Evaluation of the impact of the MECSH programme in England: A mixed methods study

› Abstract

The Maternal Early Childhood Sustained Home-visiting (MECSH) programme is a proven, structured intervention from pregnancy or up to 8 weeks after the infant comes home until child age 2, delivered to universal partnership plus or targeted families on each health visitor's caseload. The aim of the study was to show how the MECSH programme, developed in Australia, impacts families in England. The study employed mixed methods including: client demographic data gathered by record audit; parent report data; health visitor focus group; and written testimonies from health visitors and clients. A small comparative study was conducted in one site. The programme reached a diverse range of families. Programme parent-reported measures met quality standards and were higher than in control sites. Health visitors and clients perceived multiple positive parent and child impacts. These positive results support the ongoing implementation of MECSH in England, and warrant further study in a population level trial.

Key words

› Partnership working › Maternal child health services › Professional–family relations › Child protective services › Programme evaluation › Programme impact

There is considerable evidence demonstrating the effectiveness of sustained nurse home visiting interventions in international trials and systematic reviews (Avellar and Supplee, 2013; Filene et al, 2013; Molloy et al, 2021; Peacock et al, 2013).

The Maternal and Early Childhood Sustained Home-Visiting programme (MECSH) has demonstrated effectiveness in two RCTs in Australia for the wide range of families assessed as experiencing adversity in pregnancy or the early postnatal period (see *Box 1*).

MECSH in England is being implemented by health visitors who are trained in the programme in an increasing number of local authorities since 2012.

Health visitors in England are registered nurses who undertake additional qualifications (specialist community public health nurses (SCPHN)) in the health needs of children and families (Brook and Salmon, 2017). They are equivalent to child and family health nurses or maternal and child health nurses who delivered the programme in the Australian trials. It is not yet known, however, whether MECSH in England is having the intended programme impacts on families, or how that

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Box 1. Positive outcomes of MECSH in Australian trials

Children
- Improved development (Kemp et al, 2011)
- Child communication and symbolic behaviour (Goldfeld et al, 2019)

Mothers
- Improved warm parenting/reduced hostile parenting (Goldfeld et al, 2019)
- Less birthing intervention (Kemp et al, 2013)
- Improved health (Goldfeld et al, 2019; Kemp et al, 2013) and mental health
- Longer time breastfeeding (Kemp et al, 2011)
- Improved parenting confidence/self-efficacy (Goldfeld et al, 2019; Kemp et al, 2013)

Families
- Improved home environment (for safety and regularity (Goldfeld et al, 2019), and child development (Goldfeld et al, 2019; Kemp et al, 2011))

Community
- Fewer vulnerable children at school entry (Kemp et al, 2017)

impact is being achieved.

The MECSH programme has been shown to be fit for purpose in England (see *Figure 1*) as a universal partnership plus, targeted programme for children at risk of poorer health or developmental outcomes (Kemp et al, 2017; NHS England, 2014; Public Health England, 2021). In England, as in Australia, the MECSH programme is delivered in the context of a proportionate universal child and family health service system (Cowley et al, 2012). The programme is delivered by all health visitors to eligible families on their caseload.

Eligibility for MECSH is assessed in pregnancy or the first 8 weeks after the infant comes home, to identify parents needing additional and long-term support to build their personal and family capacity and access to resources to parent effectively (Kemp et al, 2017). This includes, but is not limited to, families with significant adversity who are on child protection (safeguarding) plans. Families are assessed through a combination of structured assessment (for example, using the Edinburgh Postnatal Depression Scale) and health visitors' clinical judgement. MECSH families are visited until the child is 2 years old.

Families receiving MECSH remain within the universal health visitor system of health promoting and preventive services, and receive the embedded MECSH programme as 'high quality targeted interventions within a universal system of support that begins with an assessment of all new parents' (Daro and Dodge, 2010: 79). In this way, MECSH is 'linked with and adapted to existing social care services' (Sierau et al, 2016: 50), and also has a 'spill-over' effect in benefits for the whole community (Kemp et al, 2017). Spill-over effect can be defined as 'the effects of interventions on people in close physical or social proximity to intervention recipients but who do not themselves receive the intervention' (Benjamin-Chung et al, 2018: 333).

The intention of MECSH programme implementation is to impact both the targeted families and whole population through a core focus on community connections and a me[c]shed, that is linked, service system in keeping with the recommendations for effective health visiting (Cowley et al, 2018).

The way in which sustained nurse home visiting interventions work to achieve their intended outcomes, however, remains poorly documented (Paulsell et al, 2014). SNHV is a complex intervention, as the mechanisms of effectiveness involve the development of trusting relationships based in partnership and reciprocity (Brook and Salmon, 2017), and intervention content (Daro et al. 2014). Understanding is further complicated by variability in how processes and content influence and interact with families with wide variation in needs and strengths (Nygren et al, 2018).

This study aimed to show how the MECSH programme affects families in England. Data were gathered from health visitors who were delivering, and families who were receiving, the MECSH programme. Families at risk of child maltreatment are of particular concern for health and social services, with high costs for individuals and society (van der Put et al, 2018). Conti et al (2017) estimate the lifetime cost of non-fatal child maltreatment by a primary caregiver in the UK as £89 390 per child in 2017. Identifying intervention components that are salient in improving outcomes for these children is, therefore, particularly crucial.

It has been noted that home visiting programmes can vary from the designed features when actually delivered (McDonald et al, 2012; Sweet and Appelbaum, 2004), and it is what happens in the home visit that determines the effectiveness of the programme (Gomby, 2007). This study aimed to examine the ways that home visiting processes and content were affecting families, with a particular focus on families experiencing greatest adversity who were engaged with the safeguarding (child protection) system. As described by Nygren et al (2018: s52), 'For women and families with multiple risk characteristics, understanding how dosage and content relates

to parenting outcomes is critical to improving program effectiveness and to guiding program and home visitor practices.'

Barboza et al (2018: 2–3) note that 'no scientific study has yet been conducted of the implementation of an equity-based extended postnatal home visiting program … guided by proportionate universalism'. This study sits within that gap in research knowledge, examining what works, and how it works (Chen and Chan, 2016), in the MECSH programme implementation in England.

Methods

We conducted a mixed method evaluation of MECSH on families, along with the programme processes and content, in the first eight English local authorities to implement the programme. Five of the local authorities were in London. Four had had the programme in place for 3 years or more at the time of the data collection (embedded sites) and four were newer sites operating for less than 3 years.

Impact evaluation looks broadly at how the programme has affected participants' lives. It elicits overall intended and unintended effects of the programme and the factors that produce different outcomes. While outcomes are often predefined, impacts are subjectively about personal experiences, which requires a mixed method or qualitative approach (Agency for Clinical Innovation 2013; Lowe, 2013). In this study we used a convergent mixed methods design with quantitative and qualitative data collected concurrently, analysed separately and then considered together at the interpretation and discussion stage (Creswell and Plano Clark, 2017). Three data sources were collected from the eight sites.

Client record audit

The client record audit data were collected in August and September 2019. A template was provided to each site. Health visitors at each site used the template to record the numbers of key client variables identified by the MECSH providers as of particular concern in their broader MECSH caseloads: number of young mothers <23 years old, mothers and children with disabilities. Sites were also asked to record the number of mothers/infants on a safeguarding (child protection) plan at MECSH programme commencement, and the number of those who exited and remained off the safeguarding plan during the MECSH programme duration (that is, to child age 2 years).

The audit included current clients and all clients who had ever received the MECSH programme. Each site provided the data through either electronic or manual audit, depending on their data systems. All sites were able to report on demographic variables for current and all-ever clients (*n*=4129 all-ever clients, including *n*=814 current clients). Only five of the eight sites had access to safeguarding data (*n*=377; 9.1% of the audit cases).

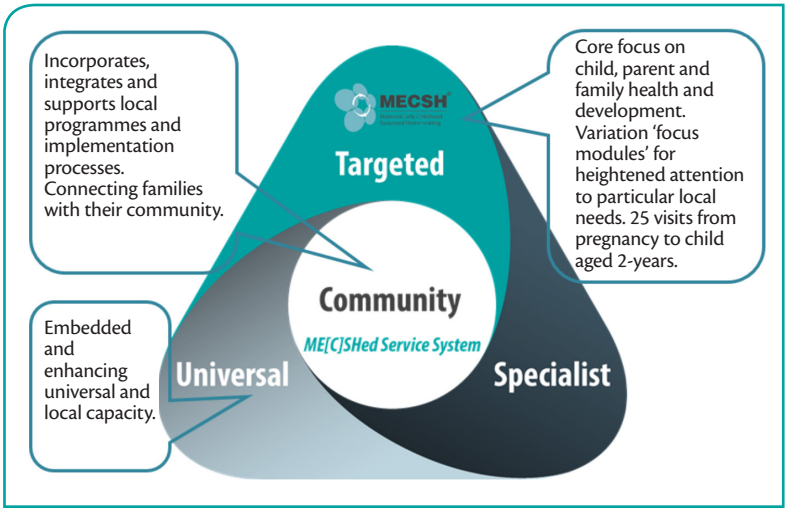

Figure 1. MECSH fit with UK health visiting service

Parent report measures

Quantitative measures of specific MECSH programme impact indicators, client satisfaction and parental enablement, are routinely collected by direct report from participating families through a confidential online survey (or paper copy for families who do not have internet access) for quality monitoring purposes. The parent satisfaction and enablement data were collated from all data received from the commencement of the MECSH programmes in England in 2012, through to December 2019. Each measure has specified performance levels. The parent report measures are completed at 6–8 weeks after baby arrives home, and when their child is 12 and 24 months old, or at exit from the programme if that occurs prior to 24 months.

Client satisfaction was measured using the modified Parent Satisfaction Questionnaire (PSQ) (Armstrong et al, 2000). The 10 items are made up of five sub-scales: communication, general satisfaction, interpersonal manner, time spent and accessibility/convenience, each with a positively and negatively worded item. The PSQ asks the participant to report their level of agreement or disagreement with a statement using a 5-point scale (calculated score 1–5). The positively (reverse scored) and negatively worded

Table 1. Client record audit

Specific characteristic	Total number of MECSH programme clients reported	N reporting specific characteristic	%
Young mothers (<23)	4129	305	7
Mother/carer with a disability	4129	216	5
Child/children with a disability	4129	278	7
On safeguarding plan at MECSH enrolment (five sites only)	377	54	14
Exited off safe-guarding plan	54	20	37

Table 2. Parent enablement index mean (SD): MECSH families

Site	A	B	C	D	E	F	G	H
n	90	233	121	45	5	20	5	31
Baby items	2.9 (1.3)	3.1 (1.2)	2.9 (1.2)	2.7 (1.3)	2.0 (1.7)	2.9 (1.2)	3.4 (0.8)	2.3 (1.6)
Parent items	5.2 (2.5)	5.2 (2.4)	4.9 (2.3)	4.4 (2.5)	5.2 (2.4)	5.0 (2.6)	6.0 (1.3)	4.0 (3.1)
Total	8.1 (3.5)	8.4 (3.4)	7.7 (3.3)	7.1 (3.5)	7.2 (3.7)	7.8 (3.5)	9.4 (2.0)	6.4 (4.5)

items on each subscale were averaged and the mean and standard deviation of the two items calculated. All items were also added to give an overall satisfaction with a mean score between 10 and 50. In this analysis, lower scores indicate greater satisfaction. Quality measures in the programme expect all reporting parents to have a PSQ total score of less than 20.

Parent enablement, that is the extent to which the participating parent felt supported by the programme to care for themselves and their baby, was measured using a modification of the Patient Enablement Index (PEI) (Howie et al, 1998), as adapted for the MECSH programme (Kemp et al, 2008). Each of the six items is scored with 0–2 (0=feel the same or less, 1=feels better, 2=feels much better) with two subscales relating to the parent (4 items, range 0–8) and the child (2 items, range 0–4), and total enablement (range 0–12). Higher scores indicate greater enablement. Quality measures in the programme expect all reporting parents to have a PEI total score of greater than 4.

Comparative study

A comparative study was conducted in site H, evaluating the parent report measures in two demographically similar populations within the local authority. In the MECSH programme areas, all health visitors were trained in the model and provided with the programme resources for use with families. Health visitors in comparison areas were not trained in the MECSH programme and continued with their usual health visiting service.

Over a 6-month period in 2017, families in the participating geographical areas were asked to complete the PSQ and PEI when their child was 6–8 weeks old. The intervention area data were gathered from 84 parents (mostly mothers), which included 31 families who were receiving the MECSH programme from their health visitor. In the non-intervention comparison areas, the PEI was received from 44 families and the PSQ from 45. It was not possible in the control sites to ascertain whether the PEIs and PSQs were completed by the same individual families.

Personal testimonies

During 2018 and 2019, health visitors who were trained in and delivering the MECSH programme were invited to submit written testimonies, including being encouraged to ask families to provide their perspective. Sixteen testimonies were submitted: nine health visitor report only and seven paired health visitor and client report. In addition, a focus group was held with health visitors, with 11 attendees, in which notes were taken. In all these data, names were replaced with pseudonyms and any identifying information removed. The data were entered into NVivo 12. Reflexive thematic analysis (Braun et al, 2018) was undertaken.

Ethics

This study was approved by the Human Research Ethics Committee of Western Sydney University, HREC approval number H13834.

Results

Client audit and parent report measures

The client audit results are presented in *Table 1*. A total of 4129 MECSH clients were recorded in the audit data. Of the total number of MECSH clients, seven percent (*n*=305) were young mothers, and there were over 200 families where the mother or carer had a disability and over 250 where the

child or children in the family had a disability. For those sites who could report on child protection, 14 percent of families commenced MECSH on a safeguarding plan, and over one third of those families exited off the safeguarding plan.

The parent report measures are presented in *Tables 2* and *3*. There were no significant differences in parent report measures between London and non-London sites, nor between sites where the MECSH programme was embedded and those that were newer to the programme. All sites met the quality standards of total PEI mean greater than four (the higher the better), and total PSQ mean less than 20 (the lower the better): standards determined by the values associated with parents achieving positive programme engagement and outcomes in the Australian trials (Goldfeld et al, 2019; Kemp et al, 2019; Kemp et al, 2013).

In the comparative study at site H, moderate to large population effects positive for the MECSH programme (that is, higher scores on PEI and lower scores on PSQ) were observed for both subscales and the total score of the PEI, and in the accessibility/convenience subscale of the PSQ (*Table 4*).

Table 3. Parent Satisfaction Questionnaire Mean (SD): MECSH families

Site	A	B	C	D	E	F	G	H
n	92	257	124	44	4	17	4	31
Communication	2.5 (1.1)	2.3 (0.8)	2.7 (1.0)	2.8 (0.9)	2.3 (0.4)	2.8 (1.0)	4.5 (1.5)	2.7 (1.3)
General satisfaction	2.5 (1.0)	2.8 (1.1)	2.6 (0.9)	2.5 (0.9)	2.3 (0.4)	2.3 (0.6)	2.3 (0.4)	2.8 (1.3)
Interpersonal manner	2.6 (1.1)	3.1 (1.4)	2.8 (1.1)	2.5 (1.0)	2.3 (0.4)	2.4 (1.0)	2.3 (0.4)	2.8 (1.3)
Time spent	2.5 (0.9)	2.9 (1.3)	2.8 (1.1)	2.6 (1.0)	2.8 (0.4)	3.0 (1.5)	2.0 (0.0)	2.9 (1.5)
Accessibility/ convenience	2.8 (1.2)	3.1 (1.3)	3.0 (1.2)	3.1 (1.3)	5.3 (1.8)	2.8 (0.9)	2.8 (0.8)	3.1 (1.2)
Total	12.7 (3.2)	14.6 (4.8)	13.7 (4.3)	13.1 (4.3)	14.8 (1.8)	13.2 (3.7)	11.3 (1.3)	14.2 (5.0)

Personal testimonies

The health visitors and parents reported extensive impacts on families from receiving the MECSH programme. The impacts reported in more than half the testimonies were an increase in confidence, improvements in children's development, families being more aspirational for themselves and their children, greater parent-child attachment, and improved parental mental health (*Table 5*). Other reported impacts include greater enjoyment in parenting, mother and baby health and wellbeing, utilising services and resources, returning to work and/or education, and positive impacts on family violence.

Working in partnership with the parents was the most mentioned process that was associated with positive impacts, described in ten of the testimonies. For example, one health visitor wrote about developing a 'trusting professional relationship' through which she 'supported [mother] with breastfeeding, attending the postnatal group, children's centre and baby massage' (HV6); supporting the impact 'utilising services and resources'. The mother described this relationship as 'I would even go as far as saying you can see her as a friend but with professional bound[a]ries' (P6).

Another health visitor 'was surprised at how quickly and easily I built up a professional partnership with the mother. By following the MECSH structured programme, I was able to stay focused and guide conversations towards supporting mother and baby's health and wellbeing' (HV5). Working in partnership underpinned all impacts, but was particularly associated with achieving positive parental mental health impacts, and affecting family violence.

Working in partnership was especially important for the most complex families, that is, those who had had previous children removed from their care, or who were experiencing adversities such as family violence or serious mental health issues. For these families, the core partnership elements included providing continuity in the health visitor-family relationship, and health visitors' persisting in the relationship even when families may at times seem reluctant to engage, and focussing on families' strengths. One health visitor noted that:

'This case study demonstrates the complexity of working with mums with multiple risk factors and how the health visitor continued with the schedule of visits and sustained the mum's engagement with the service despite all that was happening.' [HV14]

Enabling service and community connections was also a key programme process mentioned in eight testimonies, which supported positive impacts for families. For example, one mother described how the health visitor 'referred me to baby massage, which was great to build our bond with my son further' (P7); an attachment outcome.

A health visitor wrote of a mother who had

Table 4. Comparative study parent report measures (Site H)

		Intervention sites	Control sites	Effect size	T value	P value
Parent enablement Index Mean (SD)	n	84	44			
	Baby items	2.7 (1.5)	1.7 (1.7)	0.64	3.45	0.002
	Parent items	4.5 (2.9)	3.1 (3.2)	0.48	2.56	0.012
	Total	(1.7) (4.2)	4.8 (4.9)	0.55	2.95	0.004
Parent Satisfaction Questionnaire Mean	n	78	45			
	Communication	2.8 (1.1)	2.8 (1.4)	0.03	0.17	0.87
	General satisfaction	2.8 (1.0)	3.0 (1.5)	0.21	1.11	0.27
	Interpersonal manner	3.0 (1.3)	3.3 (1.6)	0.2	1.07	0.29
	Time spent	3.1 (1.6)	3.4 (1.9)	0.13	0.71	0.48
	Accessibility/convenience	3.1 (1.3)	3.6 (1.2)	0.39	2.1	0.038
	Total	14.8 (4.9)	16.1 (6.0)	0.24	1.3	0.2

not attended professional appointments needed to support her child's development, due to fear of being judged negatively. This health visitor described how 'in order to restore [mother's] faith in professionals, I organised a joint home visit with the [professional service provider], having explained [mother's] fears. We were able to allay some of these and from then on [mother] became more confident in her ability to engage with professionals. She has since ensured that [child] has attended all appointments with professionals' (HV8); supporting confidence and utilising services and resources impacts.

This service and community connection process was particularly important for those at high risk of adverse outcomes. For example, one mother living in a domestic violence situation wrote how the health visitor 'helped me with my home situation, pointed me to the right organisations such as the [programme], which has opened my eyes to such things' (P6). This health visitor wrote of being pleased that '[mother] attended and was given practical advice on safety' (HV6); a positive impact on this mother's utilisation of services and resources and family violence. Service and community connection was particularly associated with positive child development, parent confidence and mental health impacts.

Being client-led was also a central process that supported families to achieve positive mental health and child development impacts. It was particularly important for families who had had previous negative service use experiences, for example with child removal or mental health services.

One health visitor described how a mother who had had a previous child removed from her care 'was surprised to be given choices and to be in control of the visit as this was very different to her previous experience' (HV9), which the mother described as 'no one was listening to me, they think they knew better than I do because they are professionals and I was just a mum' (P9).

Other health visitors described being client-led as 'listen[ing] closely to what both parents felt was important to them and their capacity as parents.' (HV4), ensuring that the parent 'led the conversation fully, I only spoke to clarify main points' (HV3), and recognising that 'it was important to acknowledge all of [mother] and [father]'s fears' (HV10).

Other programme elements associated with achieving impacts were the health visitor being practically useful for the family, which supported parent confidence and aspiration and child development impacts; being goal focused, which supported mental health, confidence and child development impacts; and family-centredness, particularly for families with older children and with complex needs, which supported confidence, attachment and child development impacts.

For example, one health visitor described a case where both parents had significant mental illnesses, and it was important to support the father who 'was keen to have as much information as possible…as he might be the main carer for baby if mother was unwell' (HV11).

Antenatal contact was particularly impactful for families with previous child removal and other complex needs such as mental illness or family violence, and supported achieving positive impacts in those areas. The structure of the programme was important for supporting families to be focused on their child and aspirational. For example, health visitors in the focus group

Table 5. Parent and child impacts

Impact	Example (P=parent; HV=health visitor)
Confidence	'You really have helped us so much, you have always been on the end of the phone even for the little things and you have helped with my confidence with [baby's name] when I have doubted myself' (P1)
Child development	'[Mother] continues to keep her daughter at the heart of her daily activities and continues to engage in activities focusing on child communication and development and is growing in confidence daily, with regards to her parenting skills and potential' (HV2) 'Mother: the handbook I was given as part of the programme has proven to be a very interesting read, providing a very useful insight on how to communicate with my daughter and what to expect from her in terms of physical and psychological development' (P2)
Mental health	'[Mother] was able to identify me as a source of support and felt comfortable enough to approach me regarding her worries. I also felt pleased that just through talking and problem solving she was able to deal with her anxieties therefore avoiding the need for escalation and or medication at this point' (HV3)
Aspirations	'During visits, I also get to focus on and discuss what my priorities and aspirations are both as a person and as a parent' (P2)
Attachment	'Working with complex families is challenging. For me, the most memorable part of [mother] and [father] journey with [child], was watching them hold him with confidence, speaking to him with love and watching [child] reciprocate affection' (HV4)

noted that the programme structure and content 'Provides a focus; helps to focus disorganised families; provides focus and reason for contact, that is, child development; helps to keep baby in mind.' (HVFG). The Learning to Communicate programme (Anderson, 2012), which provides core child development content for MECSH was noted as supporting parents to 'identify a more positive outlook for their child; it can help to move a family forward; (HVFG), impacting aspiration. It also helped to 'keep the visits focused on [mother's] activities with her baby as opposed to her constantly reassuring me that she is mentally well' (HV13), which positively impacted on her child's development.

Four testimonies spoke about the impact of MECSH on child protection, consistently noting the feeling that if the support provided by the health visitor through MECSH had been available with their previous children, then those children may have not been removed from the family.

One health visitor noted 'I feel sad that if [mother] had been offered the same level of support with her first child, she probably would not have placed her child in foster care' (HV12). Commencing the programme antenatally, working in partnership with persistence and continuity of health visitor–family relationship and being client-led were all particularly important for achieving positive outcomes for these families. The structured nature of the programme and child development content was important for achieving positive impacts, especially for those with previous children removed, supporting these families to continue to parent their new child.

Discussion

The audit, parent report measures, and health visitor and parent testimonies showed that those families who were receiving MECSH, which included young parents, parents with disabilities, parents of children with disabilities, and those who enter the programme with service-held child protection concerns, were positively impacted by the programme.

Parents at all sites reported that they felt much more able to care for themselves and their baby, at levels consistent with that reported in the trials (Kemp et al, 2011; Goldfeld et al, 2019). In the comparative population study in site H, parents in sites that were implementing the MECSH programme were significantly more enabled than parents in comparable areas, and also felt that the health visiting service was more accessible and convenient.

In the testimonies, health visitors and parents reported improved confidence, skills and knowledge in promoting child development, and improved mental health, aspirations and attachment. Many of these domains were similar to the outcomes expressed by mothers who received the programme in the Australian trials: emotional wellbeing and mental health; confidence and parenting skills; and being aspirational, responsive and child focused (Zapart et al, 2016; Goldfeld et al, 2018).

The positive impact of the MECSH programme on maternal mental health, while noted in mothers' qualitative self-report in the Australian trials, and most recently as measured using the DASS (Goldfeld et al, 2021), has not been a common impact of home visiting programmes (McDonald et al, 2012). However, meeting of parents' emotional needs, reassurance and positive reinforcement, were the components noted in other studies to lead to parents' perceiving the

programme as 'good' (Zapart et al, 2016).

In this study, the positive impacts of MECSH were related by the health visitors and parents to three identified components of the programme: the ways that health visitors and families relate to each other; family and child-centred care; and connecting to the community.

Ways that health visitors and families relate

The parent reported satisfaction with the programme showed that families in most sites have high levels of satisfaction with health visiting in the five measured domains and overall: communications, time spent, accessibility/convenience, and general satisfaction. In most of the satisfaction domains in site H (the comparative population study) there were no significant differences between families who were receiving MECSH, all families in MECSH programme sites and comparable families who were not.

However, in the domain of accessibility and convenience, there was a higher satisfaction in the MECSH programme sites compared with usual health visiting services. This is most likely related to the 'home' visiting focus of the families who were receiving the MECSH intervention, where engagement between the health visitor and family is in an environment that most suits the family achieving their goals.

The importance of the health visitor's interpersonal manner and the working partnership between the health visitor and the family was clearly expressed as the key attribute underpinning the impact of the programme. Successful home visiting interventions are well recognised to be relationship-based (Brook and Salmon, 2017; Cowley et al, 2015), with Sierau et al (2016: 47) noting in their study that the 'Quality of the helping relationship was a positive predictor for parental self-efficacy' and parent–child attachment.

The effective elements of this relationship identified as important for the impact of MECSH included many that have been noted as important in home visiting, including trust that builds parental confidence (Brook and Salmon, 2017), and continuity that builds engagement (Cowley et al, 2015). These data show that overall, health visitor services are considered very positively in the PSQ measured elements of relationships: communication and interpersonal manner, with the MECSH programme tapping into, rather than significantly improving, those elements of practice.

Family and child-centred care

Parents valued and health visitors focused on the programme facilitating a family and child-centred care approach. It has been noted in other studies that family priorities are often professionally determined (Brook and Salmon, 2017) or determined by adherence to manualised content and prescribed approaches (Sanders et al, 2019), rather than led by the family and the family's understanding of their child and needs. In the MECSH programme, however, the impactful partnership approach was noted by participants to be family and child centred.

Client-led working and family and child centred care were impactful for families in the programme, as reflected in both the testimonies and the parents' reported enablement to better care for themselves and their child. Family and child centred care was especially important for achieving positive impacts for those experiencing sizeable adversity (family violence, mental health issues or child protection issues). Being family centred and working with families in partnership has been shown to be associated with improved child health and development, better engagement of families and family empowerment (Ridgway et al, 2020).

Connecting to community

The MECSH programme has an emphasis on supporting families to interact and integrate with their community and enabling parents to engage ('mesh') with local services (Zapart et al, 2016; Kemp et al, 2017). There has been concern expressed that home visiting is often seen as a stand-alone intervention, whereas programmes that engage with networks of community resources are likely to achieve better outcomes (Daro, 2009; Sierau et al, 2016).

In the comparative study in site H, the spill-over effect on the whole community of implementing the MECSH programme can be seen, with the PEI for the whole population in MECSH implementation areas being significantly higher than the control locations. Similarly, the accessibility of the health visiting service was rated significantly better by families in the MECSH implementation areas than in the control areas, whether or not the family was receiving the targeted MECSH intervention. The 'all health visitors and whole of population' implementation of the MECSH programme was thus providing benefits that extended beyond those directly receiving the MECSH programme to others on the health visitors' caseloads: a clear spill-over effect (Benjamin-Chung et al, 2018).

Key points

- There is considerable evidence that early childhood sustained home visiting interventions, including the Maternal Early Childhood Sustained Home-visiting (MECSH) programme, improve child and family outcomes
- The mechanisms by which these programmes achieve outcomes are poorly understood
- The MECSH programme is implemented across England for families needing a universal partnership plus, targeted health visiting programme
- Parents receiving MECSH reported they were very satisfied with the programme and it positively impacted on their parenting confidence
- Implementation of the programme within the health visiting service improved accessibility and parenting confidence for all clients
- Core programme processes were associated with parent and health visitor reports of positive child and family outcomes

Health visitors have been identified as key facilitators of connection to community and service access, with the benefits that such access can bring in terms of support, therapeutic and child-focused activities (McDonald et al, 2012; Cowley et al, 2015; Schmied et al, 2015; Rossiter et al, 2019). In this study, parents valued the connection they were supported to make with community and services. Avellar and Supplee (2013) have noted that linking families to services provides them with additional resources, support, information and further access to other services that are important for vulnerable, isolated, or high-needs families. There is evidence, here, that the connection with resources was a targeted MECSH programme strategy, supporting specific family or child-focused outcomes such as attachment or addressing family violence.

Child protection

The audit revealed that a large proportion of families (14%, across five sites) receiving MECSH were on child protection (safeguarding) plans in pregnancy or the early postnatal period, when the programme commenced. Other studies have demonstrated that it is difficult to engage and achieve positive impacts for these families, with meta-analyses of home visiting programmes showing only a limited effect on child abuse or neglect (van der Put et al, 2018). The families receiving the MECSH programme, however, reported encouraging impacts, including an audit-recorded movement of these families off child protection plans, supported by four of the testimonies.

The MECSH programme thus had both a 'curative' effect for those already on child protection (safeguarding) plans, and a 'prevention' effect for those parenting again following previous child removal. The meta-analysis by van der Put et al (2018) attempted to identify the characteristics of programmes that have curative and prevention effects on child protection concerns. Effective curative interventions target improving parenting skills, parents' personal skills, address mental health issues and provide social or emotional support. These are all elements identified by the health visitors and parents as impactful in this study. In particular, for these families receiving MECSH and their health visitors, the child-focused content and structure of the programme was supportive of positive impacts on their parenting. Effective preventative interventions, according to van der Put et al (2018), target parent self-confidence, and certainly in this study, both the parent report enablement and the testimonies demonstrate a significant impact on parenting confidence.

The health visitors and parents identified elements of the intervention that are similar to those noted in other studies exploring home visiting programmes' positive impacts on child abuse and neglect (Euser et al, 2015; Chen and Chan, 2016; Matone et al, 2018). Programmes were more effective in preventing child abuse and neglect when starting prenatally, and when they supported parents to be more confident, have improved parenting skills, secure parent–infant attachment, feel more positive (aspirational).

Support related to parental stress and mental health, and increased ability to attend to their own needs (that is, feeling better able to care for themselves, as measured on the PEI) are also important. Should the gains made by families beginning MECSH engaged with child protection be maintained, and the child not be the subject of another child protection plan, significant life-time cost savings would accrue (Conti et al, 2017).

Conclusion and limitations

This mixed method study has identified the key elements of the MECSH programme delivered by health visitors in England that underpin positive confidence, parental mental health, child development and attachment, and aspirational impacts for families experiencing adversity, and particularly those previously or initially engaged with the child protection (safeguarding) system.

The small comparison study in site H gives an indication that the impacts on parent enablement are consistent with those experienced by families in the MECSH research trials in Australia, and demonstrated a clear spill-over effect for the broader population. These data also show that

families who receive health visiting services in the MECSH sites are very satisfied with the way services are delivered, and that MECSH is maintaining, rather than enhancing that high level of satisfaction.

In the absence of a large comparison group or longitudinal follow-up to test the counterfactual or sustainability of change, however, the true impact of MECSH in England cannot be fully established here. Further, the testimonies submitted by the health visitors may be over-representative of families who had positive impacts. Nevertheless, the parent reported data and testimonies strongly suggest that a structured home visiting programme that is integrated into the service and delivered by health visitors in England could be both effective and cost effective for those families targeted to receive the intervention and for the population more broadly. It warrants further study in a systematic, population level trial. JHV

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