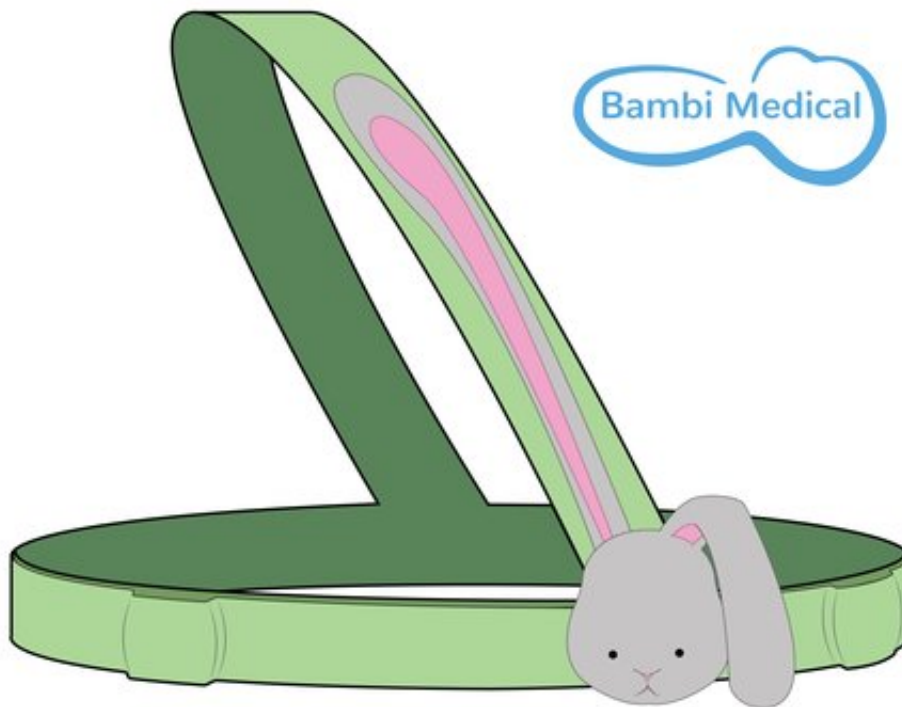


Bambi-belt to be tested in 8 hospitals around the Netherlands

September 29 2016



Credit: Eindhoven University of Technology

The Bambi-belt is an invention of Sidarto Bambang Oetomo, a paediatrician at Maxima Medisch Centrum and professor at the department of Industrial Design. Together with his son Fabio, the Bambi-belt is developed to overcome two flaws of monitoring pre-term infants in hospitals.

The Bambi-belt is a wireless monitoring system with dry, soft electrodes for [preterm infants](#) in hospitals. The belt improves the quality of life of the baby, and eases the parent-child bonding as there are no wires attached.

The Bambi-belt is already being tested in the MMC in Veldhoven on children with normal birth weight. In the coming few weeks, the belt will be also validated in seven other hospitals around the Netherlands, including the university hospitals of Maastricht, Groningen and Amsterdam.

Currently this monitoring happens with adhesives electrodes on the chest, that cause a lot of pain and stress to the baby while being removed, since the fragile skin is only half the thickness of a full-term infant. Moreover, the wires to the patient monitor inhibit the movement of the baby. As a result the baby spends too much time in the incubator, rather than in the place where it wants to be, being the mothers chest.

The impact of this innovation is immense as the academic research has shown that the length of the hospital stay is shortened through skin-to-skin contact. Next to that the skin-to-skin contact has a very positive impact on brain development, and therefore decreases cognitive impairments at a later age.

Provided by Eindhoven University of Technology

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