Infant feeding in Irish maternity hospitals: towards better waste management

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While there exists an extensive literature on both general and hazardous waste from hospitals, and waste arising from the manufacture and consumption of food, the wastes arising from infant feeding in hospital maternity units has been little studied. This study provides an introduction to the extent and better management of infant feeding wastes. At the outset it was found that little information was freely available. Therefore, to establish relevant baseline data, detailed surveys were carried out in two Irish hospital-based maternity units to identify how many babies were born, what proportion of mothers opted for breast, bottle or mixes of both, how bottled milk was supplied and consumed, and what waste management structures and practices were in place. It was found that the hospitals differed in the way that bottled milk was ordered and consumed, but in both cases considerable wastage occurred, especially as the bottle contents were too large for small babies, but for reasons of hygiene could not be re-used. Excess milk was often disposed of in waste water. The plastic milk bottles were formed of at least 5 different resins, mostly without markings to identify resin type, so that recycling was made very difficult. Some mothers used breast pumps to express and store milk, and such pumps were used often for a short period and then formed WEEE waste. Hospitals did not have effective collection of such waste. Improved management options could be clearly identified: in summary breast feeding created least waste but did not suit all mothers, bottle milk size and composition created unnecessary waste and creates barriers to recycling, breast pumps were poorly managed which led to additional WEEE waste. Actions to create a management structure which avoided waste were identified. It is suggested that a whole hospital system would provide greatest savings.