

An Inconvenient Truth

This article is based on research I conducted before appearing on BBC Breakfast tv as a spokesperson for Mothers at Home Matter debating research indicating that children at nursery are more aggressive than children who are looked after at home by their mothers.

Are babies and children better off in nursery than at home? The Government, and some mothers, seem to think so. Are there any negative outcomes for babies or children who are in nursery?

This is one of the key issues which Mothers at Home Matter has to debate because if it makes no difference whether mothers or nursery workers look after babies, then it is simply a matter of convenience whether babies go to nursery or not. It is also one of the most uncomfortable topics to raise. No mother wants to feel she isn't doing the very best for her baby and I really don't want to be the one to suggest that. Also, to be frank, I am uncomfortable making the point that my children benefitted from being at home with me, because their behaviour isn't always obviously angelic, or, at least, better than their nursery-educated peers.

With the caveat that very many nursery workers are dedicated and caring individuals who are doing their absolute best for the children in their care, I offer you a number of factors which highlight the potential dangers of nursery care.

Nurseries are no substitute for parental care

Mothers do not go out to work in order to pay for their children to go to nursery. It is not like private school. Babies and children go to nursery because their mothers have to work so someone else has to look after them. If we start from this premise, it is obvious that nurseries are almost never the first choice for a couple wanting the best for their children.

The needs of children

At its core, formal day care substitutes care by a parent who loves the child with care by someone who doesn't. What about babies and children? What do they want and need? The nursery debate is almost always couched in terms of what mothers want (which is actually, often, to stay at home with their children as much as possible). But babies and children want and need to have unconditional, loving, responsive care from their mothers or fathers.

The onus shouldn't be on mothers to prove that we are special to our children, the onus should be on the Government to prove that separating an infant from its mother doesn't do long term damage. It may not, but there are several studies indicating that it does. The Government is failing to put the needs of infants first.

Mothers vs day care

There are two factors. The first is that as much time as possible with the mother is essential for the healthy emotional and mental development of babies. The second is that time spent in day care is not only time spent away from the mother, but also is time spent in a stressful environment for the child.

Negative behaviour outcomes

Taking the second factor first, the stressful environment of nurseries: the most thorough - wide scale and longitudinal – research from the US with longer term follow up shows negative behaviour outcomes for children who attend day care. This can be explained through the discovery that children in day care have higher levels of cortisol compared to children cared for at home, particularly in the under threes. When the vital relationship between a mother and a baby is disrupted, it causes stress in the baby brain. A consistent, loving parental relationship makes networks form in the developing brain which enable a child to handle stress in later life, achieve emotional self-control, and so relate sensitively to other people. These networks in the brain also influence emotional and physical health, such as obesity, in adulthood.

The problems of high cortisol

There are a number of studies that show that long hours in day care are not good for the developing brain (Vermeer et al 2006). The problem with high cortisol, or 'stress' is that it predicts brain changes in children. (Carrion et al 2007) In animals, it's shown to damage the pre-frontal cortex. In children, damage to the pre-frontal cortex is associated with impaired control of emotions and can be harmful to 'executive functions' including control of inhibition, sustained attention, working memory and cognitive flexibility. Worryingly, high levels of cortisol are related to anxiety in adolescent girls and the release of testosterone in boys, leading to externalising behaviour and aggression. This has been borne out by increased reports of aggression in children.

As a lay person, I think it is quite obvious that where a generation of babies and children have spent their days in the constantly stimulating environment of a nursery, surrounded by other babies and children, they are going to be used to operating at a more constant level of hyperactivity than babies and children in their own home, taking the day at their own pace, or at least at their mother's pace.

Cognitive benefits vs emotional disturbance

A paper from the National Institute of Child Health and Human Development by Professor Jay Belsky has found that the more time children spent in centre based care from 3-54 months of age, the more cognitively and linguistically advanced they were AND the more they manifested aggressive and disobedient behaviour. These effects were less pronounced in home-based care settings. And, in fact, many of these early linguistic benefits even out as the children grow older, whereas the emotional disturbance remains. So, care outside the home does seem to be the issue.

Differing needs for different ages

It is very important to distinguish between the needs of a 6 month old, an eighteen month old and a 3 year old. The studies that suggest that nursery provides the best start in life are all studies that consider children older than three and most often consider four to five year olds. The EPPE study is one of the best known. Fifteen hours a week early years education based on play does support children's cognitive development, but the findings of this research should not be transposed to effects of long hours in group day care for babies and under threes who need consistent, one to one and responsive loving care. The majority of

research which is informing policy for 0 to three year olds is research looking at the over threes. The age difference is significant because at around three, children are able to verbalise their emotions, before that they have to act out their feelings. For children, behaviour is language.

Mother love

Returning to the importance of mothers, you only have to look at the way a baby or child interacts with their mother (or father) and the way a baby or child relates to a nursery worker, to see that mothers are the centre and focus of a baby's life. Babies need their mothers and they need them in large doses. 'Quality' time can not replace quantity time. For a baby, the currency of love is time. Or, speaking more personally, much as I appreciate friends' children, words can not describe the passion I feel for my children. No one else can feel that same passion, and certainly not a nursery employee.

Attachment

We know that attachment is vital for babies. They have to be well attached to a secure figure whom they know loves them unconditionally. This attachment is developed through proximity and eye contact and usually kicks in at about nine months, which is often the time at which maternity leave ends and babies are removed from their mothers to spend their days in the company of well-meaning but transient strangers and other needy babies. Attachment is crucial for many aspects of future psychological health.

Sue Palmer has written, in *21st Century Girls*, that for girls to have the best possible chance of a "good childhood" and a fulfilling, happy life, they need [their mother's] constant, consistent, one-on-one personal care during the first two years at least.' It's logical and self-evident, but these days we have to prove it.

Hippocampal volume

On the dispassionate, scientific side, a study has been done into the correlation between the amount of maternal care received between the ages of 3 and 5 and the brain size age 7-13. Maternal support observed in early childhood was strongly predictive of hippocampal volume, which is related to the release of stress hormones. There is a clear link between nurturing and the size of the hippocampus. (Luby et al 2002.) This has potentially profound public health implications.

Oxytocin

Mothers and children bring out the hormone oxytocin in each other. Oxytocin increases willingness to share one's emotions socially and increases the depth of communication. Oxytocin improves the mind reading ability in humans, which makes a significant difference in building relationships. *Neuropsychopharmacology 2013* concluded 'parental oxytocin and early caregiving jointly shape children's oxytocin response and social reciprocity.

Conclusions

We can never do a control experiment with children. We can't know how they may have turned out in different circumstances. Today's children are subject to numerous factors such as the damage that screen time inflicts on them and a consumer society which replaces the gift of time spent with parents with monetary gifts given in love. We can't necessarily

single out one factor as overriding. Many parents move heaven and earth to limit the amount of time a child spends in formalised care by working fewer hours, using grandparents or child minders and so on. A baby doesn't necessarily writhe with uncontrollable cortisol the second it enters a nursery and if time in nursery is minimised, the damage will be limited. However, the studies emerging on nurseries are worrying for the future outcomes of our children.

Recommendations

Instead of pretending that babies love nothing more than to spend their days in the company of well-meaning strangers as their mothers skip happily off to spend their days doing something much more fulfilling than looking after the little people who make their hearts skip a beat with joy, this Government should be brave enough to take a serious look at the long-term consequences of our country's ever increasing dependence on institutionalised care for under threes. The least they could do is allow families to choose how best to bring up their children, weighing the economic necessity of both parents working against their children's visceral desire and innate need to be with their mother or father as much as possible. The way they could do this is to:

- Stop discriminating against single income families in the tax system. Families on one income lose the second earner's tax free allowance and have recently lost the family allowance that was renamed child benefit. It is not a benefit, it is an allowance against tax paid for earners supporting a family.
- Stop fuelling the unrealistic costs of the housing market through measures such as the Help to Buy scheme and the failure to build enough homes.
- Redistribute the £4.5bn being spent on the childcare and early years education sector to families and allow them to decide whether to pay for childcare and continue working or sacrifice an income to raise their children themselves.
- Change the language which suggests that families where both parents are paid to work and children are brought up outside the home are 'hard working' and 'aspirational' and so, by implication, suggest that families who have sacrificed an income to raise their children themselves are not 'aspirational' or 'hard working'. They want the best for their children. They are aspirational.
- Stop denying any studies which point to possible drawbacks to babies and children being separated from their mother or father and brought up in the day care sector. Be brave enough to publish findings which may not feed into their agenda of getting all mothers working, regardless of the impact on their children and themselves.