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## Nausea in pregnancy: attitudes among pregnant women and general practitioners on treatment and pregnancy care

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### ABSTRACT

**Objective:** Nausea and vomiting during pregnancy (NVP) is very common, and may have great impact on a woman's life. The aim of this study was to explore thoughts and attitudes among Norwegian pregnant women and GPs on treatment of NVP and pregnancy care. **Design:** Focus-group study. **Setting and subjects:** Separate focus-group discussions were conducted with pregnant women and two with GPs. **Results:** Two focus-group discussions were conducted with pregnant women and two with GPs. The GPs thought it was important to normalize NVP symptoms. However, the women felt their distress due to NVP was trivialized by the GPs. The women were sceptical towards the use of medicines while pregnant, and avoidance was sought despite being ill. The GPs appeared uncertain with respect to medical treatment of NVP, which was stated to be considered only after progression to quite severe symptoms. Sick leave seemed to be an important part of the treatment regime applied by the GPs. The women had good experiences with graded sick leave. **Conclusion:** This Norwegian study identifies attitudes among GPs and pregnant women that may act as obstacles to appropriate care for women with NVP. The pregnant women and the GPs seemed to talk at cross-purposes; GPs' normalization of the symptoms made the women feel that their distress due to NVP was trivialized by the GPs. Our results indicate that pregnant women with NVP requiring medical treatment probably need comprehensive and reassuring information about treatment options before considering using any medicines.

### KEY POINTS

Nausea and vomiting during pregnancy (NVP) is very common, and considered to be of clinical significance for 35% of women.

- While the GPs agreed on the importance of normalizing the symptoms, the women felt their distress was trivialized, and missed being properly evaluated.
- Both the GPs and the women showed a reluctant attitude to medical treatment of NVP.
- The GPs gave the impression of considering medical treatment only after progression of symptoms to becoming quite severe.

### ARTICLE HISTORY

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### KEYWORDS

General practice; nausea; Norway; pregnancy; therapeutics; morning sickness

## Background

Nausea affects around 70% of pregnant women.[1] Approximately 50% experience additional vomiting.[2,3] Symptoms typically initiate during pregnancy weeks 6–8, peaking around weeks 11–13, and subside within week 16.[2,3] The prevalence of hyperemesis gravidarum (HG), the most severe form of nausea and vomiting during pregnancy (NVP), is about 1%.[4] HG is characterized by dehydration and electrolyte imbalance, and often leads to hospitalization.[5]

Though some women privately celebrate the symptoms of nausea as one of the first signs of a longed-for pregnancy,[6] prolonged nausea and vomiting during pregnancy can be very debilitating for the women. For

about 35% of the women, NVP is clinically significant.[2,5] NVP severely reduces the women's quality of life, and feelings of isolation and helplessness are reported.[7–9] The ability to carry out daily activities is impaired, including parenting, partly due to less interaction with their children.[9] Women report that NVP adversely affects social functioning, relationship with their partner, and also their partner's daily life.[9,10] Additionally, it leads to consumption of resources in the health care system, and increased socio-economic costs with increasing severity of NVP.[11,12] NVP is one of the main reasons for being on sick leave during pregnancy, reported to be responsible for almost one-third of total

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sick leave during pregnancy.[13] In Norway, as an employee, you are entitled to sickness benefits if you are occupationally disabled due to own illness or injury and fulfil the demands to an employee as set by the Norwegian Labour and Welfare Administration (Norwegian short name: NAV).[14] Sick-leave certificates can be issued by physicians. Sickness benefits equivalent to full wages (up to a set amount) are received, paid by the employer for the first 16 calendar days, and then by NAV.[14] The sick leave may be full time or graded (partial). The pregnancy care programme in Norway is free of charge and pregnant women are entitled to nine routine consultations with either their GP or a midwife, and additional consultations if required.[15]

General practitioners (GPs) in the UK are alleged to be reluctant to the use treatment against NVP.[16] Given that NVP is one of the most commonly experienced pregnancy complaints, and most often self-limiting, women presenting with NVP may not always be taken seriously. Canadian and American guidelines recommend early treatment of the symptoms of NVP to reduce costs related to hospitalizations, contacts with pregnancy care units, and sick leave, arguing that early symptoms are easier to treat.[17,18] Given that NVP is most commonly experienced during the first trimester, and consequently during organogenesis, many women and prescribers may be reluctant to use medications to treat this complaint. This is reflected in a study from the USA reporting that only 15% of women suffering from NVP used any pharmacologic treatment.[19] Insufficient safety data, preference for non-pharmacologic methods, and being made to feel uncomfortable by the physician are reported as common reasons for not using medicines against NVP among Canadian women.[20] It is well known that pregnant women often overestimate the risk of medications during pregnancy.[21,22] Various Norwegian treatment guidelines for NVP exist,[23–26] but no medicines have NVP as an approved indication in Norway, which further complicates the picture.

The aim of this study was to explore the thoughts and attitudes among Norwegian pregnant women and GPs on treatment of NVP and pregnancy care.

### Design, material, and methods

A focus-group study was conducted with two groups of pregnant women during November–December 2012 and two groups of GPs during December 2013. Women attending routine ultrasound examination in pregnancy week 17–18, and who had experienced NVP in the current pregnancy, received an information brochure together with an invitation to the study. Snowball recruitment was also used as a strategy due

Table 1. Sample distribution of study participants.

Category	Variables	<i>n</i>
Pregnant women		
Age	Range	24–37 years
Education	High school/vocational school	1
	Bachelor degree/college	4
	Master degree or higher	5
Parity	No previous live birth	6
	≥ 1 previous live births	4
GPs		
Gender	Female	5
	Male	5
Age	Range	27–48 years
Years of experience	≤ 5 years	8
	> 5 years	2

to a slow response among pregnant women at the antenatal clinic. At the time of participation, all women were still pregnant. In total, 10 women were recruited and distributed in two focus groups of four and six participants, respectively (Table 1). The discussions lasted approximately 60 minutes. The women were asked to tell about their own thoughts on and experiences with pregnancy care and treatment of NVP.

To recruit GPs, educational groups for authorized and practising GPs under specialization in general practice were contacted via e-mail. Slow recruitment was also experienced with regard to this source population. Two focus-group discussions were conducted, each lasting 60 minutes, with five GPs in each group (see Table 1). The GPs were asked to talk about their experience with and thoughts on treatment of NVP.

All focus-group discussions were conducted according to an interview guide to facilitate open discussion on pre-identified themes.[27] Separate interview guides were developed specifically for the pregnant women and the GPs. However, divergences from the interview guides occurred to facilitate a natural conversation in the group. Three of the authors acted as group moderators (HCS, IHS, LH), and one co-moderator in each group took field notes. The focus-group discussions were audio-recorded and transcribed verbatim. The transcripts from the focus-group discussions with the GPs and the pregnant women were analysed separately, according to the principles of systematic text condensation as described by Malterud.[28] First, the transcripts were read as a whole by three of the authors to establish an overview of data, followed by the identification of preliminary themes representing different aspects of the participants' thoughts on and attitudes to treatment of NVP. A collaborative negotiation strategy was applied. Second, meaning units (a text fragment that contains information regarding the research question) were sorted under the appropriate themes or code groups. Third, the content of the coded groups was reduced into a condensate aiming to capture the essence of the

meaning units. Lastly, descriptions and concepts were developed based on the condensates.

The study was approved by the Regional Committee for Ethics in Medical Research, Region West, and the Norwegian Data Inspectorate.

## Results

### *The pregnant women*

*A call for acknowledgement.* The women felt that their NVP was trivialized by their GP. Even after it was emphasized that NVP strongly impaired daily life functioning and general well-being, the women were told that symptoms of nausea are completely normal and expected as part of being pregnant. The women felt they were not taken seriously, and missed acceptance and acknowledgement from their GP of how debilitating NVP is to live with. The impact on social life and work situation was mentioned. One woman also said it was hard not being fully able to care for her other children who were too young to understand why their mother couldn't play with them:

I told my GP that I was very bothered with nausea. However, he just responded that nausea is very normal, and that all pregnant women had it just like me. Nothing to worry about. Even when I tried to emphasise the huge impact the nausea had on my daily life, I just got the impression that it was as expected. (W5)

Furthermore, they missed being evaluated properly for the severity of their symptoms, and wanted to be asked about their general well-being, weight, and diet. Close follow-up was a request from many of the participants.

*Inconsistent information resulted in scepticism and insecurity.* Information on treatment of NVP was sought from numerous sources; GPs, pharmacies, internet, family, and friends. Family, especially mothers, was a good source of advice on folk remedies. However, the women experienced a generational gap, themselves being more sceptical to folk remedies than their mothers or grandmothers. Though advice from pregnancy fora on the internet was taken with a pinch of salt, it could be used as an idea bank. Health care personnel were considered the most trustworthy source of information, and medical advice anchored in evidence-based medicine was expected. However, the experience of many of the participants was that information about treatment was inconsistent between different health care personnel, which made the participants feel frustrated, scared, and insecure:

You shouldn't be given many different answers [from various healthcare personnel]. You are sceptical and insecure to begin with thinking that you are carrying

something in your belly that you may harm. If you ask around for advice and get many different answers, this is very frustrating and annoying. (W1)

*Feelings of guilt.* A healthy lifestyle, including a healthy diet and regular exercise, was recognized by the participants as important during pregnancy. However, a strict focus on this by health care personnel while the women were suffering from NVP made the participants feel guilty due to not being able to fulfil these expectations. When they felt sick, they had to eat or drink whatever they could handle, even if this meant less healthy types of food and drinks, like crisps and soft drinks:

One might say that focus on a healthy diet is important, but I think most pregnant women know what you should or should not eat. In this condition it is all about what I actually am able to eat. It would feel good to be met by health care personnel that understand this. (W6)

One woman emphasized that she was worried about the baby, and that it was reassuring to be told that the foetus's needs are fulfilled despite the mother not eating much:

My doctor told me that no matter how often you vomit, the baby inside you takes what it needs, anyway. That is good to hear, because when I came to the ultrasound appointment in week seven or whatever, I had pictured a starved little lemon inside me. (W2)

*Medicines: Something for others, not for me.* The participants were generally very sceptical to the use of medicines while pregnant. Avoidance was sought due to fear of teratogenic effects with references to the thalidomide tragedy during the 1960s. Some of the participants also had the impression that GPs are reluctant to treat NVP with medicines due to fear of teratogenic effects, in contrast to their experience with the specialist health service, which prescribed medicines when needed. Though the participants themselves had made the decision not to use medicines, they made it clear that they realized that the choice of treatment of NVP is individual. The question of treatment seemed to depend on how much one can bear of the nausea's negative impact on social, occupational, and daily life functioning, with the threshold set generally high:

I do not feel like medicating my discomfort, not when I can actually manage to eat at least something... But I do not have anything against others who want to medicate their nausea, or who are in need of medicines. Because I cannot know other people's needs, I only know what is right for me... I would never forgive myself if something happened to the baby just because I couldn't stand the nausea. (W6)

In contrast to the reluctance to use medicines, one woman, who had HG for the second time, thought that

the GPs were too restrictive and that they delayed the use of medicines too long:

Women lose a lot of weight and get dehydrated. I don't think it should be like that considering you are carrying a child. I think it is important to have some quality of life despite having NVP. (W8)

*Graded sick leave: Something that is helpful.* Most of the participants had been on sick leave due to their NVP. They had good experience of sick leave as helpful to reduce stress, which was experienced as a trigger. Managing to keep a part-time position, however, was emphasized as positive, as this enabled some social contact. To get off the couch and to think of other things than NVP for a while could be helpful. Otherwise, as one woman said, you will easily feel isolated, and a bit blue:

I think that, if one can manage, it would be best to be on graded sick leave. To be able to get some social input. And to get something out of the day, and get your thoughts on to something other than nausea. Because you get very easily focused on the nausea lying on the couch the whole day. (W10)

### The GPs

*Emphasizing normality.* The GPs pointed out that due to NVP being one of many subjects on the list for the first pregnancy consultation, there is limited time to ask follow-up questions on how the pregnant women are handling their NVP. A box is typically ticked if nausea is confirmed, and unless the women have specific questions, the subject is left at that. If the women expressed concern with regard to NVP, the participants highly agreed on the importance of normalizing the condition and assuring the woman that it is not harmful and not a disease:

I think it is very important to normalize it. NVP is not a disease, it is something to be expected while being pregnant. (GP2)

*The dilemma of prescribing sick leave: Appraised by the women, criticized by NAV.* Sick leave was presented as a dilemma. A scenario with the Norwegian Labour and Welfare Administration (NAV) on one side, demanding a more restrictive policy for sick leave, and the women on the other side, begging for sick leave was described. They were also afraid that they might lose the patient if they denied the woman going on sick leave:

According to NAV it's all about the observations you do... But that's the "NAV world", and we work in another world. Our job is to build a relationship based on trust. If we had to doubt all patients who come and tell this kind of stories, it wouldn't work out. (GP6)

Participants expressed a wish for an objective instrument to measure symptoms of NVP as supportive documentation of the reason for issuing sick leave.

The participants had a generally low threshold to prescribe sick leave if the women were struggling with NVP. It was spontaneously mentioned by the participants when they were discussing treatment of NVP in general, giving the impression of sick leave being viewed by the GPs as one of the first interventions tried against NVP when action had to be taken, often without concomitant prescription of medicines:

I don't think I have experienced that a tablet is what enables them to go to work. The result is sick leave anyway. They have sometimes been given a prescription in addition, to relieve the symptoms. (GP3)

*Treatment with medicines is the next step: Or is it?* When the participants were asked about interventions against NVP, they all agreed that advice on dietary and lifestyle changes was a natural starting point, and something they seemed to be confident of giving. However, in their experience such measures were not of much help:

A woman with NVP had tried everything, and nothing helped. She had biscuits on the night table, eating just after waking up in the morning etc. It didn't exactly provide her with much relief. (GP8)

The GPs expressed reluctance to use medicines in the treatment of NVP. However, if dietary and lifestyle changes and/or sick leave were insufficient, the participants seemed to agree on medicines being the next step. Medicines were only considered if the woman had lost too much time from work, or was close to admission to hospital due to NVP:

Treatment is something that is being considered if the condition evolves to a great extent, but before the women are admitted to hospital due to electrolyte imbalance. When you feel you are in that phase where admission to hospital needs to be prevented. (GP2)

Mmmhm. (GP3, GP4, GP5 nodding in agreement)

It was expressed that they did not feel comfortable prescribing medicines against NVP due to awareness of the teratogenic potential of use of medicines during the first trimester, with references made to thalidomide. Some of the GPs also agreed that they did not believe in the effect of medicines against NVP:

You may try very carefully with medications with no promise to the women that this is final quick fix. They may as well not work. (GP5)

One GP even claimed that the cases which needed pharmacological treatment should be referred to the

hospital and, consequently, that pharmacological treatment of NVP is outside the GP's area of responsibility:

I do believe that when it has come so far that they are in need of treatment because the NVP constitutes a health risk, we refer them to the hospital. (GP10)

The participants missed a "go-to medicine", a medicine that has NVP as one of the listed indications, especially in the light of European Medicines Agency (EMA)'s warning against metoclopramide.

## Discussion

### *Principal findings*

The participants, both the pregnant women and the GPs in this study, elaborated on many issues related to nausea and pregnancy care. The call for help due to great distress seemed to be in conflict with the women's own scepticism regarding the use of medicines. The women were concerned about potential harmful effects of medicines when used during pregnancy, and therefore tried to avoid their use. They had rather negative experiences of the meeting with health care professionals in relation to NVP, feeling that their distress due to nausea was not taken seriously. On the other hand, the GPs expressed that it was important to normalize NVP. The GPs seemed unsure about how to treat NVP when dietary and lifestyle interventions were insufficient. Though medicines were considered as the next step, the overall attitude among the GPs was to avoid medicines against NVP, mainly due to fear of teratogenicity. Below we discuss the strengths and limitations of the study design and the impact of our findings.

### *Strengths and limitations*

Although this study is not generalizable beyond the participants in this setting, the data provide valuable insight into thoughts and attitudes among GPs and pregnant women that may be useful for GPs and other health care personnel in contact with this patient group. A focus-group design was chosen as this is considered well suited to study attitudes and experiences among a group of people within a specific milieu (e.g. health care personnel or patients).[29] It is an efficient method to gather data, and it also provides some quality control through the participants' own tendency to react to and balance out extreme views.[30] The interaction taking place within groups, which is considered to be the hallmark of focus groups as a method,[31] was specifically sought to help unveil concerns and priorities that may explain behaviour patterns.[27] Due to slow recruitment among pregnant women, a solely strategic

sampling was hindered, but the sample still turned out to be quite diverse. Though the women were in general highly educated, the age and parity varied among the participants. The high level of education may act as a limitation. However, the women without a high education did not seem restrained and were well accepted in the group, possibly because they had pregnancy and nausea in common.

Our sample among GPs was relatively diverse, with varying age and gender. However, eight GPs had less than five years of experience. This may partly explain the participating GPs' uncertainty about the choice of treatment after dietary and lifestyle advice was given. Another possible limitation is that the groups of GPs belonged to the same educational group, which may result in withholding conflicting point of views. However, the dynamic in the groups during the sessions was good, and contradictory statements seemed to be well tolerated. The groups were used to discussing different topics during their normal educational sessions, and the participants seemed comfortable with the setting. Educational groups that do not have a positive group dynamic would probably not accept an invitation to participate in a focus-group study like this.

Due to slow recruitment, only two focus-group discussions were conducted with each category of participants. This is an exploratory study with the intention to obtain new insight into the attitudes behind the rationale of treatment of NVP among both the receivers of the care and the caregivers, not to give a full description that covers the complete picture, in accordance with Malterud.[28] Based on the resulting information-rich data and the broad spectrum of themes that were uncovered, it was considered that two groups were adequate. However, there is always the possibility that conducting more group discussions might have brought up relevant themes other than those covered by this study.

### *Discussion of the findings*

The pregnant women missed a deeper understanding of and acknowledgement from health care personnel for how debilitating nausea can be. The women's call for acknowledgement does not seem to be heard among the GPs who rather strongly agreed on the importance of normalization of the symptoms of NVP. The GPs had good intentions by having this focus, as they thought it was important to reassure the patient that nausea is not harmful. However, it is our impression that the women and the GPs talk at cross purposes. The focus on normalization was interpreted by the women as if the GPs did not take them seriously, especially when the GPs

did not follow up with a proper clinical evaluation of the women's symptoms. Due to the high prevalence of nausea and a busy schedule for the first pregnancy consultation, the GPs admitted that nausea was often just confirmed and not carefully assessed. A study of HG patients from 2000 found that a high level of patient satisfaction was associated with women's perceptions that physicians believed in their descriptions of their symptoms.[32] Low level of belief in the patients may result in delayed intervention, and consequently affect the time for recovery,[32] illustrating the importance of a good patient-GP relationship. This experienced lack of understanding of NVP among health care personnel was also described by Locock et al. in a study conducted in 2003-2004 illustrating minimal change in the situation over the last decade.[6] The well-known fact that nausea is very common during pregnancy and most often self-limiting may partly explain why this complaint gets so little attention. Also, national and international guidelines stress the importance of reassuring the women that nausea is a normal part of pregnancy.[25,26,33] However, there are several studies that describe NVP's negative impact on the women's well-being resulting in poor quality of life, symptoms of depression, and even elective termination of an otherwise wanted pregnancy.[8-10,34] Locock et al. concluded that NVP was as disruptive to everyday life as a chronic disease.[6] Furthermore, 35% are considered to be clinically affected by NVP and NVP accounts for 33% of all sick leaves during pregnancy.[2,5,13] About 1% develop HG,[4] which in most cases leads to hospitalization and its related costs for the individual and the society.[5,12] HG has also been associated with giving birth to low birth-weight infants.[35] The participating GPs demonstrated a low awareness of the negative impact of NVP.

While the women had a clear call for help, they gave a rather mixed message with regard to what kind of help they wanted. On one hand they criticized the GPs for not offering any prescription of medicines, but on the other hand they were clearly sceptical of taking medicines due to being pregnant.

The women did not judge others for using medicines, but tried to the utmost to avoid their use themselves. It was a question of how much they could bear in order to protect their child from the perceived harmful effects of the medicines. This is in line with previous findings [20] and is probably due to the previously described overestimation of risk of medicine use among pregnant women.[22] Referral to the thalidomide tragedy was made by the pregnant women as well as the GPs. Though one GP stated that pharmacological management of NVP was seen to be a specialist's task, not a GP's, the other GPs agreed that pharmacological

treatment was the next step. However, they seemed wary of treating NVP with medicines due to fear of teratogenic effects. This is in line with publications from UK,[16] but is a paradox as there is available evidence supporting the safety of use during pregnancy of antiemetics.[36] The GPs stated that medical treatment of NVP was mainly considered after progression of symptoms to becoming quite severe. The sceptical attitude to medicines among the women in combination with the normalization and lack of evaluation of symptoms, and the reluctant attitude to treatment among the GPs, may prevent the question of treatment from being raised during the patient-GP encounter. HG is likely to be part of the continuum of nausea and vomiting during pregnancy.[18] The literature indicates that failure of early intervention against NVP increases risk for hospitalization due to HG,[37,38] illustrating the importance of identifying those women in need of treatment at an early stage. Hence, North American guidelines recommend early intervention to prevent progression to HG and more serious complications, including hospitalization.[17,18] Our results indicate that pregnant women requiring medical treatment against nausea would probably need comprehensive information and reassurance that there are treatment options that are considered to be effective and safe during pregnancy, before they would consider taking medicines. But before the participating GPs can take this position, they must obtain the present evidence-based knowledge about and confidence in available treatment options.

Improving quality of life during pregnancy and ability to maintain day-to-day activities for women with NVP should be reason enough for a GP to consider treatment. GPs meet women early in their pregnancy and have the opportunity to start symptom management at an early stage. It is recommended to communicate positive expectations regarding the outcome of a treatment to apply the placebo effect as a supplement to the verified treatment.[39] This contrasts the findings in this study where some GPs expressed little confidence in the treatment options they suggest to pregnant women.

The GPs missed clearer Norwegian treatment guidelines and called for a medicine with NVP as indication. This may explain the women's experiences of contradictory information from different health care personnel, and correction of prescriptions made by physicians other than those issuing them, which were described by the women who thought that this was scary and disturbing, rendering them even more sceptical. These findings indicate a lack of implementation of already existing guidelines and a need for clearer and stepwise guidelines that are easily accessible, to ensure consistency between health care personnel involved with

pregnancy care. Of note, Diclegis<sup>®</sup>/Diclectin<sup>®</sup>, a medicine consisting of an antihistamine in combination with pyridoxine, with NVP as approved indication, is available in Canada and USA.

Most of the women had been on sick leave due to NVP, and had good experiences related to graded sick leave, which made the women feel less isolated as this enabled social interaction with colleagues, and at the same time having time to rest to relieve the symptoms. Feelings of isolation have also previously been described in relation to NVP.[7] During the discussions with the GPs, sick leave was spontaneously mentioned when the moderator primarily addressed treatment. There was an impression that sick leave was an important part of the treatment regime applied by the GPs, probably as a consequence of a need for additional rest among women with NVP and the reluctance to use medicines, with sick leave being viewed as a safe intervention from both sides. Sick leave often seems to be given without the concomitant prescribing of medicines that could give additional relief, or in some cases perhaps enable the woman to work part time.

The question of prescribing sick leave was presented as a dilemma. This demonstrates awareness among the GPs who are trying to build an alliance with the women, and at the same time acknowledging the criteria set by NAV. This is in accordance with previous findings.[40] A lack of an objective measure of nausea to enable documentation for NAV on the grounds on which the sick leave is being prescribed was mentioned in relation to the sick leave dilemma. The Pregnancy-Unique Quantification of Emesis (PUQE) scale has been translated into Norwegian and is included in the new national guideline for treatment of NVP.[23,41] The PUQE scale serves as a tool to help objectify the women's NVP symptoms, enables classification of degree of nausea (mild, moderate, and severe) and is helpful in evaluating the effect of various interventions.[41] However, the experience of nausea, even if classified to the same degree according to PUQE, may deviate between different individuals. Hence, the women's own experience should be acknowledged by the GPs and the women treated accordingly.

## Conclusion

This Norwegian study identifies attitudes among both the participating GPs and pregnant women that may act as obstacles to appropriate care of women suffering from NVP. The GP's automatic normalization of symptoms and lack of assessment of the burden of NVP is interpreted as the main obstacle to appropriate care for women suffering from this condition. Also the women's

own scepticism regarding medical treatment while pregnant may hinder appropriate treatment when indicated. The pregnant women and the GPs talked at cross-purposes: GPs' normalization of the symptoms made the women feel their distress due to NVP was trivialized by the GPs. Our results indicate that pregnant women requiring medical treatment against nausea would probably need comprehensive information and reassurance that there are safe treatment options for NVP, before they would consider taking medicines. However, the participating GPs showed reluctance regarding the use of medicines to treat NVP, and appeared to be insecure in terms of the safety and the effectiveness of treatment.

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The study was approved by the Regional Committee for Ethics in Medical Research, Region West, and the Norwegian Data Inspectorate.

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