



### Knitted octopuses inside the incubators, a non-evidence based viral practice



Recently a new tendency has emerged inside neonatal intensive care units (NICUs) and is generating controversies: to place knitted octopuses inside incubators.

This initiative appeared in Denmark in 2003 in the context of The Danish Octo Project [1], in which a group of volunteers started crocheting colourful octopuses using premium cotton. According to them, the tentacles of the octopus resemble the umbilical cord and remind the babies of their time in the womb. This octopus creates a sense of safety and comfort, which translates into improved breathing, increased regular heartbeats and increased levels of oxygen in their blood. According to the project supporters another benefit is to prevent preterm babies from attempting to pull out their monitors and tubes. However, all these beneficial effects are not demonstrated and are assumptions about the effect that octopuses can have but there is not any published work demonstrating these results.

It is interesting to take into consideration the relationship established inside the triad premature-incubator-mother. The relations between humans and non-humans in the context of the NICU where technologies, kit and routines of clinical care do not simply supplement or mediate the maternal role but instead can be seen to replace it [2]. Toys are commonly put in the incubators of ill neonates because it is considered by parents and staff to make the harsh neonatal environment more friendly and human. For parents, the incubator is perceived with emotional ambivalence. The mother ornaments the machine as a way to participate in the relationship established between the baby and the incubator and thus manifests her presence in the artificial womb [3].

If the attention is focused on the clinical aspects, one of the most critical concerns for the medical staff is related to infections. The study by Davies (2000) showed that 98% of cultures from toys in infant's cots in a NICU were contaminated with bacteria that can be potentially pathogenic even to healthy infants [4]. There are two small studies about colonization of toys in neonatal units [4,5], but these are limited studies and none of them are studying the role of the toys in nosocomial infection in neonatal units.

Most part of the resistance against the incorporation of these octopuses in the NICUs are due to different reasons such as the lack of security and quality warranties and of conclusive information about the beneficial clinical effects, that makes non-acceptable the risk of nosocomial infections. Hygienic protocols to access NICUs are very strict and require a diligent hand wash to prevent the spread of infections to the infants. It is difficult to understand why hospitals oblige parents, nurses and doctors to be such careful but, on the other side, the presence of external infection sources such as knitted octopuses is permitted without even questioning safety issues.

It must be mentioned some other security issues. Octopus tentacles can become too long and can cause drowning. Also, if the octopus knitting is not too tight the padding can come off. At present, in the developed countries, all children's toys must comply with strict safety standards. Octopuses do not actually pass any of these security and qualified quality controls.

This action has led to opposite points of view. While some hospitals from United Kingdom, Spain and Denmark support it, other main hospitals in Spain and Sweden are positioned as detractors and have banned the octopuses in neonatology units.

This initiative permitted to focus on prematurity and family-centered care, but analysing the available information and the pros and cons it is concluded that the need for research is crucial, based on objective and evidence-based data and using the scientific common sense, in order to prove the safety and benefits of the toys and, in this way to decide the introduction of octopus with solid arguments.

### References

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Adriana Bastons-Compta, Marta Astals, Oscar Garcia-Algar\*  
 GRIE, Neonatology Unit, Hospital Clinic-Maternitat, ICGON, BCNatal, Barcelona, Spain  
 E-mail address: [ogarciaa@clinic.cat](mailto:ogarciaa@clinic.cat)

Erika Sánchez  
 Neonatology Unit, Hospital Clinic-Maternitat, ICGON, BCNatal, Barcelona, Spain

\* Corresponding author at: Neonatology Unit, Hospital Clinic-Maternitat, C/Sabino Arana 25, 08028 Barcelona, Spain.