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Martina: A Breastfeeding Simulation System

A hands-on, realistic breastfeeding simulation with a prosthetic and feedback system teaches proper technique, reducing maternal discomfort and increasing breastfeeding duration.

Breastfeeding has been shown to reduce diabetes, obesity, and respiratory infections. The Center for Disease Control and Prevention recommends that mother's breastfeed their babies for six months. Today, only 11.9 percent of babies are breastfed for this long. The main reason for this is mothers feel discomfort during breastfeeding. Sore breasts and bleeding nipples are causing mothers to stop breastfeeding early and use formula. Using formula is also a financial burden. By breastfeeding, families could save $1200 to $1500 over the six month period. There is a need for a way for mothers to properly learn how to breastfeed.

Researchers at Purdue University have developed a new technology that can teach mothers the correct technique of breastfeeding to avoid the discomfort. This technology is a breastfeeding simulation that gives mothers a realistic training session on the proper techniques of it. It can teach them the proper way to hold the baby, proper orientation in which the baby should be held, and other important aspects that will reduce the discomfort to the nursing mother. This simulation is hands on, providing a realistic baby and breast prosthetic for the mothers to practice using. This system gives feedback, allowing the mother to adjust her technique until she gets it correct. This technology could change how mothers approach breastfeeding.

Advantages:

-Hands-on training

-Realistic simulation

-Teaches correct technique

Potential Applications:

-Breastfeeding

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Category
Robotics & Automation/Simulation, Digital Twins, & Industrial Automation
Education & EdTech/Industrial & Workforce Training Platforms

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-Nursing mothers

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