FINAL REPORT

BURDETT TRUST FOR NURSING EMPOWERMENT PROGRAMME 665/747665

GUIDELINE FOR UK MIDWIVES/HEALTH VISITORS TO USE WITH PARENTS OF INFANTS AT RISK OF DEVELOPING CHILDHOOD OVERWEIGHT/OBESITY

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GUIDELINE FOR UK MIDWIVES/HEALTH VISITORS TO USE WITH PARENTS OF INFANTS AT RISK OF DEVELOPING CHILDHOOD OVERWEIGHT/OBESITY

BACKGROUND

Childhood overweight/obesity is a global public health issue [1]. In the UK in 2011/2012 over a fifth (22.6%) of the children measured at age 4-5 years were either overweight or obese. This proportion was one in three (33.9%) for children aged 10-11 years [2]. Overweight and obesity rates are higher than average amongst children living in deprived areas and those with Asian or Black ethnicity [2]. Early prevention of childhood overweight/obesity is considered important [3-5], but there is no national guidance in for UK health practitioners to help them identify and intervene with infants at greatest risk. However, evidence about risk factors is available [6] and a Framework for Action for tackling obesity [7] was produced in 2009 to provide guidance for practitioners but this still requires implementation into practice.

In the UK, members of the health visiting team (health visitors, registered and nursery nurses) and children's centre staff, advise parents about infant nutrition, underpinned by the Healthy Child Programme [8]. Parents with young children also seek advice about infant feeding from general practitioners and practice nurses during consultations about illness [9]. Earlier work by the team, also funded by Burdett Trust for Nursing, demonstrated the need to broaden the evidence base around overweight/obesity identification and intervention during infancy and in particular to develop tools and guidance for UK parents and all health practitioners [9-11] . The research team are undertaking on-going work to develop an Infant Risk of Obesity (IROC) tool for practitioners to use with parents [6, 12]. This project aimed to develop a guideline for members of the UK health visiting team to use with parents of infants identified as at risk of developing childhood overweight/obesity. A systematic review of behavioural interventions that reduce the risk of obesity in infants under 2 years old was used to support the guideline recommendations.

METHOD

The National Institute for Health and Clinical Excellence (NICE) guidelines manual [13] was used as a basis for the guideline development. Four stages were involved, 1) Assemble a Guideline Development Group (GDG), 2) Develop a review protocol and undertake a systematic review, 3) Data interpretation and writing of the guideline, 4) Piloting of the guideline.

STAGE 1 ASSEMBLE A GUIDELINE DEVELOPMENT GROUP (GDG)

A guideline development group (GDG) was assembled. This comprised of the research team (SR, BE, CG, JS, ANS, SW, DN) clinical stakeholders (PA, VW) and a parent stakeholder (FE). The core team members (SR, BE) met with the clinical stakeholders on four occasions and with the parent stakeholder on one occasion. The research team met on ten occasions; the entire team met on one occasion.

STAGE 2 DEVELOP A REVIEW PROTOCOL AND UNDERTAKE A SYSTEMATIC REVIEW.

A scoping review was conducted to identify any previously published systematic reviews on the topic of childhood overweight/obesity prevention during infancy. One systematic review of the literature on interventions to prevent childhood obesity was identified, but the search strategies were limited to studies conducted between 1995 and 2008. At the time only a few studies had been undertaken testing interventions

delivered during infancy, or even earlier, although the review identified a number of interventions designed for pre-school children [14].

Therefore, the aim of the systematic review was to identify any further studies reporting behavioural and non-behavioural interventions delivered during infancy, or even earlier, that reduce the risk of childhood overweight/obesity. The inclusion criteria for the review were:

Participants: Parents of infants < 2 years old.

Intervention: Behavioural/non-behavioural.

Comparison: Control group.

Primary outcomes: Child BMI (weight and height), child body fat percentage, child age at follow-up.

Secondary outcomes: Breastfeeding uptake and duration, timing of introduction of solid food, food composition, energy intake and expenditure, sleep/soothe strategies, responsive feeding and infant physical activity.

Further detail about the systematic review protocol and findings will be available in a peer-reviewed journal publication [15].

STAGE 3 DATA INTERPRETATION AND WRITING OF THE GUIDELINE

The evidence was interpreted by the GDG in order to make recommendations for practice. This was an iterative process that was guided by the quality of the evidence identified, clinical and parent-user opinion. Three levels of evidence were considered.

1. Cochrane-registered systematic reviews
2. Primary Randomised Controlled Trials: key findings, quality (randomisation, blinding and attrition) [16] and process (training, supervision, adherence, preference, and delivery) [17].
3. Current guidelines, policy documents and clinical opinion.

A consensus method was used to establish agreement on the strength of a recommendation. Each recommendation was assigned wording to reflect the GDG's views about its relative importance. For interventions where there was strong evidence of efficacy (usually demonstrated by several randomised controlled trials) and clinical consensus a recommendation of "must" was made, where there was good evidence and clinical consensus a recommendation of "should" was made and where there was some evidence and clinical consensus a recommendation of "could" was made.

The GDG considered identification of overweight/obesity risk in light of the IROC developed by the research team for another project [6, 12]. Identification of overweight/obesity risk was provided with a "must" recommendation on the basis that this is necessary in order for targeted intervention to take place. There was detailed discussion within the GDG around the timing of identification and communication of overweight/obesity risk during infancy with parents. The IROC has been developed from the Millennium Cohort Study (MCS) with infants at 6-12 months of age [12]. Based on what is currently known the guideline development group recommend that a full IROC assessment is made at 4 and 12 months to fit with the current timing of health visitor contacts with parents on the Universal Service pathway in the Healthy Child Programme [8]. However, development work is on-going [18], therefore, the GDG advise that feasibility testing is required prior to full implementation of this recommendation.

The GDG considered how the evidence statements might be developed into a guideline. It was agreed that the guideline should be presented as a patient pathway which is summarised on a flow chart for ease of use in practice. The flow chart was developed using lucid chart and numbered boxes were applied to each section for ease of navigation. Each numbered box is linked to a body of text which describes how midwives/health visitors should identify and assess clients at this stage in the pathway, what actions might be taken, and a summary of the evidence relevant to the recommendations made.

The guideline was circulated for external review to national stakeholders with expertise in health visiting (Professor Dame Sarah Cowley), obesity prevention during early years (Dr Rebecca Lang), Midwifery practice (Dr Patricia Lindsey). These stakeholders provided valuable contributions, particularly around how the evidence identified in the systematic review might be incorporated into practice. Each item of feedback was discussed by members of the GDG and the guideline adjusted as appropriate.

STAGE 4 PILOTING OF THE GUIDELINE

The revised guideline was reviewed by a health visiting team in Nottingham, East Midlands Region who were asked to report any comments made about its feasibility, acceptability and usability. A focus group was held in a local health centre with 12 members of the health visiting team facilitated by two members of the GDG (BE, JS). Copies of the draft guideline were circulated to the health visitors ten days prior to the meeting. Health visitors were asked to comment on the flow chart and the action points in relation to their current practice. Following the focus group the GDG met and discussed the main points raised by the health visitors. A number of changes were made to the actions section of the guideline to make them more workable in practice.

CONCLUSION

A guideline for members of the health visiting team to use with parents of infants at risk of overweight/obesity has been developed. The guideline contains recommendations about identification of infants at risk as well as a number of strategies that could be used for prevention of overweight/obesity. The guideline needs to be applied alongside health visitors' professional judgement. It is not intended to replace normal UK clinical practice which is guided by the Healthy Child Programme [8] and complements existing guidance such as the Framework for Action for tackling obesity [7]. The Health Visitor Implementation Plan (2011-2015) provides a vision of health visitors leading teams to provide services across the full range of preventative health care for children and families [19]. This guideline may be useful to health visitors leading infant nutrition and overweight/obesity prevention strategies. However, whilst the guideline has been designed to fit mainly with health visiting practice it will also be useful for other health practitioners who have contact with pregnant women and parents of infants and young children. In particular, there are recommendations for midwives in relation to liaising with health visitors around providing additional breastfeeding support to overweight/obese women. It is also recommended that health visitors work alongside their general/nurse practitioner colleagues in relation to identifying and intervening with infants at risk of developing childhood obesity [9].

Policy makers, commissioners and members of the health visiting team will need to consider how to implement the recommendations around obesity risk identification. The authors of this guideline recommend that the identification of infants at risk of overweight/obesity is required in order for interventions to be appropriately targeted. Given the absence of literature around overweight/obesity risk communication during infancy, the recommendations around this are tentative and need to be set within the context of the practitioners' professional judgement since this is a highly contentious issue [20, 21]. Members of the health visiting team will need to consider the appropriateness of informing parents about overweight/obesity risk and the impact this may have on them in terms of stigma; their relationship with practitioners and the way they feed their infant. Consideration is needed as to whether the benefits of risk communication outweigh the

potential harm and how parents of infants who are identified as “at risk” might be supported in a manner that is neither pejorative nor stigmatising.

ACKNOWLEDGEMENTS

We are grateful to the Burdett Trust for Nursing for funding this project. This project enabled the research team to develop good working relationships with practice stakeholders and a parent service user, together with national stakeholders. This team working was essential to ensure the research evidence could be translated for use by practitioners and was also acceptable to parents.

We wish to acknowledge Nottingham CityCare Partnership for their support for the project, in particular to the practitioners involved in the development of this guideline.

We also wish to acknowledge the contributions of the national stakeholders (Professor Dame Sarah Cowley, Dr Rebecca Lang, Dr Patricia Lindsey) for their support.

FURTHER WORK

A number of questions arose during the development of these guidelines which require further investigation. Further research needs to be undertaken to explore how obesity risk identification might be undertaken by practitioners and communicated to parents. Research is also needed to explore how this communication and associated interventions around parental feeding patterns, as detailed in the guideline, could fit with behavioural change theories.

To implement an obesity prevention strategy, health visitors require additional skills and knowledge which could be delivered through training workshops. There is a contradiction in terms of the urgent need for the guideline to be widely disseminated to improve practice versus the appropriateness of releasing the guidelines for public use in the absence of appropriate training for health practitioners. Furthermore, as detailed above the guidelines also require obesity risk identification which is a contentious issue requiring further testing. The research team plan to make an application to the National Institute for Health Research – Health Services and Delivery Research Programme in Autumn 2013. This project will develop and test training resources for health practitioners around communicating obesity risk and intervention and a multimedia resource for parents around responsive infant feeding.

DISSEMINATION

The completed guideline is available electronically, see http://tinyurl.com/obesityguideline. A limited number of printed copies of the guideline are also available, for details please contact the lead author.

An Abstract describing the development of the guidelines has been submitted to the European Congress of Obesity for consideration for presentation at their conference in Liverpool in November 2013. A paper describing the systematic review of behavioural interventions delivered to parents with infants less than 2 years old that prevent childhood obesity is being prepared and will be submitted for consideration for publication in BMC Public Health.

The results of this work will be disseminated to health visitors in Nottinghamshire in Autumn 2013 as part of their obesity prevention strategy. A printed version of the guideline will be sent to the Institute for Health Visiting, Public Health England and the Department of Health.

FURTHER INFORMATION

More information about the work of the Early Prediction and Prevention of Obesity team can be found at:

http://www.anglia.ac.uk/ruskin/en/home/microsites/eppoc.html

http://www.nottingham.ac.uk/nmpresearch/eppoc/home.aspx

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