## **London Assembly Health Committee Call for evidence: healthy early years**

Response from Better Breastfeeding campaign Additional information March 2018



## Breastfeeding as a tool for reducing health inequalities

The Marmot Review (2010) showed the impact of health inequalities in early life. A quarter of deaths under age one would be avoided if there were no health inequalities, and there are impacts in every aspect of life.

"Giving every child the best start in life is crucial to reducing health inequalities across the life course. The foundations for virtually every aspect of human development – physical, intellectual and emotional – are laid in early childhood. What happens during these early years (starting in the womb) has lifelong effects on many aspects of health and well-being: from obesity, heart disease and mental health, to educational achievement and economic status."

- The Marmot Review: Fair Society, Healthy Lives (2010)

"Breastfeeding is a natural safety net against the worst effects of poverty. Exclusive breastfeeding goes a long way towards cancelling out the health difference between being born into poverty or being born into affluence. It is almost as if breastfeeding takes the infant out of poverty for those few vital months in order to give the child a fairer start in life and compensate for the injustices of the world into which it was born."

- James P. Grant, Executive Director of Unicef, 1980-1995

From 1975 until 2010, the UK government conducted 5-yearly Infant Feeding Surveys. These measured breastfeeding rates at relevant ages and these were broken down by region, ethnicity, age, educational background and socioeconomic group. The surveys found consistently that mothers who were young, poor and of lower educational background were much less likely to breastfeed.

The last survey <a href="https://data.gov.uk/dataset/infant-feeding-survey-2010">https://data.gov.uk/dataset/infant-feeding-survey-2010</a> found that:

- for mothers under 20 breastfeeding initiation was 58% but for mothers over 30 the rate was 87%
- for mothers who had never worked breastfeeding initiation was 71% but for mothers in managerial occupations the rates was 90%
- for mothers who left full-time education at 16 breastfeeding initiation were 63% but for mothers who left after age 18 the rate was 91%
- the drop-off rates are even more stark mothers over 35 were four times more likely to be breastfeeding at six months than mothers under age 20
- mothers who left full-time education after age 18 were 2.5 times more likely to be breastfeeding at six months than those who left at age 16

Because of the many health benefits of breastfeeding, for both mothers and babies, and because of the life-long effects of breastfeeding, this means that improving breastfeeding rates among more deprived mothers is a powerful means of reducing health inequalities in the whole of society.

In fact, with optimal breastfeeding in the UK, each year\*:

250 premature babies' lives could be saved

the UK

- Over 100 deaths of babies from SIDS could be avoided
- 2,582 cases of breast cancer could be avoided
- breastfeeding protects babies from respiratory, gastrointestinal and ear infections
- children who were breastfed have a 13% lower risk of obesity
- children who were breastfed have a 35% lower risk of type 2 diabetes
- mothers who breastfeed have a 50% lower risk of postnatal depression
- mothers who have breastfed have a **47% lower lifetime risk of type 2 diabetes**
- mothers who have breastfed have an 18% lower risk of heart disease and stroke
  it is estimated that optimal breastfeeding could prevent 2,582 cases of breast cancer each year in
- mothers who have breastfed also have a lower risk of ovarian cancer and osteoporosis

\*Full references at http://betterbreastfeeding.uk/resources/

A review of studies into breastfeeding and childhood leukaemia, the most common childhood cancer, found that it **reduced the risk of leukaemia by 14-20**%

https://jamanetwork.com/journals/jamapediatrics/fullarticle/2299705

A recent study found that mothers who breastfed for more than 6 months had a **47% reduced risk of type 2 diabetes** <a href="https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2668634">https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2668634</a>

Another recent study found an **18% lower risk of heart disease** and a **17% lower risk of stroke** for mothers who had breastfed <a href="http://jaha.ahajournals.org/content/6/6/e006081">http://jaha.ahajournals.org/content/6/6/e006081</a>

Since children from deprived backgrounds are more likely to be born prematurely, to die from SIDS, to become obese, the effect of improving breastfeeding rates in these groups is likely to be even more profound.

Similarly, rates of type 2 diabetes are 77% higher in the lowest socioeconomic groups compared with the highest. Given the powerful effect of breastfeeding among children who were breastfed and mothers who breastfed, breastfeeding is a powerful tool for reducing health inequality <a href="https://www.nice.org.uk/guidance/ph35/evidence/ep-3-socioeconomic-status-and-risk-factors-for-type-2-diabetes-pdf-433771">https://www.nice.org.uk/guidance/ph35/evidence/ep-3-socioeconomic-status-and-risk-factors-for-type-2-diabetes-pdf-433771</a> 165

A fuller list of references on the health effects of breastfeeding is available at <a href="https://www.unicef.org.uk/babyfriendly/news-and-research/baby-friendly-research/baby-friend

## Breastfeeding as a tool for reducing social inequalities

Adults who were breastfed as babies have higher IQs, stay in school for longer and have a higher income at age 30. This is irrespective of the socioeconomic group they were born into <a href="https://doi.org/10.1016/S2214-109X(15)70002-1">https://doi.org/10.1016/S2214-109X(15)70002-1</a>

Many studies find an association between higher IQ and higher academic attainment among those who were breastfed as babies, and this association is stronger the longer that they were breastfed. <a href="https://www.unicef.org.uk/babyfriendly/news-and-research/baby-friendly-research/infant-health-research/infant-health-research-brain-and-cognitive-development/">https://www.unicef.org.uk/babyfriendly/news-and-research/baby-friendly-research/infant-health-research/infant-health-research-brain-and-cognitive-development/</a>

In particular, one detailed study showed convincing evidence of a sustained effect of breastfeeding, particularly breastfeeding for more than 6 months, on a range of neurodevelopmental outcomes, including cognition, reading, writing and mathematical skills, communication skills, language development, mental health and motor skills. These differences remained even after adjusting for the mother's socioeconomic background and IQ.

https://pdfs.semanticscholar.org/18b6/4c882893621ec4ff8791dea020881cbe7905.pdf

## Breastfeeding as a tool for improving mental health

In one study of 2,900 mother-infant pairs, breastfeeding for one year was associated with better child mental health at every age up to age 14. Longer duration of breastfeeding was associated with better child mental health at every assessment point.

https://www.ncbi.nlm.nih.gov/pubmed/20004910

Maternal depression has a well-documented effect negative effect on babies and children. Depressed mothers tend to disengage from their babies, and fail to respond to their cues. Babies experience this as highly stressful, and there can be lifelong effects from being raised by a chronically depressed mother or father. A 20-year follow-up of children of depressed parents compared them with a matched group of adult children whose parents had no psychiatric illness. The adult children of depressed parents had three times the rate of major depression, anxiety disorders, and substance abuse compared to adult children of non-depressed parents.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2735764/https://www.ncbi.nlm.nih.gov/pubmed/16741200

When mothers are suffering from depression, breastfeeding can actually help to protect babies from this harm. In one study, the babies of depressed, breastfeeding mothers had normal EEG patterns compared to the babies of depressed, formula-feeding mothers. The reason for this finding comes down to maternal responsivity. The researchers discovered that the depressed, breastfeeding mothers did not disengage from their babies. The breastfeeding mothers looked at, touched, and made eye contact with their babies more than the mothers who were not breastfeeding. And that was enough to make a difference.

https://www.ncbi.nlm.nih.gov/pubmed/15130527

Many studies now show that breastfeeding is strongly protective of maternal mental health. Mothers who want to breastfeed and go on to breastfeed have **50% lower rates of postnatal depression** as mothers who chose not to breastfeed and did not breastfeed. However, those who wanted to breastfeed but did not had higher rates of postnatal depression. Therefore, it is essential that mothers are given the support they need to achieve their own breastfeeding goals.

https://www.ncbi.nlm.nih.gov/pubmed/25138629 https://www.ncbi.nlm.nih.gov/pubmed/19336362 https://www.ncbi.nlm.nih.gov/pubmed/16958715

Breastfeeding may also reduce the transmission of intergenerational trauma. A 15-year longitudinal study of 7,223 Australian mother-infant pairs found that breastfeeding substantially lowered the risk of maternal-perpetrated child maltreatment. Non-breastfeeding mothers were 2.6 times more likely to be physically abusive, and 3.8 times more likely to neglect their children compared to breastfeeding mothers.

http://pediatrics.aappublications.org/content/123/2/483.comments