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NCT Briefing:
Inequalities in Health Related to Infant Feeding

Baby feeding is recognised as a public health issue as breastfeeding has the potential to reduce inequalities in health. Babies who are not breastfed are shown to have increased risk of developing some infections and diseases in their first year of life, during childhood and in later life. Babies born to parents in social class IV and V are less likely to be breastfed, which exacerbates health inequalities already evident in these groups.

Impact on health

Breastfeeding reduces the likelihood and severity of many common infections in babies.[1] It is estimated that 27% of hospitalisations for lower respiratory tract infections could be prevented each month by exclusive breastfeeding. Similarly 53% of diarrhoea hospitalisations could be prevented each month if babies were exclusively breastfed.[2]. Breastfed babies have a reduced risk of infections of the middle ear[1] and urinary tract [3,4,5], and breastfeeding is associated with a reduced risk of atopic dermatitis (eczema).[1]

For some conditions, there is evidence that protection extends beyond the period of breastfeeding and is dose responsive. For instance, formula fed babies have double the risk of respiratory illness in the first 7 years compared to babies fed only breastmilk for the first 15 weeks.[3, 2] Babies who had never been breastfed were 50% more likely to have gross motor coordination delays than infants who had been breastfed exclusively for at least 4 months (10.7% vs 7.3%). It is thought that this difference is attributable to the components of breastmilk and not simply a product of advantaged social position, education or parenting style as these were controlled for in the study. [6]

Breastfeeding also protects babies' future health. Babies who are exclusively breastfed for the first three months of life are less likely to develop coeliac disease in the first 7 years. [7] Exclusive breastfeeding is causally associated with reduced blood pressure in children.[8,9] It is associated with a reduced risk of being overweight or obesity[9] or developing insulin dependent (type I) diabetes mellitus. [9,10] There is strong evidence to suggest an association between formula milk and increased risk of developing some allergies including asthma, although one large randomised controlled trial found no reduction in risk for breastfed babies.[11] This finding suggests that other contributory factors such as poor housing and family history of allergies may also be influential in the development of allergies.

Breastfeeding is associated with an increase in IQ by an average of 7 points in babies who have the FADS2 gene. It is estimated that 90% of the population carry this gene. A series of confounding variables which are considered to impact upon intellectual development, such as maternal intelligence, intrauterine growth and social class were controlled for in the study.[12]

Premature babies

Breastmilk has a particularly significant impact for babies born pre-term. It contains specific factors that are needed for brain and eyesight development in the early days.[13] In one RCT, premature babies who received only breastmilk were 6 – 10 times less likely to develop necrotising

enterocolitis (a life threatening bowel disorder) than babies fed formula milk. [14] As children they were less likely to have allergies and scored, on average, 8 percentage points higher in IQ tests at 7-8 years old.[15]

Factors such as poor housing, smoking and lower birthweight are also associated with increased infection rates, admission to hospital and increased risk of future illness. However, when these factors are controlled for, breastfeeding continues to be an independent factor influencing inequalities in health.

Mothers' Health

There are long term health benefits for women as well.[1] The risk of breast cancer, some forms of ovarian cancer, type II diabetes[1,16] and post-menopausal osteoporosis leading to hip fracture is lower in women who have breastfed.[4,17]

Who breastfeeds?

Successive Infant Feeding Surveys have shown that young mothers, women of lower socio-economic status or who left full-time education at an early age are least likely either to start breastfeeding or to continue breastfeeding for as long as other women. The 2005 UK survey showed that the prevalence of breastfeeding at birth among women who had occupations was 88% compared to 64% among women who had never worked outside the home. At two weeks the comparative rates were 76% and 46% and at four months 47% and 30%. These lower breastfeeding rates may be one of the key factors linking social adversity, disadvantage and health inequalities.

Continuing to breastfeed

The most rapid decline in breastfeeding occurs in the first few days after the birth. Although hospital stays are becoming shorter, in 2005 more than 1 in 7 first time mothers had stopped breastfeeding by the time they left hospital.[5] The most common reasons given are that the baby was rejecting the breast and the mother feeling she does not have enough milk for the baby. This indicates a need for much better support and information around early breastfeeding. It has been demonstrated that individual help with the practicalities of breastfeeding reduces early problems and increases the duration of breastfeeding, particularly for first time mothers.[6] Randomised controlled trials demonstrate that support during pregnancy, labour and after the birth increases breastfeeding rates.[7] More women start breastfeeding, continue for longer and breastfeed exclusively for longer. A Cochrane systematic review reported effects of the supportive intervention in different social groups. They found that the greatest difference in the proportion of women still breastfeeding at four weeks was in social classes IV and V.[18]

Given the public health importance of breastfeeding and the fact that most women stop breastfeeding earlier than they wanted to, there is a need to provide better support for breastfeeding mothers within existing maternity services and the wider society.

Potential for change

There is evidence that it is possible to influence breastfeeding rates. In the UK, social class differences in breastfeeding have reduced between 1985 and 2005. Social class differences are also less pronounced in some other countries with similar cultural influences, such as Canada.

Evidence is accumulating that local mother-to-mother supporters can be effective in supporting women to breastfeed for longer. Some of these studies focused on women living on low incomes[10] and women from ethnic minority groups.[11] Training local breastfeeding supporters is an effective way to enable women on low incomes to breastfeed successfully.

The NCT is calling for:

- a comprehensive, UK wide strategy to promote breastfeeding

- more effective breastfeeding support from appropriately trained health professionals, particularly in the immediate postnatal period; with implementation of the Baby Friendly Initiative in maternity units and community facilities.
- funding and materials for breastfeeding support groups through Children's Centres and other community initiatives.

For further information and links see: http://www.nct.org.uk/about/campaigns/breastfeeding

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