A meta-synthesis of qualitative studies on general practitioners’ diagnosis and management of perinatal depression and anxiety.

Elizabeth Ford 1*, Suzanne Lee 2, Judy Shakespeare 3, & Susan Ayers 2

1) Division of Primary Care and Public Health, Brighton and Sussex Medical School, Brighton, UK
2) Centre for Maternal and Child Health Research, School of Health Sciences, City, University of London, London, EC1V 0HB, UK
3) Royal College of General Practitioners, 30 Euston Square, London, NW1 2FB UK

*Corresponding Author: Dr E. Ford, Brighton and Sussex Medical School, Department of Primary Care and Public Health, Mayfield House, Village Way, Falmer, Brighton, BN1 9PH.

e.m.ford@bsms.ac.uk.

Word count: 2439 excluding quotes
Abstract (233 words)

**Background:** Up to 20% of women experience anxiety and depression during the perinatal period. In the UK, management of perinatal mental health falls under the remit of general practitioners (GPs).

**Aim:** This review aimed to synthesise the available information from qualitative studies on GPs’ attitudes, recognition and management of perinatal anxiety and depression.

**Design & Setting:** Meta-synthesis of the available published qualitative evidence on GPs recognition and management of perinatal anxiety and depression.

**Method:** A systematic search was conducted on Embase, Medline, PsycInfo, Pubmed, Scopus and Web of Science, and grey literature was searched using Google, Google Scholar and British Library EThOS. Papers and reports were eligible for inclusion if they reported qualitatively on GPs’ diagnosis or treatment of perinatal anxiety or depression. The synthesis was constructed using meta-ethnography.

**Results:** Five themes were established from five eligible papers: Labels: diagnosing depression; clinical judgement versus guidelines; care and management; use of medication; and Isolation: The role of other professionals. GPs considered perinatal depression as a psychosocial phenomenon, and were reluctant to label disorders and medicalise distress. GPs relied on their own clinical judgement more than guidelines. They reported helping patients make informed choices about treatment, and inviting women back regularly for GP visits. GPs felt isolated when dealing with perinatal mental health issues.

**Conclusion:** GPs often do not have timely access to appropriate psychological therapies and use several strategies to mitigate this shortfall. Training needs to focus on these issues and needs to be evaluated to consider if this makes a difference to outcomes for women.
Introduction

The perinatal period lasts from the onset of pregnancy until twelve months after birth. Perinatal depressive and anxiety disorders are common: about 18% of pregnant women have depression during pregnancy (1) and 13–19% of new mothers have major or minor depression in the first year after delivery (1, 2). Anxiety is also common, with 8% experiencing generalized anxiety disorder (GAD), 3% experiencing panic disorder and 3% experiencing obsessive compulsive disorder (OCD) in pregnancy. Following birth, up to 8% experience GAD, 9% of women experience panic, 2–3% experience new onset OCD and 3% experience post-traumatic stress disorder (PTSD) (3-6). The consequences of perinatal disorders are potentially more severe and far-reaching than these disorders at other times in women’s lives, having an adverse impact on the whole family if left untreated (7). Perinatal mental health is a strategic priority for health policy: while much data on costs are still missing, a recent UK report found that the annual cost to UK society of perinatal depression was £73 822 per case ($104 574) (8), of which 70% was due to the increased risk of psychological and developmental disturbances in children (7).

In the UK, primary care is the first point of care for patients in the National Health Service (NHS) including perinatal women. This comprises general practitioners (GPs), midwives for pregnant women, and health visitors (community nurses specialised in maternal and child health) for new mothers and infants. England’s National Institute for Health and Care Excellence (NICE) guidelines recommend that all primary care practitioners ask about possible depression and anxiety when women first have the contact in pregnancy and at all subsequent perinatal contacts (9). If a perinatal mental health difficulty is identified, NICE recommends the GP as the first line of assessment and management (9).

Despite GPs being in the front line of care for mental health, and the Royal College of General Practitioners (RCGP) recognizing perinatal mental health as a clinical priority (10), very little research has looked at how well GPs recognise, differentiate and manage perinatal disorders. Our recent systematic review of quantitative literature found large gaps in the literature and no studies
on disorders other than depression (11). Qualitative research can provide a more detailed understanding of the complex factors that influence patient-clinician interactions and decision-making. A number of studies have investigated women’s and health visitors’ views on help-seeking and disclosure of symptoms of anxiety and depression in primary care (12-14), on women’s experience of care provided after disclosure (15, 16) and their preferences for taking antidepressants (17), but viewpoints of GPs have rarely been reported (18, 19).

Following a review of quantitative observational studies in the same area (11), the aim of this review was to synthesise qualitative studies on GPs’ attitudes, decision making and routine clinical practice for the diagnosis and treatment of perinatal depression and anxiety in primary care.

Method

Search Strategy

A systematic search was conducted conforming to the PRISMA statement, between October and December 2014 on Embase, Medline, PsycInfo, Pubmed, Scopus and Web of Science. Broad search terms were used to ensure as many articles as possible were identified (e.g. general practitioner; family physician; anxiety; depression *natal; *partum; *pregnan*; matern*; etc). The grey literature was searched using the same search terms on Google, Google Scholar and British Library EThOS.

The systematic search returned 8210 papers (Figure 1). After removing duplicates and inspection of the title of each paper for relevance, 7524 papers were identified as not relevant for the inclusion to this review. The abstracts of 686 papers were screened and 24 papers were scrutinised in full by two researchers (EF and FE; acknowledged). A further 1 eligible report was identified from the grey literature search.
Eligibility

Papers and reports were eligible for inclusion if they reported qualitatively on General Practitioners’ (GPs; UK, Australia and Netherlands) or Family Physicians’ (FPs; US and Canada) attitudes, decision making or routine clinical practice for the diagnosis or treatment of perinatal anxiety or depression in primary care. We defined “qualitative” very broadly to mean any results reported as text rather than numbers and mixed methods studies were included if they reported results analysed qualitatively. Papers were ineligible if they were published before 1990, did not report original research, were not published in English, GPs or FPs were not the main participants or reported as a separate group, or they reported interventions or quantitative results. At the full text stage, studies were excluded if they were not an empirical study (n=5), if they did not include GPs as the main participant (n=4), if they were randomised controlled trials evaluating an intervention (n=4) and if they reported on quantitative methods only (n=9) (studies were excluded for more than one reason so N>19). One Brazilian paper (20) was excluded because primary care in the Brazilian healthcare system was non-comparable with general practice as described in other papers.

Quality assessment

There are no widely agreed criteria for quality of qualitative research (21), or quality reporting in metasyntheses (22). A checklist, based on that of Atkins et al. (21) was used to indicate the range of quality of studies and provide a means of testing the contribution of papers to the final meta-synthesis (23) but no studies were excluded on quality grounds (24). Out of 11 possible points, all studies scored 9 or 10. The checklist and results are shown in Supplementary Table A.

Analytic strategy

The synthesis was constructed using the process of meta-ethnography described by Noblit and Hare (25). The papers were read and quotes identified by SL and EF. They were then re-read and key themes were identified by SL. Tables were constructed for each paper showing first and second order constructs for each theme. The definitions of these constructs was taken from Malpass et al. (23) where first order constructs are considered to be participants’ “views, accounts
and interpretations”, i.e. direct quotes from participants. Second order constructs are considered to be “authors’ views and interpretations... of patients’ views”, i.e. analytic commentary on the first order constructs.

Using these tables, studies were then translated into one another using the processes of reciprocal and refutational translation (25). Quotes from participants were used to support the credibility of the new themes and to demonstrate their traceability back to the originals (26). To bring fresh insights and new understandings a line of argument synthesis was carried out so that the translated themes were organised into a logical and coherent order (27). All authors read and agreed thematic structure of results. The structure of themes is given in Supplementary Table B.

Results

Studies

Five papers were found which met eligibility criteria, reporting on views from 323 GPs (Table 1). Three papers, reporting on depression only, used interviews to elicit GPs’ views (28-30). One paper reported content analysis of open questions in a survey (31) and the fifth, (32) a non-peer reviewed report, covered perinatal mental health more generally. These papers were included due to the early stage of research in the area but their findings were used to support themes found in the other studies rather than initiating themes. Three papers focused on the postnatal period (28, 29, 31), one on pregnancy (30) and one on the “perinatal period” (32).

Findings

Five key themes were established from the data: Labels: diagnosing depression; clinical judgement versus guidelines; care and management; use of medication; and Isolation: The role of other professionals. Table 2 shows which themes were drawn from which studies.

- insert Table 1 here-

- insert Table 2 here -
Labels: Diagnosing Depression

GPs described conceptualising depression in psychosocial rather than biomedical terms and could be reluctant to identify the condition with a diagnostic label: “I call it emotional turmoil rather than depression, psychological disturbance, at various stages after the birth, and I don’t think of them as adjustment disorders, and often they are what I would think of as ‘existential crises’” (28, 29). This could reflect an overall approach to management and a preference for non-pharmacological interventions: “I don’t want to medicalise it too much really I think it needs to be an informal sort of network because I do think most of the time people do recover from it if they are just given some support rather than medication” (28, 29). However it could also result from a necessarily pragmatic perspective in the face of limited service availability: “If I call it depression, I need to do something. There’s no one to refer to, so I would rather call it something else and manage her myself” (28, 29).

GPs also referred to women’s reactions in the face of diagnosis and how these could influence their definition of the condition. Some women were wary of being labelled even when they were presenting in distress: ”I mean, if they deny that they have got a problem but are still in tears, it becomes very difficult, because you can’t treat somebody if they don’t accept that there’s something to treat” (29). Others could be more willing to acknowledge there was something wrong: ”And equally others will just come in and say ‘My husband said I’ve got to get this sorted out, and I need a tablet to calm me down’ or whatever” (29).

Clinical judgement versus guidelines

GPs reported frequently relying on their own judgement in the detection of depression and anxiety: “I think any kind of flatness, it’s a difficult thing to explain, isn’t it? You can just tell by having a conversation, just chatting to them” (28, 29). Clinical intuition was considered a reliable tool for identifying women with symptoms in preference to formal detection instruments such as the EPDS (33) but there was some reluctance to consciously ask about symptoms: ”So I’m not saying I actively look for it, but I am hoping my antennae would tell me if there was a problem” (28, 29).
This preference for the use of clinical judgement also extended to decisions about treatment where clinical judgement was again seen as a more appropriate decision-making tool than formal guidelines: “I’m not a robot and doctors aren’t programmed to be robots… and you get to know your patients and you know who needs an antidepressant and who doesn’t” (30). Sometimes guidelines were not followed because it was considered there was a lack of evidence to support them and the advice of trusted colleagues was perceived as more reliable: “Depression. Most information is ‘personal decision’ i.e. no good evidence. Reasons for decision - local psychiatrist opinion, [hospital] pharmacist’s opinion. Difficult finding up to date info” (31). Guidelines were also not regarded as the best way of identifying the optimum management plan for individual patients: “NICE guidelines are useful but I think you need to put your own experience into play as well, a lot of the time NICE guidelines are very strict and if you go strictly by the guidelines then quite often you don’t necessarily give the patient what they need or what help they need” (30). This reliance on individual judgement could lead to concerns about professional accountability: “There is no clear professional guidance either and you always feel a little bit isolated when that’s the case and a little bit at risk because you’re kind of working off your own experience” (30).

**Care and management**

Some GPs described ensuring they made time for women with depression or anxiety: “Once you kind of know they're in distress you don’t just give them one session, you ask them to come back always, you get them to come back two weeks later to see how they’re doing” (29). While this approach was considered generally beneficial, it also raised its own issues: “It’s quite time consuming from the GP’s point of view that you end up seeing them much more often than you would if they weren’t on medication” (30). GPs acknowledged they relied on using medication, together with seeing the patient regularly, more frequently than was ideal due to a lack of other treatment options: “I mean, it’s best if it’s a multiple approach rather than just drugs. Unfortunately that’s all we can offer” (29). There was perceived to be a shortfall in the provision of talking therapies available for women: “Services are too stretched and referrals are refused” (32).
GPs reported that they generally involved women in decisions about their care: “Postnatal depression. Antidepressant prescribed after long discussion with patient re: prob. areas and current literature/discussion re: safety and proven side effects. I was happy with the decision and I felt the patient was happy” (31). This was perceived as empowering for women and likely to improve compliance with treatment and improve outcomes: “It means giving patients the freedom and the confidence and the information they need to make their own decisions . . . I think if we can’t give patients empowerment then they can’t really be well or stay well” (30). It was acknowledged that this approach should be tailored according to the needs of individual women: ‘There’s the doctor centred consult where it’s ‘What do you think doctor?’ and I say what I think and I give you what I think and you go away happy or there is a different type of patient who like the patient centred consult which involves the patient’s agenda. I think the key in general practice is to pick up on the cue of which patient wants which particular style” (30). GPs also identified an occasional need for further intervention in the interests of safety: ‘Patient empowerment is good, but you have to, if you felt it was harming to themselves or to their baby you would have to maybe take stronger action” (30).

GPs’ approach to the care of women with depression could be influenced by personal experience: “Tragically it is only because of my own personal experience of severe postnatal depression 8 years ago and my struggle to find help and treatment... has the perinatal mental health of my patients become a priority for me... I am very sensitive to this in my patients and have a high pick up rate and aim to provide excellent multidisciplinary care for patient and her baby/family” (32). It could also be altered by increased awareness of the issue: “It is quite recent that after a workshop I became more aware of this and since then I have diagnosed about 5-7 ladies and looked after them including referral to perinatal mental health service in our area” (32).

**Use of medication**

GPs recognised their use of medication was influenced by a lack of other services: “If I had easier access to counselling . . . my use of antidepressants would be much less” (30). Some described
anxieties regarding prescribing medication to breastfeeding or pregnant mothers: "Concerns about SSRI during breastfeeding by both me and patient. Decision making process is always fraught and made difficult by conflicting information" (31). This anxiety occurred more frequently in relation to psychotropic drugs than other kinds of medication used in the perinatal period. There was however an acknowledgement that antidepressants were a necessary intervention for some women: “if I felt that somebody’s mental state was such that they were at risk, that their quality of life was . . . so bad that they weren’t going to have a good pregnancy, I would have no problem with prescribing” (30).

GPs’ concerns about prescribing for breastfeeding women sometimes resulted in women being given unnecessarily cautious advice regarding breastfeeding, but others took an evidence-based approach and stressed the importance of continued breastfeeding: “Postnatal depression. Prescribed Zoloft [sertraline] advised to continue breastfeeding. Benefit outweigh risks. I felt okay with decision” (31).

When GPs did wish to prescribe antidepressants, this could be met with reluctance by women: “Patient’s reluctance despite reassurance +++ No problem for me, but patient very reluctant to take anything” (31). Women’s concerns sometimes resulted in them making decisions about their medication without consultation with their GPs: “Women will just stop if they are on antidepressants and find out they are pregnant . . . I know they shouldn’t have done that but they just panicked and said ‘right, OK I’m pregnant now no more tablets’” (30).

**Isolation: The role of other professionals**

GPs reported concerns that changes to the organisation of perinatal healthcare services, in particular their decreased contact with health visitors, had led to a worsening of service quality: “[I now have] much less opportunity [to identify women]. [I] used to do joint clinics with [the] health visitor [but these have] now stopped so communication with other healthcare professionals [is] poor. I feel I am seeing fewer patients with post-natal depression which cannot be correct” (32). Concerns included lack of continuity of service: “Where we used to have a health visitor who was assigned to us, who we could discuss cases with, we are now assigned to a local team, so it could be anybody and it could change from day to day who the patient’s health visitor is and which team they are working
for” (28). There was also uncertainty about both their own role and that of health visitors under the new system: “I feel my role has been marginalised since joint working with health visitors has effectively stopped” (32); “Because I think [health visitors] seem very constrained on what they are prepared to do really. I think that they seem just to play not a very non-interventionalist role and see themselves as being preventative, which I think is quite tragic” (28).

Other professionals were sometimes consulted for advice regarding the management of women: “The pharmacist at [hospital] excellent - gives various sources of information and good opinion re: overall management. If not in, she always rings you back - very reliable” (31). This happened more frequently when the GP knew and trusted the individual professional. Otherwise, advice from others was not always perceived as useful: “Pharmacist[s] tend to be too conservative and advise against taking anything. Also, they sometimes provide advice against what I say and alarm patients” (31).

**Discussion**

This meta-synthesis has highlighted that GPs consider perinatal depression as a psychosocial phenomenon rather than a biomedical one, leading to a reluctance to label disorders and medicalise distress. This finding is congruent with other commentaries on recognition and management of depression in UK general practice (34). Practitioners vary considerably in the threshold at which they will label patients as cases needing treatments because depressive symptoms are widely distributed through the population and change quickly (35). GPs see a range of social problems leading to distress and sadness, so doubt the effectiveness of antidepressants (35) and doubt that patients’ problems are solvable with medical treatment (36). This can lead them to approach disclosures of mental health symptoms with reassurance, or a “watch and wait” approach.

Women may perceive this response as their symptoms being minimised and dismissed, (37-39) following which they may become reluctant to pursue treatment (40). “Watch and wait” is also potentially an inappropriate strategy in the perinatal period when suicide is a real risk (41) and
disorders may have profound impacts on the child’s emotional and behavioural development (7). Some evidence suggests that when trusting relationships with healthcare professionals have time to develop the risk of dismissing new or important symptoms is diminished (42). It could be argued that rather than offering lesser treatments for perinatal women with anxiety or depression, GPs should be more proactive about initiating treatment during this vulnerable period, compared to at other times in a woman’s life.

The second theme suggests that GPs rely on their own clinical judgement more than established or evidence-based guidelines. However, doctors’ confidence in their decisions is not always related to their accuracy (43). When guidelines are not used in practice, unconscious biases can occur throughout doctors’ interactions with patients, such as selectively gathering and interpreting evidence that confirms a diagnosis and ignoring evidence that might disconfirm it (44). The adoption of evidenced-based approaches and decision or screening tools may improve the quality of doctors’ reasoning, but more research is needed to confirm this. Insight via education appears the major means in which to avoid distorted decision-making processes (45).

GPs reported on helping their patients to make informed choices about treatment, and on attempting to plug the gap in availability of “talking” therapies by inviting women to come back regularly for GP visits. They prescribed anti-depressants despite recognition that a psychological therapy may be more appropriate. This suggests a tension between what GPs consider best practice and what they can practicably offer. Studies suggest GPs are aware of patients’ dislike and reluctance to take antidepressants (35, 46), and would prefer to offer patients treatments aligned with their preferences.

The final theme suggests that GPs feel isolated when dealing with perinatal mental health issues. Over recent years midwives’ and especially health visitors’ methods of working have moved from case-loading and affiliation to a particular GP surgery, to corporate team working, where it is harder for professional relationships to develop. This may have reduced collaboration between different specialties, and may risk women losing out on joined up care. For example, Chew-Graham
et al., (28) reported health visitors as having negative attitudes to GPs, and as saying that GPs do not have a “sympathetic attitude” and would “just write a prescription”. Given that health visiting services are now commissioned by the local authority rather than the NHS, the co-ordination and continuity of care are becoming harder rather than easier within the primary care and community environment.

**Implications for Research**

Research with GPs on how they manage perinatal depression is currently sparse, and we found none exploring perinatal anxiety or PTSD. Future research is needed at all levels of the primary care pathway, from recognition of psychological distress, to outcomes of treatment both within primary care and following referral to specialist services (47). Training and resource interventions should be evaluated to see if they improve outcomes for women, their infants and their families.

**Clinical Implications**

Continuity of care and trusting relationships are found to be important in the literature on women’s perception of help-seeking. However, it is unlikely that GPs will have more routine antenatal contact with pregnant women in order to develop a sense of continuity, (48) or closer working relationships with midwives and health visitors in the near future. One potential strategy is for practices to have a GP lead for maternity and maternal mental health who regularly meets with local midwives and health visitors and coordinates strategy within the practice, and is visibly available for patients to consult with about perinatal mental health issues. A key issue for GPs is also to have specialist community perinatal mental health services available to refer patients to in a timely way. Very recently, there has been considerable investment in specialist perinatal mental health by the current UK government, for example, development of Mother and Baby units and specialist community teams, but little so far to address the common mental health problems which are usually managed in primary care.

**Strengths and Limitations**
Our search strategy was comprehensive so it is likely we captured all available literature, and our methodology for synthesising the papers was robust. However, only one researcher screened titles and abstracts, which may have made study selection unreliable. The small number of studies and small samples mean that these findings only represent a narrow range of views, are not generalizable, and are likely to be subject to selection bias. Additionally, because of the small range of literature available, we included a lower quality study which used open-ended survey responses and a non-peer reviewed report. The survey study was focussed on prescribing for breastfeeding women rather than perinatal mental health, thus results from this study could only support rather than initiate themes. Additionally we found no evidence for how perinatal anxiety is recognised or managed in primary care. Studies all originated from English speaking countries (UK and Australia) and given that four of the five were UK based, these results are very UK focussed. Much more research is needed in this area to confirm these findings and set them in context, and explore how GPs manage perinatal mental health in other countries.

Conclusions

This meta-synthesis shows that GPs consider perinatal depression within the context of women’s lives and are frustrated at the lack of talking therapy resources they have available. It is clear that GPs try to plug the gap in mental health services by inviting women back regularly, thus developing a potentially therapeutic trusting relationship. Much more research is needed in this area, and particularly in how GPs manage perinatal anxiety, to inform training and resource interventions. Where interventions are implemented, they must be evaluated to consider if they make a difference to outcomes for women.

Competing interests

The authors have no competing interests.

Acknowledgements
We gratefully acknowledge the help of Maithreyee Vipulananthan and Fatin Elias in conducting the literature searches.

References

<table>
<thead>
<tr>
<th>Authors</th>
<th>Country</th>
<th>Methods</th>
<th>Sample</th>
<th>Sampling Approach/ Response Rate</th>
<th>Primary Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chew-Graham et al (2008)</td>
<td>UK</td>
<td>In-depth interviews, thematic analysis.</td>
<td>Purposive sample of 19 GPs recruited from participants in multi-centre RCT (RESPOND - Randomised Evaluation of antidepressants and Support for women with PostNatal Depression)</td>
<td>Sampling was purposive and sought to achieve maximum variation in relation to GPs' age, gender, length of time in general practice, practice size and level of deprivation.</td>
<td>To explore the views of GPs and health visitors on the diagnosis and management of postnatal depression.</td>
</tr>
<tr>
<td>Chew-Graham et al(2009)</td>
<td>UK</td>
<td>In-depth interviews, thematic analysis.</td>
<td>Same sample as Chew-Graham (2008) above.</td>
<td>As above</td>
<td>To explore GPs’, health visitors’ and women’s views on the disclosure of symptoms which may indicate depression in primary care.</td>
</tr>
<tr>
<td>Jaywickerama et al (2010)</td>
<td>Australia</td>
<td>Anonymous postal survey, content analysis.</td>
<td>335 GPs: 70% female 37% aged 45-54 84% obtained medical degree in Australia 90% had children 49% of them (or their partners) had &gt;12 months experience of breastfeeding.</td>
<td>125/640 (19.5%) GPs responded to survey and provided open ended comments on prescribing decisions, 54 GPs (8.4%) mentioned depression.</td>
<td>Explore GPs’ decision making when they are considering recommending or prescribing medication for a breastfeeding woman.</td>
</tr>
<tr>
<td>McCauley &amp;</td>
<td>UK</td>
<td>Semi-structured</td>
<td>8 GPs:</td>
<td>10 Practice</td>
<td>Develop an in-</td>
</tr>
<tr>
<td>CASSON (2013)</td>
<td>(Northern Ireland)</td>
<td>Interviews, Colaizzi’s process of analysis.</td>
<td>2 male, 6 female. managers were invited to identify GPs who were eligible for involvement, 8 GPs were identified.</td>
<td>Depth understanding of GPs’ experience of using guidelines in the treatment of perinatal depression and if this enabled them to empower women to become involved in treatment decisions.</td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>--------------------</td>
<td>--------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>KAHN (2015)</td>
<td>Mainly UK</td>
<td>Postal survey plus semi-structured interview with 3 survey respondents, interpretive phenomenology.</td>
<td>43 GPs: 40 from England, 2 from Wales &amp; Scotland, 1 from India. Over half had &lt;11 years’ experience in general practice, just over a third had practised for 1-3 years. Just over a quarter had &gt;20 years’ experience. 14% felt they held a partially specialist role in perinatal mental healthcare.</td>
<td>The GP survey was distributed to an unknown but large number of GPs through virtual portals. Only 43 GPs responded. To better understand the contribution of GPs to the area of perinatal mental health.</td>
<td></td>
</tr>
</tbody>
</table>
Table 2: Themes drawn from the five studies

<table>
<thead>
<tr>
<th>Paper</th>
<th>Theme</th>
<th>Labels: Diagnosing Depression</th>
<th>Clinical judgement versus guidelines</th>
<th>Care and management</th>
<th>Use of medication</th>
<th>Isolation: Role of other professionals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chew-Graham et al (2009) (25)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Jayawickrama et al (2010) (27)</td>
<td>-</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>McCauley &amp; Casson (2013) (29)</td>
<td>-</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Khan (2015) (28)</td>
<td>-</td>
<td>-</td>
<td>Yes</td>
<td>-</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>
Figure 1. Flow diagram of study selection

- **8210** Identified through database search
- **686** screened
- **24** full-text articles assessed for eligibility
- **5** papers included in the review
- **7524** duplicates and unrelated titles were removed
- **662** abstracts and **20** full text removed due to articles:
  - Being published before 1990
  - Not being an empirical study
  - Not including GPs as main participants or reporting their results separately
  - Reporting an intervention
  - Being quantitative studies
- **1** report from grey literature
## Supplementary Table A: Quality Appraisal

<table>
<thead>
<tr>
<th>Study</th>
<th>Are the research question clear?</th>
<th>Is the qualitative approach appropriate for the research question?</th>
<th>Is the study context clearly described?</th>
<th>Are the following clearly described?</th>
<th>Are the following appropriate to the research question?</th>
<th>Are the claims made supported by sufficient evidence?</th>
<th>Total /11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chew-Graham (2008)</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Chew-Graham (2009)</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Jaywickerama</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>McCauley &amp; Casson</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Khan</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>9</td>
</tr>
</tbody>
</table>