Breastfeeding promotion for infants in neonatal units: a systematic review.

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Abstract Background Breastfeeding/breastmilk feeding of infants in neonatal units is vital to the preservation of short- and long-term health, but rates are very low in many neonatal units internationally. The aim of this review was to evaluate the effectiveness of clinical, public health and health promotion interventions that may promote or inhibit breastfeeding/breastmilk feeding for infants admitted to neonatal units.

Methods Systematic review with narrative synthesis. Studies were identified from structured searches of 19 electronic databases from inception to February 2008; hand searching of bibliographies; Advisory Group members helped identify additional sources. Inclusion criteria: controlled studies of interventions intended to increase breastfeeding/feeding with breastmilk that reported breastmilk feeding outcomes and included infants admitted to neonatal units, their mothers, families and caregivers. Data were extracted and appraised for quality using standard processes. Study selection, data extraction and quality assessment were independently checked. Study heterogeneity prevented meta-analysis.

Results Forty-eight studies were identified, mainly measuring short-term outcomes of single interventions in stable infants. We report here a sub-set of 21 studies addressing interventions tested in at least one good-quality or more than one moderate-quality study. Effective interventions identified included kangaroo skin-to-skin contact, simultaneous milk expression, peer support in hospital and community, multidisciplinary staff training, and Unicef Baby Friendly accreditation of the associated maternity hospital.

Conclusions Breastfeeding/breastmilk feeding is promoted by close, continuing skin-to-skin contact between mother and infant, effective breastmilk expression, peer support in hospital and community, and staff training. Evidence gaps include health outcomes and costs of intervening with less clinically stable infants, and maternal health and well-being. Effects of public health and policy interventions and the organization of neonatal services remain unclear. Infant feeding in neonatal units should be included in public health surveillance and policy development; relevant definitions are proposed.

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