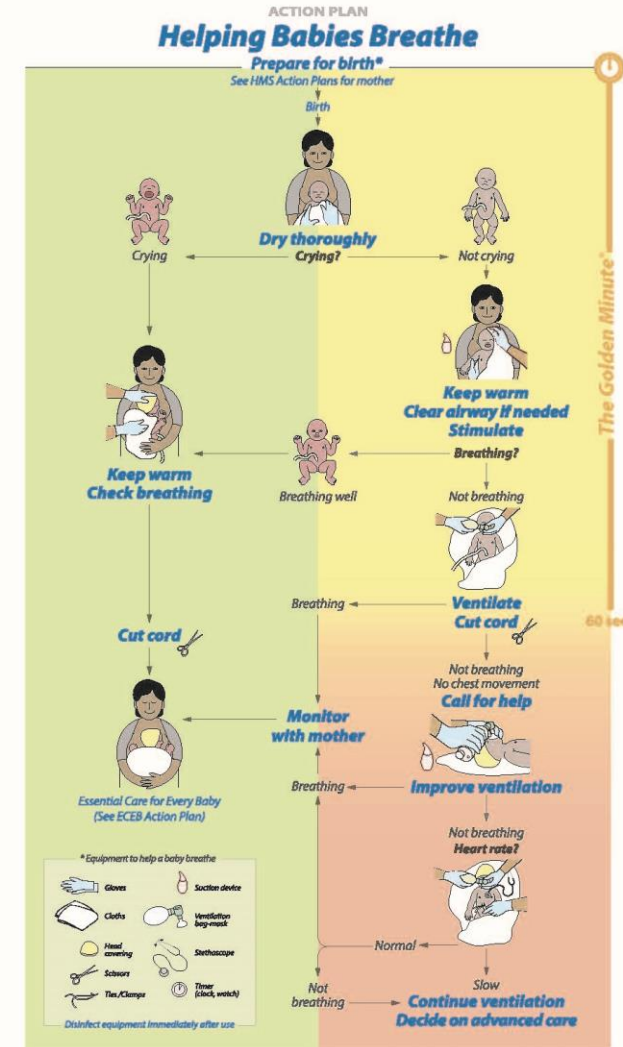


CRITERI DI INCLUSIONE

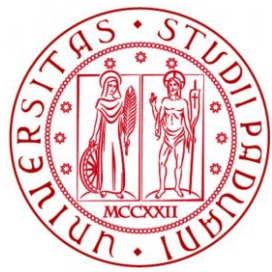
- Neonati apnoici alla nascita
- Peso stimato > 1500 g
- Consenso dei genitori

CRITERI DI ESCLUSIONE

- Neonato nato morto
- Malformazioni congenite maggiori
- Gemelli
- Rifiuto dei genitori



MATERIALI E METODI



OUTCOME PRIMARIO

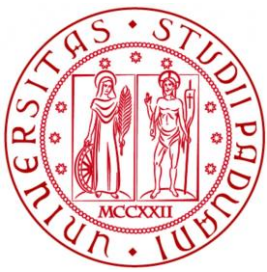
Numero (%) di neonati in cui non è stata necessaria la ventilazione

Outcome secondari

- Apgar a 5'
- Numero (%) di neonati con necessità di compressioni toraciche
- Timing delle stimolazioni:
 - Tempo di inizio (s)
 - Durata prima stimolazione (s)
 - Durata totale (s)
 - Numero stimolazioni



RISULTATI

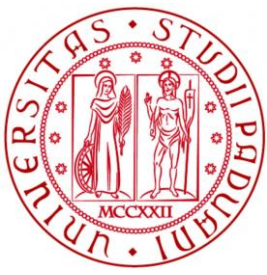


Caratteristiche del campione: 41 neonati reclutati

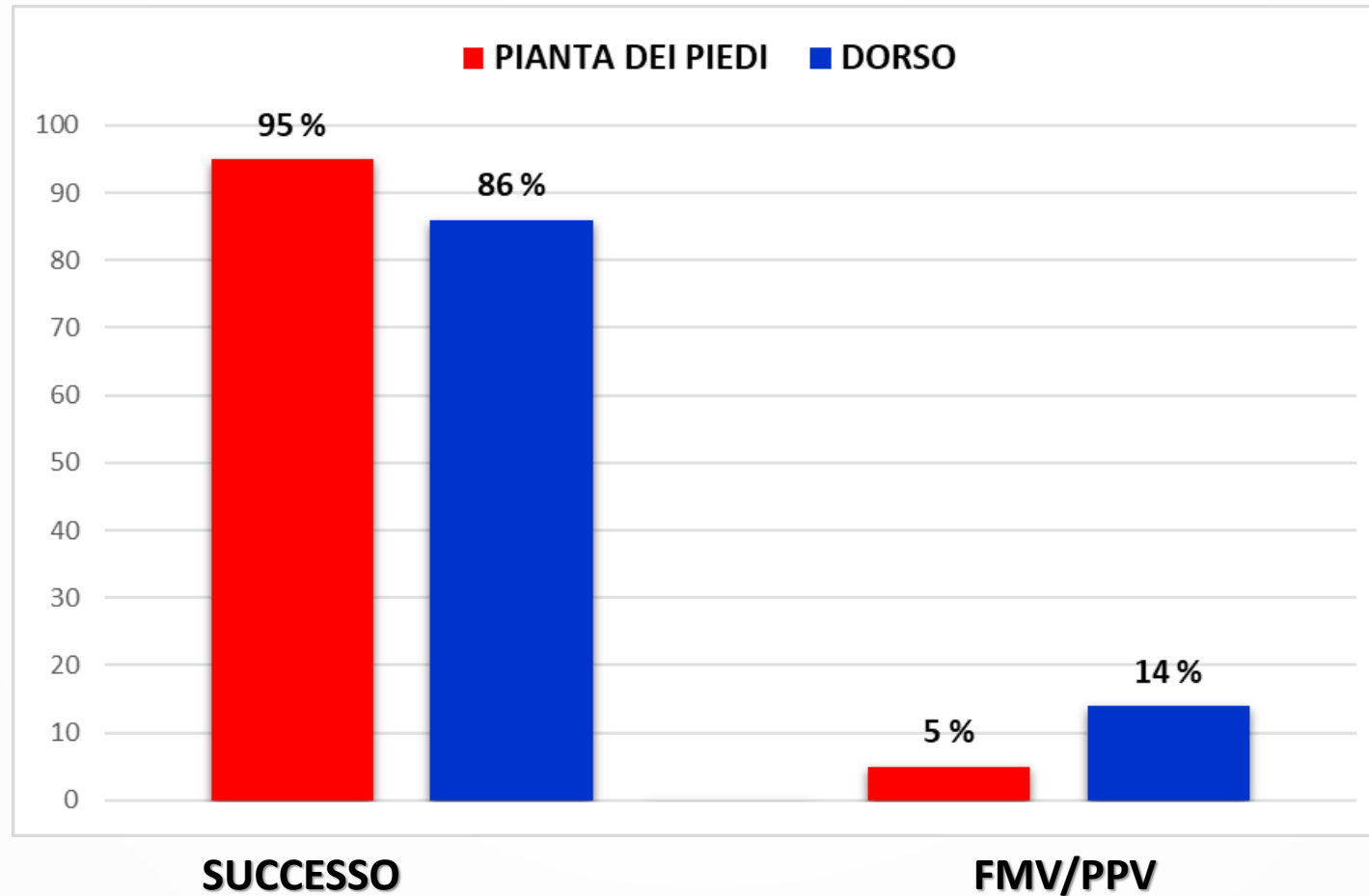
	Stimolazione del dorso	Stimolazione della pianta dei piedi
N.	21	20
Età gestazionale, settimane	39 (39;40)	39 (38;40)
Maschi:Femmine	13:8	5:15
Peso alla nascita, grammi	2800 (2600-3000)	3000 (2700-3450)
Parto:		
Spontaneo	21 (100%)	16 (80%)
Cesareo	0 (0%)	4 (20%)
Clampaggio, secondi	70 (39-110)	61 (53-110)

Dati espressi come numero (%) o mediana (IQR)

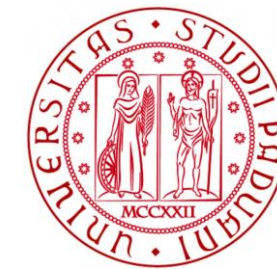
RISULTATI



Outcome primario: prevenzione della ventilazione



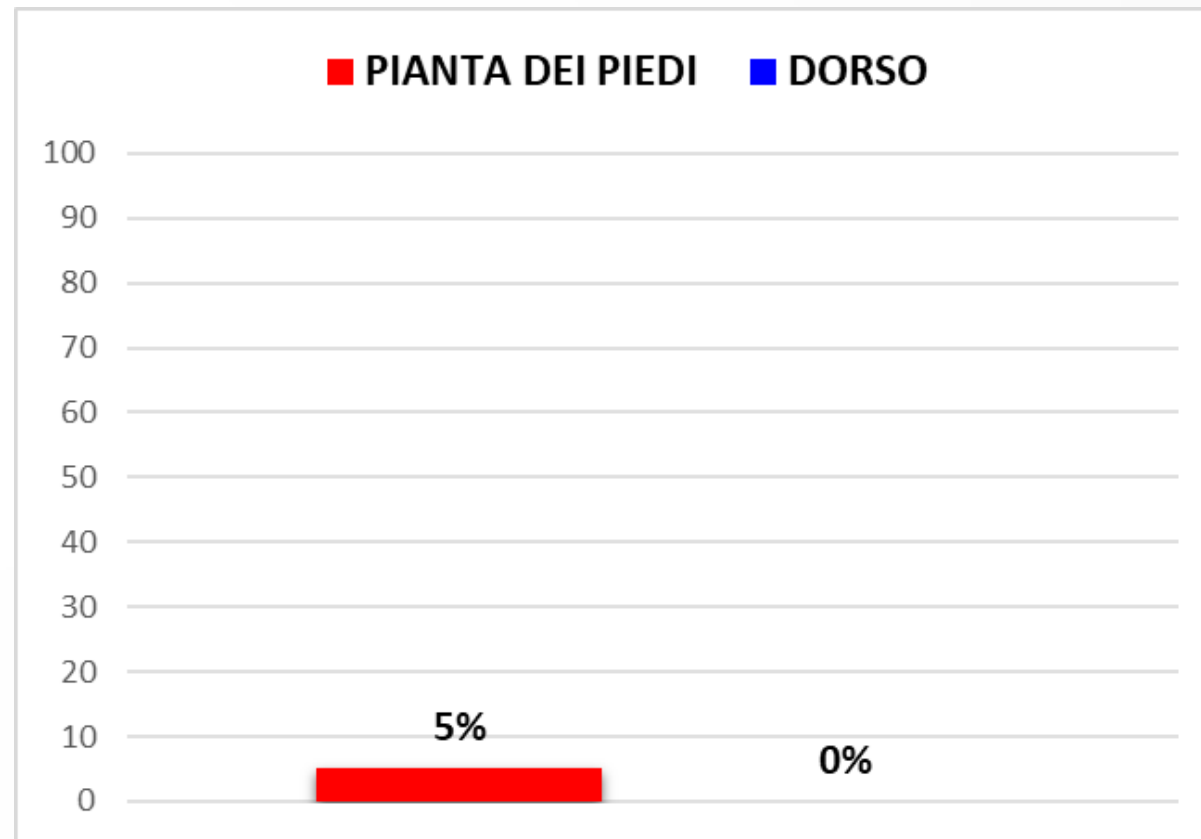
RISULTATI



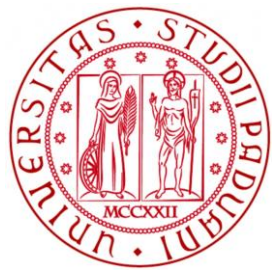
Punteggio di Apgar a 5'



Compressioni toraciche



RISULTATI

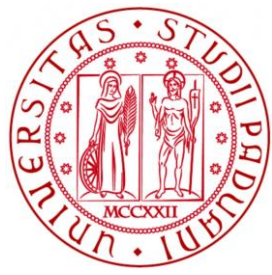


Timing delle stimolazioni

	Stimolazione del dorso	Stimolazione della pianta dei piedi	p-value
N.	21	20	-
Tempo di inizio, secondi	12 (10-16)	11 (6-14)	0.27
Durata prima stimolazione, secondi	5 (5-5)	5 (5-5)	0.31
Durata totale, secondi	20 (9-30)	20 (9-30)	0.71
Numero stimolazioni, n	2 (2-3)	2 (2-3)	0.59

Dati espressi come mediana (IQR)

CONCLUSIONI

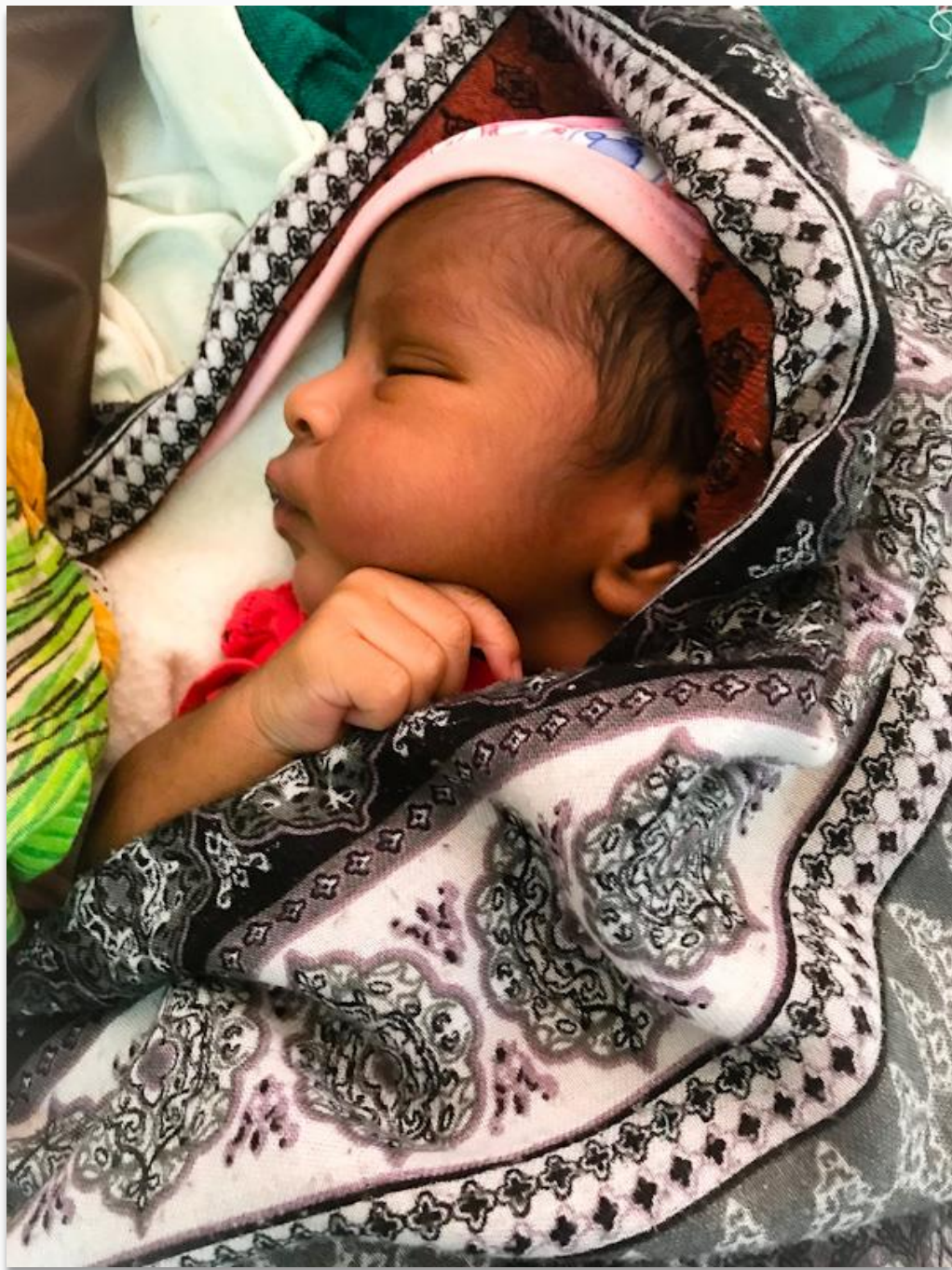


Più del 90% delle stimolazioni è stato efficace nella prevenzione della ventilazione

- ❖ **Non sono emerse differenze** tra le due tecniche di stimolazione raccomandate
- ❖ **Limiti:** Campione ridotto (41 neonati) → sono necessari ulteriori studi

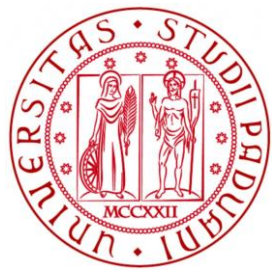


- Continuare lo studio con un campione più grande
- Utilizzo di un supporto video
- Multi-center



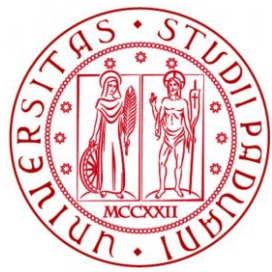
**GRAZIE PER
L'ATTENZIONE**

BIBLIOGRAFIA E SITOGRAFIA



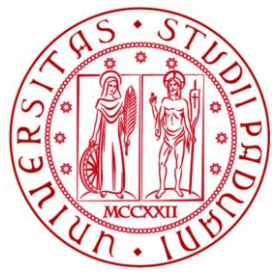
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