

The attitudes of gynaecologists, midwives, and pregnant women towards antidepressant use and preventive cognitive therapy during pregnancy.

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Abstract

Introduction. Approximately two percent of all pregnant women in the Netherlands use antidepressants (AD) during their pregnancy. However, the use is still controversial. An alternative to prevent depression relapse is *preventive cognitive therapy* (PCT). Nowadays, the attitudes of gynaecologists, midwives and pregnant women towards these two depression relapse prevention treatments are unknown. However, it seems important to examine these attitudes, because gynaecologists, midwives and pregnant women often differ in their treatment preferences. The examination of these differences will reveal the position of each of these groups. This will help health professionals to be more aware of their own attitude. Besides, they can take the preferences of their colleagues and their pregnant patients more seriously, which will lead to more patients commitment.

Methods. A cross-sectional, self report study among 18 gynaecologist, 38 midwives and 55 pregnant women was performed. The participants filled in a questionnaire to assess the attitudes towards AD and PCT.

Results. Gynaecologists significantly showed a more negative attitude towards PCT compared to midwives and pregnant women. The majority of gynaecologists and midwives chose PCT above antidepressants for preventing depression during pregnancy. There was no difference between the groups in attitude towards antidepressants. Besides, a more negative attitude towards PCT showed a non-significant trend with experiencing more self-stigma.

Discussion. Health professionals should take this knowledge into account while making a decision with pregnant women about relapse prevention for depression. Besides, they should encourage pregnant women to express their own preferences. This could prevent pregnant women from deciding to stop taking antidepressants without consultation.

Keywords: attitudes, pregnancy, antidepressants, preventive cognitive therapy

Introduction

Approximately two percent of all pregnant women in the Netherlands use antidepressants (AD) during their pregnancy (Ververs, van Dijk, Yousofi, Schobben & Visser, 2009; Quispel, Schneider, Bonsel & Lambregtse-van den Berg, 2012). Antidepressants, like *Serotine reuptake inhibitors* (SSRI's), are the first choice pharmacological treatment for severe episodes of depression and anxiety (Spijker et al., 2013; van Balkom et al., 2013). A depression is a mood disorder characterized by low mood and/or lack of interest in daily activities for more than two weeks (Koster van Groos, 2001; American Psychiatric Association, 2013). After recovering from a depression, the treatment of antidepressants often continues as a relapse prevention strategy (Hansen et al., 2008). It seems that 25% of the women in the childbearing age have to deal with depressive episodes (Farr, Bitsko, Hayes & Dietz, 2010; Marcus, Flynn, Blow & Barry, 2003). This suggests that fertile women, who suffer from depressions, are likely to use antidepressants while getting pregnant.

Nevertheless, the use of SSRI's during pregnancy is still controversial (Ververs et al., 2009). Unsupervised tapering or abruptly stopping the use of antidepressants can increase the risk of maternal depression relapse. However, continuing the use may negatively influence the development of the baby (Cohen et al., 2006; Noorlander et al., 2008). An alternative relapse prevention strategy is *preventive cognitive therapy* (PCT). This psychotherapy, based on *cognitive behavioural therapy* (CGT), helps patients to identify and change dysfunctional attitudes, enhance memories of positive experience and think about relapse prevention strategies (Bockting, Spinhoven, Wouters, Koeter & Schene, 2009). PCT shows promising results in patients who started this therapy after a remission from a depressive episode, with long-term preventive effects for five years (Guidi, Tomba & Fava, 2016; Bockting et al., 2009).

Since 2012, the policy of the Dutch Association for Obstetrics and Gynaecology (NVOG) is in general to continue using antidepressants, depending on severity of the depression (Richtlijn NVOG, 2012). However, nearly 50% of the pregnant women stop using pharmacotherapy to prevent relapse (Cohen et al., 2006; Roca et al., 2013). PCT could be a safe opportunity for these women, because they can taper their antidepressants while they learn the tools to prevent a relapse.

The choice between antidepressants or PCT is influenced by the preferences and attitudes of pregnant women and their health professionals, like midwives and gynaecologists (Pierce & Hicks, 2001). Attitudes are mental representations, which are shaped by experience and affect the behaviour (Breckler & Wiggins, 1989). The attitudes towards treatments can be

divided in the dimensions perceived credibility and personal reaction (Dimidjian & Goodman, 2014). It seems relevant to examine these dimensions in gynaecologists, midwives and pregnant women towards relapse prevention treatments. Firstly, because it has been shown that pregnant women and health care professionals often differ in their treatment preferences (Montgomery & Fahey, 2001). It is interesting to explore in more detail what these differences are, so the position of gynaecologists, midwives and pregnant women to one another can be revealed. Furthermore, the knowledge of this research is important for health professionals, so they can be more aware of their own and their colleagues preferences. After all, health professionals will better understand the preferences of pregnant women and take them more seriously, which may lead to an increase of engagement in pregnant women towards the chosen treatment (Kwan, Dimidjian & Rizvi, 2010).

The views of general practitioners and pharmacologists towards depression prevention treatment during pregnancy has already been investigated, but the attitudes of gynaecologists and midwives are still unknown (Ververs et al., 2009). Therefore, it is useful to look at the paradigms of gynaecologists and midwives, because a paradigm represents the value and belief system of a group (Davis-Floyd, 2001). Previous studies showed differences in paradigms towards pregnancy and childbirth when comparing the two groups of health professionals (Davis-Floyd, 2001; Ensing, 2010). This led to the proposal that gynaecologists have a technocratic paradigm which entails seeing the patient as an object that must be fixed with instruments when there are complications (Davis-Floyd, 2001; Ensing, 2010). While midwives are more likely to have a holistic paradigm, which means they see the patient as a human being who should have a treatment adapted to her own individual context (Davis-Floyd, 2001; Ensing, 2010).

This difference in attitudes towards childbirth might also apply in the attitudes towards medication and psychotherapy. Research seems to confirm this difference in approach and attitude. For example, Fuller, Anderson, Leddy and Schulkin (2013) found that 86% of the gynaecologists recommend the use of antidepressants when a major depression disorder is detected in women in general. The same holds for women who already use antidepressants and become pregnant, where 75% of the gynaecologists advise to continue this medication (Davis, Gawley & Bowen, 2012). Moreover, it has been shown that gynaecologists suggest their female patients to use antidepressants twice as often compared to referring the patient to a mental health specialist (Leddy, Lawrence & Schulkin, 2011).

These findings correspond to the increased number of women who continue the use of antidepressants during their pregnancy over the past ten years (Bakker, Kölling, Van Den

Berg, De Walle, & De Jong van den Berg, 2008; Andrade et al., 2008; Cooper, Willy & Ray, 2007). A possible explanation for this increase is a lack of awareness to advise women to follow psychotherapy among gynaecologists (Coleman, Carter, Morgan & Schulkin, 2008). This lack can be related to the shortcomings of current psychotherapy research in pregnant women, mainly caused by ethical problems, small sample sizes and poorly performed interventions (Dimidjian, & Goodman, 2009). This results in little scientific evidence for effectiveness of various forms of psychotherapy in pregnant women, while those psychotherapies are effective for people with a major depressive disorder (Guidi et al., 2016; Bockting et al., 2009).

On the other hand, midwives are less likely to recommend antidepressants during pregnancy compared to gynaecologists. Previous studies indicated that general practitioners recommend antidepressants in the prenatal phase significantly more often than midwives (Buist et al., 2006; Jones, Creedy & Gamble, 2012). It is suggested that midwives are more concerned and cautious with pregnant women (Jones et al., 2012). However, their attitude towards psychological interventions is similar to the attitude of gynaecologists. Less than one-third of the midwives referred their patients to a mental health service (McCauley, Elsom, Muir-Cochrane & Lyneham, 2011). Besides, women experience, prenatal as well as post-partum, a lack of emotional care of their midwives (Gamble & Creedy, 2009; Creedy, Shochet, Horsfall, 2000). Midwives might be afraid to aggravate the mothers distress (Hammett, 1997). Moreover, they want to protect women from being stigmatized (McCauley et al., 2011). Instead of referring to a psychologist, midwives recommend pregnant women to share their depressive feelings with their partner, a counsellor or to use meditation (Jones et al., 2012).

This causes a difficult situation for the pregnant women, since the health professionals they encounter, show different approaches and preferences (Avni-Barron & Gupta, 2012). Most pregnant women however prefer a different treatment than their health professionals recommend. It was already mentioned that pregnant women tend to stop taking antidepressants. Besides, Goodman (2009) showed that only 35% of the pregnant women would like to take medication if it was recommended. This suggests a negative opinion towards antidepressants during pregnancy. Instead, 92% of pregnant women indicated they would like to get individual therapy if they needed it (Goodman, 2009). Even when women were asked specifically about relapse prevention treatment, they preferred psychotherapy over pharmacotherapy (Dimidjian & Goodman, 2014). However, in this study only interpersonal

Attitudes of gynaecologists, midwives and pregnant women towards relapse prevention treatments
psychotherapy (IPT) and mindfulness based cognitive therapy (mCGT) were included as relapse prevention treatment.

Pregnant women often do not feel supported by their health professionals in the wish for psychotherapy. (Henshaw et al., 2011; Dennis & Chung-Lee L., 2006). They experience attitudinal barriers, particularly self-stigma, which may prevent pregnant women to seek mental health care (Sareen et al., 2007). It is shown that 42.5% of the pregnant women fear for discrimination, because they do not fit the image of the happy pregnant women (Goodman, 2009). Since self-stigma withholds pregnant women from mental health care, it seems to have a considerable influence on their attitude towards therapy. So beside the dimensions 'perceived credibility' and 'personal reaction', self-stigma is a part of the attitude towards PCT.

With the previous findings in mind, the question rises what the attitudes of Dutch gynaecologists, midwives, and pregnant women are towards the depression relapse prevention strategies antidepressants and PCT. First, because previous findings about the attitudes of pregnant women focused on IPT and mCGT and did not include PCT. Moreover, earlier mentioned research about the behaviour attitudes of gynaecologist, midwives and pregnant women are examined mostly in the United States. It is important to see if this can be replicated in the Netherlands. And finally, this research will provide new insights regarding the differences in attitude between gynaecologists, midwives and pregnant which may be valuable for the respectively new research field about attitudes towards relapse prevention during pregnancy.

In line with previous research it can be expected that there is a difference in attitudes between gynaecologists, midwives and pregnant women towards antidepressants and PCT during pregnancy. Gynaecologists are hypothesized to have a more positive attitude towards antidepressants compared to midwives and pregnant women. Midwives and pregnant women are supposed to have a more negative attitude towards antidepressants. For the attitudes towards PCT, a difference is foreseen with gynaecologists and midwives being more negative and pregnant women more positive towards this kind of treatment. Finally, the expectation is that self-stigma will be associated with a more negative attitude towards PCT. By testing these hypotheses the question can be answered if there is a difference between the attitudes of gynaecologists, midwives and pregnant women.

Methods

Participants. The participants consisted of gynaecologists, midwives and pregnant women (see Table 1 and 2). They were recruited through social media, midwifery practices and hospitals. A link to the questionnaire was sent to 90 Dutch midwifery practices. Thirty-two Dutch gynaecologists, who were already familiar with the researchers and research topic were personally approached by one of the researchers.

Measurements. The following *sociodemographic characteristics* were asked; gender, age and postal code. The midwives and gynaecologists filled out their workplace, work experience, how many pregnant women they see each year and how many of these women use antidepressants. Pregnant women, instead, were asked about their level of education, marital status, the duration and the number of their pregnancy, the possible prior and current use of antidepressants and about episode(s) of depression previously. Two questions about the *etiology of depression* were included for all groups, to investigate their view on the cause of and the solution to recover from a depressive episode. The *Edinburgh Postnatal Depression Scale* (EPDS) and the *Stait-Trait Anxiety Inventory* (STAI) Six-item short form measured the depression and anxiety in pregnant women.

The *Beliefs about medicine questionnaire* (BMQ) measured people's beliefs and views about medication (Horne, Weinman & Hankins, 1999). The original BMQ consisted of the BMQ Specific and the BMQ General. Due to the fact BMQ Specific focused on patients who already use medication, only the BMQ General was used in this research. The BMQ General contained two subscales: the General Harm scale and the General Overuse scale. The General Harm scale looked at the perceived harm people experience with medication. The General Overuse scale asked about the vision towards the use of medicine and if medicines are overprescribed by health professionals (Horne, Weinman & Hankins, 1999). In the current research, the terminology *medication use in general* was replaced by *antidepressant use in general* to be more specific. Each subscale included four items, which were answered on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). A higher score indicated a more negative attitude towards antidepressant (Menckeberg et al., 2008). The reliability of the Dutch version was $\alpha = .64$ for the Harm scale and $\alpha = .68$ for the Overuse scale (Menckeberg et al., 2008). In this study those reliability results were similar, with $\alpha = .61$ for the Harm scale and $\alpha = .69$ for the Overuse scale, which indicated a sufficient reliability.

The *Credibility Scale* (CS) and the *Personal Reaction Scale* (PRS) were used to examine the perceived credibility and personal reaction, in this study towards the treatments with antidepressants and PCT (Addis & Carpenter, 1999). The CS and PRS contained respectively 7 and 5 items, and had a 7-point Likertscale (1 'not at all' to 7 'extremely'). For example, two items were '*How scientific does this treatment seem to you?*' and '*If you were concerned about preventing depression and went to see a mental health professional, how helpful do you think this approach would be for you?*'.

A higher total score indicated a higher perceived credibility and a more positive reaction towards the treatment. In this research, the CS and PRS were introduced with a short explanation about the treatments, antidepressants and PCT (Appendix 1). Further, the formulation of the questions was adjusted, to highlight that both treatments were for pregnant women who already recovered from a depression, but wanted to prevent a relapse. The scales were translated into Dutch by an English professional. The scales showed a good reliability with a minimum of $\alpha = .88$ for each scale (Dimidjan & Goodman, 2014; Zoellner, Feeny, Cochran & Pruitt, 2003). The validity in current study was $\alpha = .85$ and $\alpha = .90$ for the CS, and $\alpha = .91$ and $\alpha = .96$ for the PRS. A final question was put after the *Credibility Scale* (CS) and *Personal Reaction Scale* (PRS) for the health professionals to state which treatment was preferred; *antidepressants (AD)*, *PCT*, *none* or *otherwise, namely...* (Dimidjan & Goodman, 2014).

The *Self-Stigma of Seeking Help* (SSOSH) was developed to investigate the self-stigma people may experience when they seek mental health care (Vogel, Wade & Haake, 2006). The SSOSH has an unidimensional factor structure and shows a good viability and reliability ($\alpha = .85$), also in the Dutch translated version (Vogel, Wade & Hackler, 2007; Reynders, Kerkhof, Molenberghs & Van Audenhove, 2014). This was replicated in the current study ($\alpha = .86$). The perceived self-stigma is measured with ten items, which can be answered with a 5-point Likert scale (1 'strongly disagree' to 5 'strongly agree'). One item, for example, was '*I would feel inadequate if I went to a therapist for psychological help*'. A higher total score meant a greater perceived self-stigma, with a cut off score of 33 points indicating high self-stigma (Vogel, Wade & Haake, 2006).

Procedure. The online questionnaire was accessible during seven weeks in January and February 2016. Participants were invited by a general link to the questionnaire. First, they read an introduction including informed consent. After confirming their participation, participants were asked about their sociodemographic characteristics, followed by the items of

the different questionnaires. The whole questionnaire took about 10 à 15 minutes to complete. Afterwards participants could leave their email address to win a 20 € gift voucher in recognition of their assistance and to be informed about with the research results. The current study was approved by the Faculty Ethical Committee of Utrecht University, Social and Behavioural Sciences.

Analysis. The following analyses were required to measure the difference between the attitudes of gynaecologists, midwives and pregnant women towards antidepressants and PCT. First the Cronbach's α and a factor analysis were used to calculate the reliability of the questionnaires. With a multivariate analysis of variance and follow-up univariate analysis of variance, the groups were compared on the dependent variables; BMQ, CS AD, PRS AD, CS PCT, PRS PCT and SSOSSH. Significant results were analysed with the post-hoc test *Tukey HSD*. Correlations between self-stigma and attitude towards the treatment PCT were computed with a *Pearson correlation*. The statistical analyses were performed with SPSS (version 20.0).

Results

Participant Description

In total, 18 gynaecologist, 38 midwives and 55 pregnant women fully completed the questionnaire (see Figure 1). This resulted in response rates of respectively 75, 59 and 55 percent.

The mean age of the pregnant women was 29.38 years ($SD = 5.74$). Midwives and gynaecologist were on average 34.98 ($SD = 9.46$) and 46.05 ($SD = 9.75$) years old. Of the midwives, a total of 62.3% ($n = 33$) worked in their own practice. Most of the gynaecologists, 86.5% ($n = 19$), worked in a general hospital. The participants came from all regions of the Netherlands, but most of them lived in North-Holland, South-Holland and Utrecht. Other demographic characteristics are shown in Table 1 and 2. The participating midwives and gynaecologist estimated that each year they treated respectively 9.1% and 10.2% pregnant women, who used antidepressants.

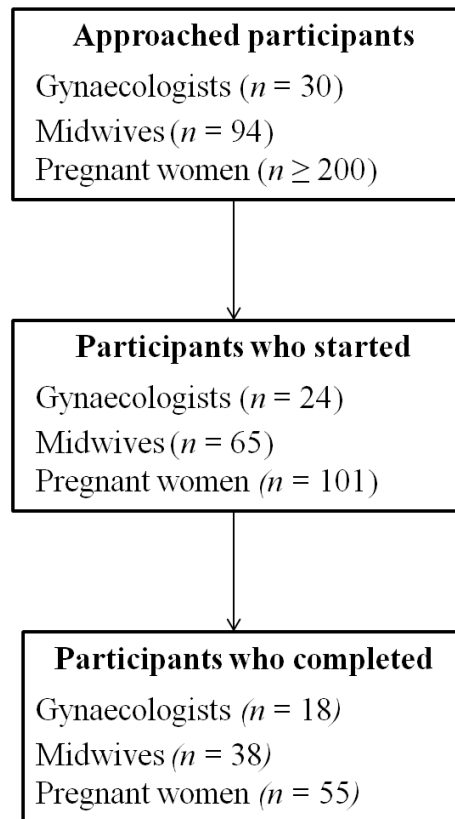


Figure 1. Flow chart of approached participants

Table 1. Demographic characteristics of Gynaecologists and Midwives

Profession	Gynaecologist $n = 22$	Midwives $n = 53$
Demographic characteristics	$M (SD)$	$M (SD)$
Age (in years)	46.05 (9.75)	34.98 (9.46)
Work experience (in years)	16.45 (9.34)	10.92 (8.09)
Workload: Number of pregnant women	521.82 (411.03)	358.96 (349.75)
Workload: Number of pregnant women using antidepressants	65.68 (61.48)	33.26 (49.31)

Note. M = Mean. SD = Standard Deviation.

Table 2. Demographic characteristics of Pregnant Women

Demographic characteristics	Pregnant women
Level of Education	<i>n</i> = 88
<i>Elementary Education, VMBO</i>	3 (3.4%)
<i>High school</i>	21 (23.9%)
<i>Higher education, university</i>	62 (70.4%)
<i>Other</i>	2 (2.3%)
Marital Status	<i>n</i> = 88
<i>Single</i>	1 (1.1%)
<i>In a relationship</i>	4 (4.5%)
<i>Married</i>	60 (68.2%)
<i>Living with partner</i>	23 (26.1%)
Current trimester pregnancy	<i>n</i> = 83
<i>First trimester (1-3 months)</i>	17 (20.5%)
<i>Second trimester (4-6 months)</i>	22 (26.5%)
<i>Third trimester (7-9 months)</i>	44 (53.0%)

Depressive and anxiety symptoms among pregnant women

Among the pregnant women (*n* = 83), 28 women (34.5%) answered to have experienced a depressive episode in life. Two participants (2.5%) used antidepressant at the moment and three women (3.7%) took them in the past. According to the EPDS, the pregnant women (*n* = 70) currently experienced some depressive feelings ($M = 7.01$, $SD = 5.72$). A percentage of 15.7% of the women (*n* = 11) had a score indicating significant levels of depression ($EPDS \geq 13$). Besides, STAI results indicated that pregnant women also felt some anxiety ($M = 32.71$, $SD = 11.31$), with 17% (*n* = 12) scoring 3 points or more for each item ($STAI \geq 43$).

Etiology and treatment of depression

The opinions about the cause of a depressive episode varied between the gynaecologists, midwives and pregnant women (Table 3). On the other hand, the majority of the three groups chose therapy as first choice to treat depression. The participants who chose ‘*otherwise...*’, explained the interaction of genes, negative events and coping mechanisms as the cause of a depression.

Table 3. *Etiology of a Depressive Episode*

	Gynaecologist <i>n</i> = 20	Midwives <i>n</i> = 45	Pregnant women <i>N</i> = 70
Cause of depression			
<i>Negative experience</i>	3 (15.0%)	14 (31.1%)	20 (28.6%)
<i>Biological cause</i>	4 (20.0%)	7 (15.6%)	9 (12.8%)
<i>Own thought, way to cope with stressful events</i>	10 (50.0%)	18 (40.0%)	31 (44.3%)
<i>Other</i>	3 (15.0%)	6 (13.3%)	10 (14.3%)
Solution to recover from a depression			
<i>Therapy</i>	13 (65.0%)	36 (80%)	46 (65.7%)
<i>Medication</i>	3 (15.0%)	4 (8.9%)	4 (5.7%)
<i>Own perseverance</i>	1 (5.0%)	1 (2.2%)	14 (20%)
<i>Spontaneous</i>	2 (10.0%)	-	1 (1.4%)
<i>Other</i>	1 (5.0%)	4 (8.9%)	5 (7.1%)

Attitudes towards antidepressants and PCT

Multivariate analysis of variance (MANOVA) was used to examine if the attitudes of gynaecologists, midwives of pregnant women towards antidepressants and PCT differed. Only the completed questionnaires were included in the analyses ($n = 111$). After analysing the outliers, it was decided to exclude two participants, because of their abnormal scores. Despite the removal of these outliers, the assumptions of normality and homogeneity were violated ($n = 109$). Unfortunately, there is not a non-parametric test, which compensates for the violation of these assumptions (Field, 2013). Though, it is not considered problematic when the assumption of normality is violated, as the MANOVA is considered robust when group sizes exceed 30, which applies for midwives and pregnant women (Allen & Bennett, 2010). Besides, a box plot of the distribution suggested that the departure from the normality was mild (Allen & Bennett, 2010). At last, a stricter alpha level ($p < .01$) can be considered to compensate for the violation of homogeneity (Allen & Bennett, 2010). The other assumptions were met.

The MANOVA was statistically significant, $F(12, 202) = 2.768$, $p = 0.002$, partial $\eta^2 = .141$, indicating a difference in attitudes between gynaecologists, midwives and pregnant women towards antidepressants, PCT and self-stigma in seeking treatment. This signification still remains with an alpha level of $p < .01$. This test also specified that the groups differed from each other on the Credibility scale and Personal Reaction scale towards PCT and the

Self-Stigma Scale (see Table 4 for the results). No significant effects were found between groups on the BMQ, CS and PRS towards antidepressants.

Table 4. Mean Score Differences between Gynaecologists, Midwives and Pregnant Women.

Questionnaire	Gynaecologist <i>n</i> = 18	Midwives <i>n</i> = 38	Pregnant women <i>n</i> = 53	
	M(SD)	M(SD)	M(SD)	<i>F</i>
Attitude AD				
<i>BMQ</i>	21.44(.97)	24.28(.66)	23.60(.56)	2.971
<i>Credibility AD</i>	24.11(1.6)	22.59(.93)	22.95(1.1)	.340
<i>Personal Reaction AD</i>	15.11(1.4)	12.58(.98)	13.17(.83)	1.085
Attitude PCT				
<i>Credibility PCT</i>	32.56(1.39)	37.18(.95)	34.32(.81)	4.534*
<i>Personal Reaction PCT</i>	22.77(1.28)	27.37(.88)	26.45(.75)	4.522*
<i>SSOSH*</i>	23.18(1.5)	19.66(1.0)	22.70(.86)	3.177**

**p* < .05

***p* < .05, but it appeared not to be significant after performing the post hoc test Tukey's HSD

Note. M = Mean. SD = Standard Deviation. SSOSH = Self Stigma of Seeking Help

Analysis of Variance's (ANOVA) were performed to investigate which groups differed significantly from each other. On the variables CS and PRS towards PCT and the SSOSH, significant effects were found, therefore only these were taken into account. The assumptions were met, except for the assumption for normality for the Personal Reaction scale towards PCT. However, the significant results were also replicated with the non-parametric Kruskal-Wallis ANOVA test (appendix 1), which compensated for this shortcoming.

The groups differed in attitude towards the credibility of PCT, $F(2, 108) = 4.81, p = 0.010$. Post hoc analyses with Tukey's HSD ($\alpha = .05$) revealed that gynaecologists ($M = 32.56, SD = 1.39$) had significantly lower credibility scores towards PCT than midwives ($M = 37.18, SD = .95$).

Furthermore, personal reaction towards PCT differed between groups, $F(2, 106) = 4.52, p = 0.013$. Turkeys' HSD ($\alpha = .05$), revealed that only the gynaecologists ($M = 22.77, SD = 1.28$) had a significantly lower personal reaction scores than midwives ($M = 32.56, SD = 1.39$), and pregnant women ($M = 32.56, SD = 1.39$).

Finally, the groups seemed to differ in their experience of self-stigma for seeking help, $F(2, 106) = 3.18, p = 0.046$. However, post hoc analyses with Tukey's HSD ($\alpha=.05$), revealed no significant effect between groups. Noteworthy, the mean score of the gynaecologists fell in the category of medium self-stigma, where the midwives and pregnant women scored a low level of self-stigma. Overall, it was shown that there is a non-significant trend that gynaecologist differ in attitude compared to the midwives and pregnant women.

Preference for AD or PCT

Gynaecologists ($n = 18$) and midwives ($n = 38$) both preferred the PCT above antidepressants for preventing depression during pregnancy. Midwives, with a percentage of 92.1%, preferred PCT slightly more than the gynaecologists, who had a percentage of 83.3%. Antidepressants were chosen by 11.1% of the gynaecologist, while none of the midwives chose this option.

Experienced Self-Stigma towards Seeking Help

The Pearson correlation was chosen to measure the linear relationship between the attitude towards PCT, CS score multiplied with PRS score, and the experienced self-stigma. The assumption were met, except for the assumption of normality. Therefore, the non-parametric test Spearman correlation was calculated. The correlation between the variables was very small and negative, $r = -.12, p = -.124$, two tailed, $N = 109$. This non-significant trend only suggests that a slight decrease in experienced self-stigma correlates with a more positive attitude towards PCT.

Discussion

Previous literature gives reason to expect a difference in the attitudes of gynaecologists, midwives, and pregnant women towards the relapse prevention treatments antidepressants and PCT (Davis-Floyd, 2001; Ensing, 2010; Dimidjian & Goodman, 2014). Although knowledge of these differences can be valuable for choosing a treatment and assuring client's commitment, no study investigated this before (Kwan, Dimidjian & Rizvi, 2010). This study examined whether a difference exists between attitudes of Dutch gynaecologists, midwives and pregnant women.

First, it was found that gynaecologists, midwives and pregnant women do not differ in their attitude towards antidepressants. In general all the groups tended to be slightly negative, which is in contrast with former studies, which indicated a positive attitude for gynaecologist towards antidepressants (Fuller et al., 2013; Davis et al., 2012; Leddy, et al., 2011; Jain et al., 2012). This result can be explained by the small sample of gynaecologists who participated. Moreover, most of the gynaecologists were already familiar with the researchers and the topic. This might have caused a sample which stands more negative towards antidepressants. However, it could also be that gynaecologists are not as positive towards antidepressant as previously assumed. Earlier findings described mainly the behaviour of gynaecologists, which indicated that the majority recommends the use of antidepressants (Fuller et al., 2013; Davis et al., 2012; Leddy, et al., 2011; Jain et al., 2012). Nevertheless, the behaviour of gynaecologists does not necessarily indicate that they have a positive attitude towards antidepressants. Maybe they advise medication because they see no better treatment option for pregnant women. Jain et al. (2012) already suggested a lack of awareness in gynaecologists concerning psychotherapy.

Secondly, it was expected that gynaecologists and midwives would have a more negative attitude towards PCT in contrast to pregnant women. The findings in this study confirmed the more negative attitude of gynaecologists towards PCT. However, the midwives turned out to be as positive as the pregnant women towards PCT. This implies that the view of midwives towards the care of pregnant women is more in line with the preference of pregnant women than previously thought (Jones et al., 2012; Gamble & Creedy, 2009; McCauley et al., 2011). This outcome does correspond to the holistic view of midwives towards pregnancy and childbirth (Davis-Floyd, 2001; Ensing, 2010). Presumably midwives want to satisfy the wishes of the pregnant women and take into account their personal environment. The positive

attitude of midwives towards PCT implies also that midwives adjust themselves to the preferences of pregnant women.

Finally, only a non-significant trend was shown that an increase in experienced self-stigma somewhat correlates with a more negative attitude towards PCT. However, the findings are in line with earlier research where self-stigma creates a barrier for pregnant women who consider seeking mental health care (Sareen et al., 2007). Further, gynaecologists, midwives and pregnant women did not differ in their experience of self-stigma.

A few limitations in this research need to be pointed out. First, the small sample sizes might have caused groups which are not representative for the whole population. This applies especially for the gynaecologists. Therefore, replication of the results in this study in a larger sample is needed. Further, this research used self-report questionnaires to collect the data, which can have the risk of bias. An example of a risk is that participants may have answered social desirable to conform to the social norms, like being happy during pregnancy for pregnant women (Krumpal, 2013; Goodman, 2009). This image can also have influenced the participants while filling in the questionnaire. However, the response accuracy in online self-report questionnaire is higher than for participants who are interviewed (Krumpal, 2013; Rossi, Wright, & Anderson, 2013). This makes it a relatively suitable way to find out the attitudes of participants towards taboo topics, like depression treatment. Secondly, the questionnaire contained only a short introduction to explain the treatments AD and PCT (Appendix 1). This description may have been too short to form a proper opinion. Though, in real life people often do not get a detailed description about treatment. Besides, it would have led participants into reconsideration of their view. While this research particularly wanted to show the first reaction of participants, so the general attitudes would be clear.

Based on this research, several recommendations can be made. First of all, this current study gives new opportunities for further research. Besides the findings of the comparison between the gynaecologists, midwives and pregnant women, the results also displayed differences within these groups. It is useful to further research this, as these results could contribute to more valuable information about attitudes towards antidepressants and PCT. A second research topic is to explore more about the effects of PCT on pregnant women. Earlier research already proved PCT to be safe and effective in relapse prevention for major depression (Guidi et al., 2016; Bockting et al., 2009). However, it is convincing if proper research can replicate these results with pregnant women. This could contribute to more awareness of PCT in health care, particularly in gynaecologists, and overshadow the

shortcomings in earlier research (Dimidjian, & Goodman, 2009). Remarkable, the estimated prevalence of midwives and gynaecologists was higher than the earlier found prevalence, which is also interesting to explore.

Furthermore, this study has clinical implications. The sample of Dutch pregnant women showed, alike earlier research, a strong preference for psychotherapy. In total, 62% of all pregnant women found PCT a credible option and 72% personally stood positive towards the treatment. This implies that psychotherapy treatments like PCT should be made easily accessible for pregnant women. An advantage is the positive attitude of midwives towards PCT, which shows their willingness to cooperate. In this way, the preference of pregnant women can be satisfied.

To conclude, gynaecologists may have a more negative attitude towards PCT compared to midwives and pregnant women. However, the majority of all health professionals chose PCT above antidepressants as a treatment. Health professionals should take this knowledge of attitude differences into account while making a decision with pregnant women about relapse prevention for depression. Besides, women should be encouraged to express their own preferences, so these can be taken into consideration. This can prevent that pregnant women decide on their own to abruptly stop taking antidepressants. At last, health professionals must be aware that self-stigma in pregnant women can form a barrier to choose for therapy. An increase of awareness and openness could contribute to a better match between preferences of pregnant women and chosen relapse prevention treatment in the future.

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Appendix 1: The short introduction of the treatments AD and PCT

Antidepressants

Antidepressants, especially *Serotine reuptake inhibitors* (SSRI's), are the most common medicine to treat a depressive episode. They decrease the symptoms, which are characteristic for depression and anxiety. Citalopram (Cipramil), Fluoxetine (Prozac), Paroxetine (Seroxat) & Sertraline (Zoloft) are well-known antidepressants.

Preventive cognitive therapy

Preventive cognitive therapy (PCT) is a training based on cognitive behavioral therapy. During this therapy, patients learn how a depression relapse can be prevented. It focuses on dysfunctional thoughts and enhancing positive memories. The therapy works towards a personal plan, which describes how relapse can be prevented.

Appendix 2: Results Kruskal-Wallis

A Kruskal-Wallis ANOVA indicated that there were significant differences between the scores CS PCT assigned to the midwives (*Mean Rank* = 66.75), the pregnant women (*Mean Rank* = 51.85) and the gynaecologists (*Mean Rank* = 45,97), H (corrected for ties) = 6.929, df = 2, N = 111, p = .031, Cohen's f = 0.259.

Besides, the same test showed that there were significant differences between the scores PRS PCT which belonged to the midwives (*Mean Rank* = 59.54), the pregnant women (*Mean Rank* = 57.71) and the gynaecologists (*Mean Rank* = 37.44), H (corrected for ties) = 6.782, df = 2, N = 108, p = .034, Cohen's f = 0.258.