

SUSTAINABLE HEALTHCARE: THE CURIOUS CASE OF OUR SMALLEST PATIENTS

RESEARCHERS at the University of Limerick are working with the Environmental Protection Agency on assessing the environmental impacts of infant feeding.

The research team, Dr Yvonne Ryan-Fogarty, Postdoctoral Researcher, and Dr Bernadette O'Regan, as Principal Investigator, are keen to pour their collective experience into the research.

"We need to start assessing how policy at all levels can provide a more integrated approach in addressing environmental problems" says Dr O'Regan. "Backcasting is an incredibly useful tool in the fulfilment of this aim."

The research team used key health and waste management policies to develop solutions. In particular the WHO Global Strategy on Infant and Young Child Feeding and HSE Infant Feeding Policy for Maternity and Neonatal Units are crucial to waste prevention.

"This analysis provided thought-provoking results. The problem orientation phase showed that 61pc of ready to use breastmilk substitutes purchased are unconsumed and end up as waste," said Dr Ryan-Fogarty.

"We developed 14 alternative solutions for prevention and management of this waste. Some of the solutions are already key health promotion goals, for example increasing breastfeeding rates, while others are innovative in terms of seeking new opportunities for waste prevention."

"Participation in the Baby Friendly Health initiative (BFHI) is HSE policy for maternity units. The BFHI aims to provide a protective environment for all babies and their mothers and this includes awareness and skills for parents and health workers if a baby is receiving human milk substitutes," explained Dr Genevieve Becker, National Coordinator of the BFHI in Ireland. Therefore the research outcomes were strengthened by the inclusion of Baby Friendly Health Initiative criterion in the evaluation of potential solutions.

Preliminary data collection from University of Limerick Maternity Hospital and Cork University Maternity Hospital has begun. ULMH

Infant Formula Food Waste in Irish Maternity Hospitals


53% of infants received infant formula in hospital


>787,000 bottles were required in 2013


61% of infant formula sourced for maternity units unconsumed


63 tonnes bought
38 tonnes wasted

Contributing Factors

68,830 Infants Feeding

3.2 Days
Average Infant Hospital Stay

36,480

Received Infant Formula
In Hospital Feeding Method

5-7ml

Day 1 of Life
Infant Stomach Capacity

1/10th size of bottle

Newborn Stomach Size
Standard Bottle Size: 70ml

 UNIVERSITY OF LIMERICK
RESEARCH | EDUCATION

 CENTRE FOR ENVIRONMENTAL RESEARCH

 epaResearch
Climate - Water - Sustainability

was recently presented with an award to acknowledge its continued commitment to the Baby Friendly Health Initiative.

Achieving Baby Friendly status is called for in Healthy Ireland, the National Maternity Strategy, HSE Infant Feeding Policy, HSE Breastfeeding Action Plan and the UN Convention on the Rights of the Children report on Ireland. Infant feeding methods directly impact on the lifetime health of the infant.

For further information log onto the project website: <https://ecoinfantresearch.wordpress.com/>

and Baby Friendly Health initiative in Ireland: <http://www.babyfriendly.ie>.

This research is supported by the Irish Environmental Protection Agency Research Programme 2014-2020.

 **HBS** Health Business Services
The business division of the HSE