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BEHAVIOUR CHANGE OPPORTUNITIES AT THE MOTHER AND BABY CHECKS IN  
PRIMARY CARE: A QUALITATIVE INVESTIGATION INTO THE EXPERIENCES OF  
GENERAL PRACTITIONERS

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## **ABSTRACT**

**Background:** Pregnancy is widely recognised as a “teachable moment” for healthy behaviour change and the postnatal period has been identified as the opportune time to initiate this change. In the UK, all women are offered a routine health check at 6-8 weeks postpartum with their General Practitioner (GP). This provides a potential opportunity to facilitate long-term behaviour change discussions.

**Aim:** To explore GPs’ views and experiences of using the postnatal check as a health-related behaviour change opportunity.

**Design and setting:** A qualitative, inductive study in general practice.

**Method:** Semi-structured telephone interviews were conducted with 18 GPs. Audiotaped interviews were transcribed verbatim and analysed using thematic analysis.

**Results:** One theme emerged from the data: the postnatal check is an unrealised opportunity to facilitate health-related behaviour change. This theme was organised into three subthemes: opportunity for health related behaviour change, role responsibility and patient-led vs. GP-led behaviour change.

**Conclusion:** Although GPs recognise the postnatal check as a potential opportunity for health-related behaviour change, it is underutilised as they

do not perceive this to be the purpose of the check and are uncertain as to their role in facilitating lifestyle changes. To enable this long-term lifestyle behaviour change opportunity to be utilised more fully, further research is needed to understand women's expectations of postnatal check and the scope for further recommendations, guidance and communication training around behaviour change.

**Keywords:** General Practice; Behaviour Change; Postnatal Check; 6-8 week check, Qualitative; Thematic Analysis

### **How this fits in**

Pregnancy has been identified as a powerful teachable moment for health-related behaviour change and the postnatal period has been recognised as an opportune time to initiate this change. UK women are offered a routine health check with their GP at 6-8 weeks postpartum which creates a unique and timely opportunity for supporting lifestyle changes. Little is known about GPs' experiences of discussing behaviour change at this consultation and how this opportunity could be best utilised. This study provides an insight into GPs' experiences of behaviour change discussions at this check.

## Introduction

A range of health-related behaviours are associated with negative health outcomes and non-communicable diseases (NCDs)(1). These include alcohol misuse, lack of physical activity, poor diet, unsafe sexual behaviour and smoking. It is estimated that NCDs, primarily cardiovascular and respiratory diseases, cancers and diabetes, are responsible for 60% of the world's annual mortality (2). However, due to their association with health-related behaviours, such conditions are considered largely preventable (3). Consequently, it is important to identify and exploit opportunities and strategies to promote healthy behaviour change (4). The “teachable moment” is a naturally occurring life or health event that provides an opportunity to stimulate patient action for positive behaviour change (5). Three constructs determine whether an event serves as a teachable moment: an increase in perceived personal risk and outcome expectancies, the promotion of a strong affective or emotional response and a redefinition of an individual's self-concept or social role (6).

Pregnancy has been conceptualised as a powerful teachable moment with potential for behaviour change that can benefit the whole family including future pregnancies (7). Pregnancy provides an immediate and personal experience of risk related to the health of the mother and baby,

enhancing the perceived value of healthy behaviours. Strong emotional responses are evoked, such as elation and fear about the wellbeing of the fetus, influencing an individual's judgement about the significance of the event. Personal and social roles are redefined as women prepare to become mothers, with expectations of major changes in lifestyle and self-image (7).

A richer analysis of perinatal behaviour change encompasses and expands upon the teachable moment by applying the Capability-Opportunity-Motivation Behaviour (COM-B) framework (8). The COM-B framework goes beyond solely motivational aspects of behaviour change; it identifies capability and opportunity as fundamental determinants of behaviour change (8).

Multiple events during pregnancy and the postnatal period not only bring changes to women's motivations, but also to their capabilities and opportunities for change. For example, women may have increased physical and social opportunities due to greater family support and access to services for new mothers. Changes in motivation, capabilities and opportunities can influence receptiveness to health promotion (8).

Although pregnancy and the postpartum period have been defined as optimal for women to make changes to behaviours which impact on both them and their child, the latter period may create particular opportunities: It has been found that healthy lifestyle changes are conceived in the antenatal

period, but are *executed* in the postnatal period, for example, with women making a conscious decision to manage their weight in the postnatal period only (9). Furthermore, weight loss interventions are not recommended during pregnancy due to the risk of harm to the unborn child (10). Women's capabilities and opportunities for behaviour change at this point thus need examining. Hence the input of healthcare professionals beyond the midwifery and obstetric team has a important potential role.

NICE guidelines recommend that all women and their babies receive a routine health-check between 6-8 weeks after birth by a "coordinating healthcare professional" (11). In the United Kingdom, the General Practitioner (GP) is the main healthcare professional who routinely conducts this check. At each postnatal contact NICE recommend this healthcare professional should '*...offer consistent information and clear explanations to empower the woman to take care of her own health*' (11, p. 11), indicating an opportunity to discuss behaviour change. However, it is known that even though even within routine consultations where practitioners identify that health-related behaviour change is highly relevant, opportunities are frequently missed (3, 24). Reasons for this are a lack of confidence in addressing the issues, uncertainty about whose responsibility behaviour change is, concern about their ability to effect change and a desire to protect the doctor-patient relationship (3, 24). GPs are

particularly important healthcare professionals to support behaviour change for women at this time, as they are the only healthcare professional who potentially has continued contact with women before and after pregnancy and will also provide care for the baby (20). Therefore, GPs are suitably placed to co-create a teachable moment through the dynamic clinician and patient interaction (4). However, it remains unknown how GPs perceive their role in this interaction, and how behaviour change features and if similar barriers are operating as found in other routine consultations (24). Consequently, the aim of this study was to explore GPs' experiences and views of health behaviour change discussions during the 6-8 week postnatal check.

## **Method**

Ethical approval was obtained by a University Research Ethics Committee (reference 02/12/15). Sampling was purposive and sought to recruit qualified or trainee GPs from the North West UK. In line with key qualitative methodological principles, this sampling method aimed to seek the widest range of views available relating to the research question, rather than to generate a statistically representative dataset that removes more atypical cases (12, 13). GP practices were identified via the NHS directory, followed by snowball sampling, in which participants provided contact details of other



relevant individuals (14). The practice manager(s) at each practice was initially contacted via email and invited to distribute the study details to all GPs affiliated with the practice. Interested GPs were encouraged to email one of the principal investigators for further details. All potential participants were emailed the participant information sheet and provided written consent, prior to participation in the interview.

Semi-structured telephone interviews were conducted between December 2015 and November 2016. Telephone interviews provide an opportunity to obtain data from groups that are hard to engage in research (15, 16). The interviewer (HT or ES) combined open ended questions for free responses and focused questions to prompt (17). A topic guide was designed for the interviews following a review of the current literature, a pilot interview and discussions with the research team (see Table 1). It provided a flexible framework for questioning, but ensured that key topics were explored: participants' views and experiences of the postnatal check and the postnatal check as a behaviour change opportunity. The topic guide was amended throughout the study to allow for the exploration of emerging themes. The interviews were audio-recorded and anonymously transcribed verbatim.

[Table 1 here]

The transcripts were analysed using thematic analysis, as described by Braun and Clarke (See Table 2) (18). Thematic analysis provides a rich and detailed, yet comprehensive account of the data (18). This analytical approach was chosen because it is theoretically flexible (18). Within this study it was used as a realist method; it was assumed that the language used reflected the meanings, experiences and reality of the participants (18). The codes and themes were identified inductively and at a manifest level. Considering the novelty of the research, these decisions meant the analyst did not look beyond the narrative, in an attempt to accurately report the views and experiences of participants (18). Alongside recruitment, interview data were discussed as a research group. After 16 interviews had been completed, it was evident that no new concepts were emerging, however, to ensure this was an adequate sample size to summarise the experiences of the sample, two further interviews were conducted and discussed.

[Table 2 here]

## **Results**

Two hundred and thirty-five practices were contacted, with an initial expression of interest made by 23 practices. From these, 21 GPs agreed to take

part in the study and scheduled an interview, although three did not subsequently complete this. The final sample comprised 18 GPs (fourteen female; four male) from 12 GP surgeries in North West England. Practices were varied and drawn from urban and more rural areas, and from practices in areas of a range of level of deprivation. All participants were fully qualified GPs currently working at least part-time in a primary care practice and undertaking baby-checks as part of their job role. Interviews lasted between 20 and 40 minutes (mean = 26 minutes). One theme and three sub-themes were identified from the data (Figure 1), which summarised participants' views and experiences of health-related behaviour change during the postnatal check. Each sub-theme is described, supported by direct quotes as evidence to illustrate the themes.

### **The postnatal check is an unrealised opportunity for facilitating health-related behaviour change**

Participants identified health promotion to be an important area of general practice and perceived the postnatal check as a potential opportunity to initiate discussions about behaviour change with women. However, they reported it was not readily discussed during these consultations. Participants reflected upon the importance of behaviour change and whether they should

endeavour to better utilise this opportunity and discuss behaviour change more consistently.

*“I think after you’ve asked me the questions you’ve made me think around whether, if I should be more consistent in, erm, what I do ask about smoking and alcohol, as I say, I don’t talk about alcohol at regular things so maybe that would be something that I should be doing”*

This theme is organised into three sub-themes: (i) Opportunity for health-related behaviour change, (ii) Role responsibility and (iii) Patient-led vs. GP-led behaviour change.

[Figure 1 here]

### ***Opportunity for health-related behaviour change***

The participants identified that the postnatal period presented an opportunity for women to change their behaviour, recognising that women may have already changed or considered changing several health behaviours during pregnancy, such as smoking cessation and reducing alcohol consumption. Participants, therefore, acknowledged that there was also scope to encourage women to maintain healthy lifestyle changes as

well as initiate new behaviours. Participants recognised that women were going through a life transition and may be prepared to reevaluate their habits and priorities for the benefit of themselves and their family. Women were believed to be motivated to change and had new opportunities to be physically active, such as walking with the pram, making them potentially receptive to health promoting messages.

*“Well, clearly it’s obviously a great opportunity when you’ve just had a baby, for anything smoking and alcohol related behaviours whatever, erm, you know could be obviously detrimental to the baby, you know, and it’s obviously a chance, it’s obviously a big change in the woman’s life, so it’s obviously equally a very good chance to try and change behaviour”*

Whilst the check provided an opportunity for health behaviour change talk, participants described other potentially competing agendas. Participants perceived the postnatal check as an opportunity to interact with women. In comparison to other consultations, participants described the postnatal check as particularly enjoyable. The check was viewed as an opportunity to congratulate women on their baby, and provided the foundation for fostering a strong relationship between the GP and the woman’s family.

Importantly, participants stressed that the postnatal check allowed them to ascertain women's wellbeing, such as recognise indicators of postnatal depression and assess their social support and coping strategies.

*“One of the main things is to check in with mum and you know, establish that relationship with mums in relation to the practice [...] but I think something in terms of that foster stuff, about building, it is a chance to get to know them and ask you know, things about depression and support”*

### **Role responsibility**

The role of the GP in behaviour change discussions was often reflected upon and conflicting views were expressed as to whether the GP is in the best position to discuss postnatal behaviour change. Participants identified that the postnatal check is a potential behaviour change opportunity recognising the importance of behaviour change to their profession and their influence as a respected health professional, acknowledging that women may be more inclined to listen to information provided by a GP as opposed to other members of the healthcare team. Yet, many considered their main purpose as treating physical health problems and not to promote health. Furthermore, where participants did view their role as promoting healthy behaviours, it was

often in the form of signposting women to further information or referring them to other health professionals.

*“I also feel strongly that a GP should, erm, should be an advocate of a healthy lifestyle, so you should be the right weight for your height, you shouldn’t smoke, you shouldn’t drink too much alcohol, you should exercise regularly”*

*“GPs are needed for complex medical conditions and it seems a bit luxurious to book an appointment to talk about diet and lifestyle change, which doesn’t have to be done by such a highly qualified professional”*

Some were concerned that not only was the GP not the most appropriate person to initiate behaviour change discussions, but that the postnatal check was not the appropriate time. Two reasons given were a lack of time in the appointment to address behaviour change and a lack of readiness from women.

*“They’re often totally worn out, they’re often not happy with the way they look ‘cause they’re often overweight, they’ve got stitching. Yeah I think it’s probably not the best moment to suggest major lifestyle changes”*

Some participants felt they lacked the resources and skills to discuss behaviour change effectively.

*“Obviously in the, in the relatively short time that the GP would have with that woman, I’m not quite sure I would necessarily be equipped enough anyhow to offer significant, sort of, you know, dietary advice, certainly, you know, I would mention it and ask about that and again signpost mum”*

In contrast they perceived different healthcare professionals were in a better position to discuss behaviour change and specifically named health visitors, health trainers, midwives, dieticians and specialist nurses as potential candidates. They perceived these other health professionals as having better continuity of care and therefore the ability build a strong practitioner-patient relationship. They also believed other healthcare professionals had more time to discuss behaviour change or make appointments specifically for behaviour change.

### ***Patient-led vs GP-led behaviour change***

Participants distinguished between behaviour change discussions relevant to this consultation that are initiated by the GP and those that are led



by the women. GP-led behaviour change encompassed pregnancy-related behaviours such as contraception and breastfeeding, behaviours relating to postnatal medical problems, the safety of the baby and postnatal depression. Typically, when health behaviours were raised by the GP they were around resolving pregnancy-related issues rather than creating long-term lifestyle behaviour changes. Communication around behaviour change relating to more general lifestyle behaviour change was almost exclusively patient-led. Participants believed women often wait until this health check to ask about health behaviours and hence would initiate conversations over lifestyle factors they were motivated to address.

*“If I saw it, I mean certainly if the patient’s asking for any advice or any help I’m more than happy to talk about those things. If there is a concern from my side because they are particularly overweight, they are inactive then I’ll be happy to do it, but maybe as a routine I wouldn’t be looking at lifestyle counselling”*

Behaviour change to improve the future health of the mother and family was also viewed to be led by the women and their own motivations, for example to return to their pre-pregnancy weight.

*“A lot of them are pretty anxious to, sort of, try and shift the baby weight, so healthy eating is something that’s often led by them”*

## **Discussion**

### **Summary**

This study is the first to investigate the views and experiences of GPs regarding the 6-8 week postnatal check as a health-related behaviour change opportunity. Findings revealed that although the postnatal check was recognised as a potential opportunity to facilitate behaviour change, such opportunities are not readily utilised for long-term lifestyle behaviour change. The 6-8-week postnatal check offers an opportunity for GPs to initiate a behaviour change conversation around pregnancy-related behaviour change - afforded by a naturally occurring intervention opportunity and a NICE (2006) recommended primary care consultation. Nonetheless, such opportunities for long-term lifestyle behaviour change or behaviours that are not specifically pregnancy-related are often missed. Despite being knowledgeable of behavioural change, GPs do not consider long-term lifestyle behaviour change to be their role at this time. GPs perceive their role as addressing medical and pregnancy-related concerns whilst fostering a positive relationship with the woman, and respond to

explicit requests to 'refer' rather than 'initiate' a behaviour change discussion. Thus, referral to appropriate resources and services maybe the most suitable role for GPs in long-term lifestyle behaviour change, as it can offer women the opportunity and capacity for behaviour change, important components according to the COM-B model (8).

### **Strengths and limitations**

This study, the first to explore GPs views and experiences towards health-related behaviour change during the postnatal check, sought a sample from a population who are often reluctant to engage in research (16). The views expressed provide insight into current knowledge and experiences of GPs regarding behaviour change during the postnatal check. However, limitations must be acknowledged. The GPs interviewed and recruited are limited to one area in the UK. It is also important to note that those who took part in the research may have more of an interest postnatal care, patient-communication and behaviour change than other GPs. Hence the findings from this likely motivated sample may *underestimate* the reluctance of GPs to engage in behaviour change conversations beyond pregnancy-related behaviours and *over-estimate* the extent to which GPs recognise their potential role in promoting healthy behaviours at this time.

## **Comparison with existing literature**

GPs reported women often initiate lifestyle behaviour change discussions; suggesting a strong indicator of women's willingness to start making healthy lifestyle choices at this time. This supports arguments by Phelan (2010) that pregnancy is a teachable moment; women's perceived value of healthy behaviours is enhanced and there are expectations for changes in lifestyle (7). The data indicate that women do express a willingness to return to their pre-pregnancy activities and manage their weight post-pregnancy during these consultations. This echoes previous research that healthy lifestyle changes are executed in the postnatal period (9). Despite recognising the postnatal period as a significant life event associated with increased receptiveness to health messages (7) and evidence that women may even initiate behaviour change talk at this time, our findings demonstrate GPs do not capitalise on these opportunities. Past research has reported that the success of the teachable moment rests on the physician's ability to address the salience of patients concerns and identify opportunities to implement change (5). GPs and the wider NHS community have the opportunity to encourage change and given the lack of GP-initiated behaviour change, it is possible that GPs and allied health

professionals should provide women with the opportunity to capitalise upon teachable moments and deliver behaviour change support. A recent article from Australia stated that GPs have a key role in behaviour change through several avenues; firstly, they can signpost women to the appropriate service or advice and thus reduce any anxiety of where to locate relevant information and secondly, they can help women to change lifestyle risks and manage chronic health concerns (20). These findings provides further evidence for the COM-B model (8) which identifies motivation, opportunity and capability to be simultaneously important for successfully changing behaviour. Literature suggests women want to make changes in the postnatal period (9), the postnatal check presents an opportunity to capitalise upon women's perceived motivation, thus it is imperative that health professionals possess the necessary capabilities to implement change which may include knowledge of the most appropriate route to refer a woman for lifestyle behaviour change support (5, 8, 21). Together these findings suggest that the COM-B model may be a useful framework to understand not only women's behaviour changes, but also GPs behaviour in initiating and addressing these issues during consultations.

Previous research has suggested that GPs do have the capabilities to accomplish teachable moments (5) but encounter barriers including lacking confidence and the skills for behaviour change facilitation (3). This study demonstrates that such barriers persist in the context of postnatal care also; GPs cited lack of expertise and resources impeded behaviour change discussions. In addition, GPs perceived that long-term lifestyle behaviour change was not within their remit. It is possible that this perception may have been influenced by GPs declining role in postnatal care (22, 23). GPs provided conflicting accounts of who should provide health-related behaviour change support, supporting past research which has demonstrated that GPs remain unclear regarding their own and other health care professionals' roles in lifestyle behaviour change (24). This supports Chisholm et al.'s (2012) finding that doctors believe their responsibility is to raise awareness of behaviour change, yet refer patients to other healthcare professionals. Continuity of care was a key factor in GPs' reasoning as to why other health professionals were in a better position to facilitate behaviour change. The suggested lack of continuity between GPs and their patients contradicts the common perception that GPs, arguably, have the strongest form of continuity; 'longitudinal continuity' which is synonymous with the ideal of consistent care from one doctor over a defined period of time (25). This suggests there are misaligned

ideas surrounding continuity of care within the NHS, as although seen as a prerequisite for behaviour change, continuity is not thought to be held by health professionals. GPs cited time constraints as a barrier for lifestyle behaviour change discussions at the postnatal check which is already full with pregnancy-related medical questions. This is consistent with existing evidence, which identifies time constraints as a barrier to undertaking health promotion in general practice (3, 26). However, research has suggested that lacking time, for matters such as health promotion, only implies it is of lower priority than other activities, rather than being due to the lack of a finite resource (16). Nevertheless, initiating behavior change discussions, responding to behaviour change motivation cues, and providing relevant sign posting is likely to be a more realistic expectation rather than facilitating behaviour change directly.

The findings also reveal a dichotomy in the current communication of behaviour change. Traditionally, healthcare communication has been conceptualised along a continuum of doctor-centeredness and patient-centeredness (27). Whilst patient-centred care adheres to the patient-led agenda and values patients' views, doctor-centred care follows a doctor-led agenda with a focus on disease (28). GPs have been identified as having more patient-centred attitudes than other doctors, such as surgeons and pathologists (29), yet in the postnatal check it appears GPs integrate both

models of care. GPs largely followed a doctor-led agenda, addressing medical or pregnancy-related behaviour change. Yet, with regards to lifestyle behaviour change they followed a patient-centred model of care, as it was only discussed after women were offered space to initiate these concerns. This is important as it reveals some women do want to discuss behaviour change at a time where they may be more vulnerable due to their new role as a mother and in this setting. Such patient-led communication is in line with the NHS agenda to increase patient partnership in health (30). However, relying on women to initiate these conversations is likely to miss opportunities to discuss behaviour change, not least due to the prevalence of unvoiced agendas within general practice. This presents an inadequacy in current discussion of behaviour change and supports previous findings that even where GPs believe they should advise health promotion activities, in practice they are less likely to do so (32).

### **Implications for research and practice**

It is evident that further research is needed to understand women's views and experiences of health-related behaviour change during the postnatal check including both pregnancy-related and lifestyle behaviours. Moreover, it would be valuable to conduct observations of when and how



opportunities are initiated and facilitated or inhibited during these consultations. To ensure that GPs and women's expectations are aligned, an explicit postnatal check agenda that enables shared decision making over the priorities of GPs and women within the available time could be a useful resource and research is needed to understand its acceptability. Our findings suggest that the GPs' perceived role in behaviour change may impede the initiation of lifestyle behaviour change discussions during the postnatal check. It will be necessary to replicate this work in other locations in order to further understand the extent to which these findings generalise to GPs with less experience or interest in working with women postnatally. Recognising the potential scope for health promotion within the postnatal check and women's expectation and acceptability for these conversations is likely to ensure the check is better utilised. It is likely developments to current recommendations and guidelines will be necessary (33). As our study highlights, GPs are unclear about their role in behaviour change at this time, and therefore future policies should clarify the role of the GP in maternity services (21). Defining the role of the GP in the postnatal check could contribute to a better provision of care and thus improve satisfaction with services and subsequent outcomes for women and their families (33). GPs did not perceive lifestyle behaviour change to

be within their remit which was fuelled by the perception that they did not have the expertise, resources and time. Therefore, there is a need to increase the opportunities offered by GPs to liaise with other healthcare professionals involved postnatal care and to signpost women to appropriate services to support lifestyle behaviour change. Despite potential longer term benefits of such opportunities, there are likely to be short-term resource implications to also consider. Nevertheless, updated guidelines could serve to operationalise GPs' (and their allied colleagues') role as behaviour change facilitators within postnatal care.

### **Author contributions**

SP, DMS and HT conceived of the idea and designed the study. HT and ES recruited participants, transcribed and conducted interviews and conducted the preliminary analysis. All authors contributed to the refining of the analysis. HT drafted the paper which was developed and completed by all authors. All authors approved the final version.

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**Conflicts of Interest:** none

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