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van Blarikom, E.; de Kok, B.; Bijma, H.H.

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“Who am I to say?” Dutch care providers’ evaluation of psychosocial vulnerability in pregnant women

Esca van Blarikom [a,b], Bregje de Kok [a,*], Hilmar H. Bijma [c]

[a] Department of Anthropology, Amsterdam Institute of Social Science Research, Amsterdam, Netherlands
[b] Wolfson Institute of Population Health, Centre for Primary Care, Queen Mary University of London, United Kingdom
[c] Department of Obstetrics and Gynaecology, Division of Obstetrics & Foetal Medicine, Erasmus MC, Rotterdam, Rotterdam, Netherlands

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ABSTRACT

Maternity care increasingly focuses on evaluating psychosocial vulnerability during pregnancy. Research and nationwide (public health) programs, both in the USA and Europe, led to the development of new protocols and screening instruments for care providers to systematically screen for psychosocial vulnerability in pregnant women. However, standardised screening for vulnerability is complex since it requires discussion of sensitive issues. Women may fear stigmatisation and may have limited trust in their care providers or the health system. Our study contributes to the growing field of client-facing risk work by exploring care providers’ interpretations and evaluation of psychosocial vulnerability in pregnant women. Drawing on semi-structured interviews with Dutch maternity care providers, we explore how they conceptualise risk and vulnerability and identify ‘vulnerable pregnant women’ in their practices. We find that care providers conceptualise ‘vulnerability’ as primarily based on risk, which contributes to an imbalanced focus on individual mothers, rather than on both parents and the social context. Our findings highlight care providers’ concerns around ‘care avoidance’, seen as a risk factor affecting ‘vulnerability’ during pregnancy and as a possible consequence of risk screening. The care providers we interviewed employ “in between-strategies” based on intuition, emotion, and trust to skillfully attend to the risk that comes with risk work, in terms of its potential impact on relationships of trust and open communication. We conclude that ‘vulnerability’ should be understood as a multi-layered, situated and relational concept rather than simply as an epidemiological category. Since a trusting relationship between pregnant women and care providers is crucial for the evaluation of vulnerability, we reflect critically on the risk of standardised perinatal psychosocial risk evaluations. Policy should recognise providers’ “in between-strategies” to embed epidemiological understandings of risk in the context of everyday risk work.

1. Introduction

Maternity care in the Netherlands (e.g., Lagendijk et al., 2018; Posthumus et al., 2017; van der Hulst et al., 2018) and other Euro-American settings (e.g.:ACOG, 2006; Glover and Barlow, 2014; Nelson, 2020) increasingly focuses on evaluating and addressing psychosocial vulnerability during pregnancy. Definitions of vulnerability differ across contexts, but they tend to focus on risk factors statistically associated with unfavourable perinatal outcomes and limited parenting capacities. For instance, according to the definition which emerged from a recent European Delphi study, a vulnerable pregnant woman is “a woman who is threatened by physical, psychological, cognitive and/or social risk factors in combination with lack of adequate support and/or adequate coping skills” (Scheele et al., 2020, 1).

This shift towards increasing support for ‘vulnerable pregnant women’, based on the identification of risks, is emblematic of the influence of the developmental origins of health and disease (DOHaD) hypothesis, which asserts that early life experiences, including those occurring in utero, have long-term effects on our health (e.g. Barker, 2007; Suzuki, 2018). This hypothesis has been gaining importance since 1986 when the first study by the group argued that early-life exposures cause later disease and that these exposures are primarily transmitted by the mother during pregnancy. This hypothesis reinforced long-standing cultural assumptions regarding the primacy of maternal pregnancy exposures. Today, there is still an imbalance in studies that focus on maternal health, lifestyle and behaviour over other factors like paternal

* Corresponding author. Anthropology Department, University of Amsterdam, Nieuwe Achtergracht 166, 1018 WV, Amsterdam, Netherlands.
E-mail address: B.C.de.Kok@uva.nl (B. de Kok).

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and postnatal environmental exposures that are also likely to be important (Pentecost and Meloni, 2020; Sharp, Lawlor, and Richardson, 2018).

In the Netherlands, attention to vulnerability and psychosocial support also increased due to a European report showing a relatively high perinatal mortality rate in the Netherlands (Euro-Peristat project 2008). Around the same time, De Graaf et al. (2009)found that women in the four largest Dutch cities were at increased risk of detrimental perinatal outcomes, especially when living in 'deprived' neighbourhoods. This set the agenda for programmes and studies addressing perinatal health inequities through a focus on the early identification and support of so-called vulnerable pregnant women. The government adopted a nationwide program, 'Promising Start' (Department of Health, Wellbeing and sport, 2018) aimed at improving children's short- and long-term health and developmental outcomes, and decreasing health inequities, especially during the first 1000 days of development, in line with the DOHaD hypothesis. Furthermore, studies led to the development of protocols and standardised risk assessment tools for the identification of psychosocial risk factors and vulnerability in pregnant women (e.g. Denktaş et al., 2012; Quispel et al., 2012). Although currently the majority of maternity care providers have not yet implemented standardised risk assessment tools into their practice (Department of Health, Wellbeing and sport, 2020;2021), the Dutch Ministry of Health strives to increase their use.

In policy, the category 'vulnerable pregnant woman' is thus enacted as a quantifiable and measurable condition, based on risk, that can be assessed and addressed through neutral, objective measuring tools. However, studies indicate that risk assessment is not a straightforward, neutral matter. These studies point to challenges in the implementation of standardised risk assessments, especially with regard to maintaining a relationship of trust with patients (Cowley et al., 2004, Brewster et al., 2018). In their UK study of health visitors' use of pre-defined needs assessment schedules, Cowley et al. (2004) found that health visitors employed different strategies to resist explicit use of these tools. This resistance appeared aimed at allowing a trusting relationship to develop by demonstrating open, general interest and a caring approach (Cowley et al., 2004, 522). Similarly, in their study of a 'universal''harm measurement tool, Brewster et al. (2018) found that British community nurses experienced tensions between data collection requirements and maintaining a relationship of trust. Moreover, they did not always have access to information required, and prioritised different harms than those measured. Their study indicates that harm measurement tools are experienced as contextually and socially situated by health providers, thus calling into question the extent to which standardised tools can be transferred across contexts.

Hence, although policy is currently pushing Dutch maternity care in the direction of increased implementation of structured, standardised risk assessments, challenges are likely to arise, and it is not well understood how care providers integrate these tools into their practice. At the moment of our study, only three of the 11 participants used structured risk assessment tools, although all were aware of the existence of these instruments and most worked in organisations where they were expected to use them. Through in-depth interviews, we learned from perinatal care providers involved in the care for so-called vulnerable pregnant women how they conceptualise and identify risk and vulnerability. Our findings show that care providers use "in between-strategies" (Zinn, 2008), based on trust, intuition, and emotion, that are not currently recognised in the push toward more structured risk assessments. In line with Zinn's (2008) analysis, we show how care providers use these strategies to complement and overcome the challenges and limitations of more calculative forms of risk management.

Before moving on to explain the Dutch maternity care context and discuss the conceptualisation of vulnerability, we want to briefly reflect on our use of the word 'women'. We recognise that not only cis women but also (trans)men or people who consider themselves non-binary can be pregnant. For reasons of brevity and consistency with the literature we refer to, we use the words women and mothers, but where applicable this can be read as (trans)men, people, or parents.

2. Background

2.1. The Dutch context

In the Netherlands, maternity care is organised into different levels of care, the boundaries of which are determined by medical risk. At the end of the 19th century, almost all Dutch women gave birth at home, however, the number of hospital births gradually increased in the next 100 years. This shift from a maternity care system dominated by midwife-led, low-risk births to the increasing classification of women as high-risk points toward what Scamell and Alaszewksi (2012) have termed the "ever-narrowing window of normality during childbirth."

These changes fueled a sense of competition between midwives and obstetricians (Bos, 2016), and midwives and obstetricians are often portrayed as adversaries in the literature. However, in a recent study, Goodarzi et al. (2018) show that different notions of how maternity care should be organised in the Netherlands vary not so much according to professional boundaries, but rather within professional groups, according to personal beliefs. Dutch maternity care providers can be roughly divided into two schools of thought: one in favour of a more hands-off, midwife-led approach and the other in favour of increased hospital-based care. According to these differing stances, trans-professional coalitions are formed. The distinction between midwives and obstetricians in the Netherlands is thus not clear cut, which is also reflected by statistics indicating that the vast majority of pregnant women receive a combination of primary and secondary care (Perined, 2010). Specifically, the care for women in vulnerable circumstances calls for more intensive collaboration between primary and secondary care. When women do not have the resources to come to the hospital, antenatal checks are carried out partly by the community midwife and partly in secondary care.

2.2. Conceptualising risk and vulnerability

As Brown et al., (2017, 498) argues, although we can speak of a "vulnerability zeitgeist", the concept of 'vulnerability' remains vaguely defined. Its use is "often normative, implying deviation from usually undefined standards of life or behaviour, and as supporting powerful moral and ethical projects." A growing body of literature has started to critique how, in policy contexts especially, ideas about vulnerability "can mix concerns about risk to certain groups with anxieties about risks from these groups" (Brown et al., 2017, 500). This relates to feminist scholars' critique of the rise of a risk discourse in maternity care during the last quarter of the 20th century (e.g.: Kaur and Ricciardelli, 2020; Rothman, 2014). These scholars have critiqued the risk discourse for creating an imbalanced focus on individual mothers, as forming risks themselves or responsible for reducing risks, to themselves and the foetus or baby. This neglects the role played by both parents and features of the social context, and perpetuates unrealistic expectations of maternal self-regulation and discipline.

In Dutch perinatal care, this "vulnerability zeitgeist" is especially visible in the increased focus on the early recognition of 'vulnerable pregnant women'. However, here as well, consensus regarding the definition of vulnerability during pregnancy is lacking. Some definitions frame 'vulnerability' more as the outcome of an interplay between risks and protective factors:

> "Vulnerability arises from an imbalance between risk factors and protective factors. Risk factors are, for example, financial problems, a disadvantageous lifestyle, or the avoidance of care. Examples of protective factors are a supportive social network or the willingness to accept help." (van der Meer et al., 2020).

However, the Dutch national organisation for midwives (KNOV),

defines vulnerable pregnant women through an enumeration of risk factors:

> "Vulnerable pregnant women have to deal with difficult circumstances as individuals and as a group: including little education, lack of sufficient and stable income, far from ideal housing conditions, and a more isolated life in a competitive society, with highly variable knowledge and/or skills around their own health and how to act when care is needed. These women are thus at a higher risk of problems around pregnancy and birth." (KNOV, 2021).

This definition shows an understanding of vulnerability as primarily based on the presence of risk factors, and thus almost interchangeable with 'risk'. This merging of 'vulnerability' and 'risk' happens often in epidemiology (Aday, 1994), where 'risk' is used to describe the probability that an individual can be harmed in the future. Specific risk factors (e.g., smoking, drug use, unemployment) can increase this probability. 'Vulnerability' is, in this sense, understood at a population level, and becomes almost synonymous with the categorisation of 'at-risk groups'-when for example all women from ethnic minorities or all teen pregnancies are by definition considered vulnerable.

However, abstract understandings of 'vulnerability' as synchronous with 'risk' do not tell us anything yet about care providers' understandings of vulnerability and the strategies they use to identify vulnerability in their pregnant clients. There is a growing body of literature that analyses how professionals engage in 'risk work': a micro-level approach to empirically study people's everyday practices in what has been termed the 'risk society' (Giddens, 1991; Beck, 1992). The risk society thesis holds that although social life has not become 'riskier' in itself, risk has become less tolerated and risk avoidance is now fundamental to the way social actors organise the world. 'Risk work' refers to the impact of this preoccupation with risk on everyday working practices. Horlick-Jones (2005, 293) argues that within organisations, risk-based practice is advocated by a rhetoric stressing administrative efficiency, however, 'in the real world' these practices are highly varied and situationally specific. Horlick-Jones therefore advocates for more studies of the everyday, informal practices and logics associated with risk work.

In a recent editorial in Health, Risk and Society, Brown and Gale (2018a)sought to develop the sociology of client-facing risk work. Brown and Gale (2018a) argue that in client-facing risk work, professionals have to contextualise 'risk knowledge', or "the abstract form of knowing made possible by the pooling of observations which are necessarily homogenised and lifted out of context". Risk work involves managing, in practice, the uncertainty of the 'ecological fallacy' inherent in risk calculation: a person may be statistically more likely than the general population to have bad pregnancy outcomes, but there is no way of knowing whether they will belong to those who actually have worse outcomes. Brown and Gale (2018a, 2) identify three core features of risk work: interpreting risk knowledge; intervening to minimise risk; and handling social relations and interactions. Brown and Gale (2018b) argue that these features often stand in tension with one another in everyday practices and interactions, especially concerning the truth of risk knowledge, the legitimacy of interventions and the authenticity of experiences. For example, guidelines may make sense in terms of evidence of reducing mortality or morbidity at the population level, but are less legitimate when invoked within individual cases and interactions (Brown and Gale, 2018b, 10). According to Brown and Gale (2018b), studies of risk work should explore the experiences of professionals in managing these inherent tensions.

Recent studies looking specifically into risk work by maternity care providers describe how viewing pregnancy through a 'risk-lens' has led to a shift in focus from normality to risk management in maternity care (Healy, Humphreys and Kennedy, 2016). Spendlove (2018) argues that the 'risk discourse' in obstetric care is associated with anxiety over uncertainty, error and blame and a perceived increase in the medicalisation of childbirth. Scamell (2011), in her study of midwifery talk, refers to the tensions experienced by midwives whom she describes as treading a difficult line between facilitating a 'normal' process of childbirth while simultaneously handling a situation saturated with 'latent risk'.

Underexplored in this growing body of literature on risk work in maternity care is the specific experience of doing 'psychosocial' risk work. To our knowledge, only one previous study by Brygger Venø et al., (2021) engaged specifically with care providers' understandings of vulnerability in pregnancy. Brygger Venø et al.,(2021) found that Danish GPs identify 'vulnerable pregnant women' through intangible indicators, evoking a 'gut feeling' of vulnerability. Their findings arguably point toward the difficulty of standardising the assessment of vulnerability. Our study of how Dutch care providers conceptualise and evaluate vulnerability in pregnant women adds further insight into how this nebulous and morally laden term becomes translated into practice. Specifically, our study shows care providers' awareness of and skilful attendance to the risk that comes with risk knowledge (Rothman, 2014) and risk work, in terms of its potential impact on relationships of trust and open communication.

3. Method

We initially designed this project as an ethnographic study, involving both interviews with pregnant women as well as healthcare providers, and observations of multidisciplinary team discussions at the Erasmus MC hospital in Rotterdam. However, due to the first wave of the COVID-19 pandemic, all scientific research in the Dutch hospitals was halted during the study period (February–April 2020). Hence, we decided to instead focus on data collection through digital interviews with care providers and recruited additional providers through our personal and professional networks. We concur with Bayms' (cited in Pink et al., 2016, 83) view that digitally mediated communication should not be seen not as impoverished or second-order to face-to-face communication, but as an additional tool people use to connect. For this study, digital interviews, with their flexibility in time and place, provided a good way for care providers to share their experiences. Practically speaking, doing interviews digitally removed travel and time related hurdles, and thus allowed us to include more care providers from different backgrounds than initially planned.

Before the COVID-19 outbreak, the first author conducted one face-to-face interview with a care provider. Ten more video interviews with care providers working for various Dutch care institutions using either Zoom or Skype followed. The sample consists of care providers with various professional backgrounds who are usually engaged in the care for 'vulnerable pregnant women', such as obstetricians, nurses and psychologists (see Table 1 for participant demographics). Additionally, the first author interviewed one woman who was five months pregnant and considered vulnerable. Her narrative provided important insights into the experiences of pregnant women in the evaluation of vulnerability in practice. Interviews were semi-structured, based on a topic list, and lasted between 30 and 90 min. We audio-recorded the interviews and transcribed them verbatim.

Using thematic analysis (Braun and Clarke, 2006), we coded interviews and documents through ATLAS. ti 8. Coding was both inductive and deductive. We developed a coding scheme based on the empirical data, but we based some codes on pre-determined foci (e.g. dealing with risk and vulnerability in practice; values and assumptions in conceptualisations of vulnerability). The first author first tried to get a sense of the whole dataset by thoroughly reading all transcripts. Keywords and frequently returning themes were marked. Key themes and core categories were discussed and agreed on by the team. The first author organised the clusters of coded data into a mind-map, which allowed us to synthesise the data and develop an over-arching narrative. Drafts of this synthesis were shared back and forth between team members in an iterative process of analysis.

Our third author is a practising gynaecologist who could bring in her

Table 1
Participant demographics.

Demographics		Number of Participants
Location of Employment	Rotterdam	3
	Amsterdam'	4
	Leeuwarden	1
	Helmond	1
	Eindhoven	1
	Groningen	1
Profession	Nurse	2
	Midwife	1
	Prevention worker	1
	Psychologist	2
	Gynaecologist	2
	Safe Home physician	3
Qualifications	Nursing	2
	MD Obstetrics & Gyneacology	3
	Psychology	2
	MD Pediatrician	1
	Andragogy	1
	Midwifery	1
	MA Forensic Science	1
Years of experience	1–5	2
	5–10	2
	10+	7

'emic' insights into vulnerability assessments and ask critical questions of social science lines of argument. We engaged in a form of member-checking by sharing draft findings with every participant (we received some positive replies, no suggestions for change). We compensated the participating pregnant woman with a voucher worth ten euros but did not compensate the care providers.

The study received ethics approval from the University of Amsterdam. All participants received an information letter outlining the study aim; procedure; the right to withdraw at any moment; measures taken to protect participants' privacy; and the researcher's contact details. Participants provided oral or written informed consent to participate in the study. We replaced all names of participants with a pseudonym and removed the names of the facilities.

4. Findings

4.1. Conceptualising vulnerability during pregnancy

When asked to define vulnerability during pregnancy, the participating care providers predominantly described vulnerability in line with policy definitions: as a static, risk-based concept. Isabelle, a doctor employed by Safe Home, a government agency centre for the prevention of domestic violence, provided the following description:

> "Well, uhm, vulnerable pregnant women can be people with psychological problems or psychiatric problems, or they have alcohol or drug issues, or a difficult past, um, or they don't easily make contact with other people, have few stable relationships. In any case, people who already have a hard time figuring things out for themselves, let alone take on the responsibility for a child. Sometimes they have financial problems, sometimes they have no housing, sometimes they are intellectually disabled, well, or they are on their own. Yes. It is very broad; it can be very broad."

Vulnerability is not described here as a single 'condition', but rather represents a heterogeneous class of people or issues, reflecting a range of risk factors.

Like most respondents, Isabelle does not refer to protective factors. Some care providers were bothered by this lack of recognition of women's capacities for mitigation of vulnerability. Psychologist Roos, for example, does not like using the term, because she argues "it kind of suggests, if you say about a woman that she's vulnerable, that she's, well, that she can't handle anything, that she might break or something."

Notions of what constitutes vulnerability during pregnancy differed according to professional background. Depending on their discipline and function, care providers can access and generate different types of knowledge about their clients, which affects how they see vulnerability. Marieke comments on her standpoint as a midwife:

> "I think we [midwives] are very much inclined to always see someone like a mother. And if you've had someone under your care since they were young, and you see them making progress, then it is maybe very hard to uhm… judge that person objectively in the mother role as well […]. And also, some care providers from external organisations, they are very close to those people, right. So it will have, it will also have to do with the level of engagement."

Marieke suggests that because mental health practitioners or social workers follow women for a longer period, their 'objective judgment' of that person in the mother role might be clouded. To assess a person's well-being and capabilities through time and in all aspects of their lives is indeed very different from assessing them solely as future mothers. Expectations of care providers from different disciplines regarding what makes a mother and her living environment 'safe' might therefore clash. Also note how Marieke's framing of pregnant women as (future) mothers foregrounds vulnerability as foremost about being a risk to their (unborn) child, reflecting the mixing of concerns about the risk to women with angst about risk from women (Brown et al, 2017).

A dimension of vulnerability that returned remarkably often in care providers' conceptualisations, was the degree to which women might be 'open to care'. Many care providers commented that any risk factor could be countered or mitigated if a woman was open or 'receptive' to care. Providers considered women 'receptive' to care if they seemed willing to work on changing the unfavourable factors which care providers considered a risk to a safe pregnancy and child-rearing environment, or if they were open to referral and care interventions. Care providers referred to some women as 'care-avoiders': they considered them an especially vulnerable group of women, often described as "women who don't have insight into their problems".

Fordyce (2014) has argued that there is an implicit assumption in public health discourse that utilisation of biomedical prenatal care is linked to being a responsible, rational citizen:

> "the contemporary risk model of pregnancy assumes that pregnant women will assume the individual responsibility to provide their unborn child with the ideal gestational environment, and to best provide this environment she must comply with biomedical risk. […] To refuse prenatal care is understood as neglectful or bad mothering" (Fordyce, 2014, 382).

In line with this idea, nurse Thomas tells me: "if you register yourself for additional care because you know you have a vulnerability inside of you, then that will often make it, yeah, that will put the odds in your favour from my point of view." Gynaecologist Floor, likewise, comments: "the hardest thing for me to deal with is the people who don't recognise it themselves. I think that's the trickiest group because you don't have access to them."

Care providers' narratives appear to imply that they have less worry about women who are motivated for care, and whose perception of vulnerability aligns with those of caregivers. Partly, this may reflect a concern about women who cannot fully grasp the risks they and their pregnancy face, but it also appears to express caregivers' implicit expectation that pregnant women adhere to a medicalised understanding of what it means to be vulnerable. Women deemed as 'vulnerable' may not always see themselves as such, and the insistence on the label creates the danger of alienating women. Care providers indicated that women considered 'vulnerable' are often already mistrustful of healthcare institutions because of previous bad experiences or out of fear of losing custody over their children, and therefore may downplay psychosocial adversities they experience in their consultations with

maternity care providers. Importantly, care providers often framed the avoidance of care as if it is a matter of conscious choice, without much recognition for the various barriers to maternity care that disadvantaged groups are known to experience (e.g. Boerleider et al., 2013; Peters et al., 2019; Posthumus et al., 2015, 2017).

In the interviews, care providers predominantly positioned the child as the vulnerable party, whereas risks were attributed to the mother's behaviour or 'lifestyle'. Again, this can increase women's perception that they are being held responsible for risk to their child and enhance fear of losing custody over their children. Psychiatric nurse Thomas, for example, argues:

> "That child, they end up someplace. And that, um, can for many reasons, that can go wrong. That is the most important thing, that the child there, um, they come first. They didn't ask for anything."

The child, rather than the mother or the household, emerges here as the vulnerable party who might be hurt. Safe Home physician Marian defends this position as follows:

> "We all attach so much importance to young life that we would give a lot for it. That's different than when you… when a neighbour is psychotic, then perhaps the neighbours will think, well, she's a grown-up, she'll have to take care of it. However, when there is a little child involved, then people are always prepared to help, to think along. […] A child, before it is born, sets in motion something, yeah, very essential."

Although a pregnancy thus sets the possibility of care intervention in motion, the intervention is first and foremost targeted at the safety of the child, not the mother. For many of the interviewed care providers the essential question boils down to: will the child be born into, and grow up in, a safe environment? There is no straightforward answer to that question: what constitutes a safe environment is not given. Gynaecologist Floor, for example, comments: "who am I to say that they are vulnerable? Who am I to say they don't have enough money? Or that it's weird that they live in a one-room apartment with two kids and a third on the way? That's my perception, right".

As mentioned in the introduction, there is an imbalance in the focus of maternity care on maternal factors that potentially influence foetal health over paternal and contextual postnatal factors (Sharp, Lawlor and Richardson, 2018). This adds to the construction of mothers as risk objects. Indeed, the perinatal care providers engaged in this study acknowledged their limited means to engage partners in care, despite recognising that partners had an important impact on the level of vulnerability during pregnancy. Midwife Marieke, for example, comments:

"Well [a partner's influence] can be very positive, but also negative, because it is of course, if you, for example in the case of drug use, if the partner just continues to snort drugs all the time while you try to get that woman clean, yes, that is impossible. And sometimes it also works the other way around, that there's a woman who actually can't handle very much, mentally, but who has a very supportive partner and then you see that they manage just fine together."

In summary, at first sight, care providers tend to define 'vulnerability during pregnancy' as a static state that arises due to (a combination of) psychosocial risk factors. However, narratives of specific cases and situations enabled the identification of a different, more layered notion of vulnerability as depending also on women's 'insight into her problems', and her openness and motivation for care. Notions of maternal responsibility are tied up with this discourse of care motivation versus avoidance. This may contribute to fear and stigma connected to the referral to psychosocial care during pregnancy since women might sense that they are being framed as the risky party responsible for their baby's vulnerability. Finally, pregnant women's partners, when present, were also considered influential for the level of vulnerability during pregnancy, but care providers felt limited in their possibility to engage with them.

4.2. *"In-between" strategies of evaluating vulnerability in practice*

As mentioned, there is a strong policy push within Dutch perinatal care to move towards a more structured approach to psychosocial risk evaluations. In our study, only a minority of the participants (3) were working with structured risk screenings in the form of questionnaires, although all were aware of, and often 'supposed to be', working with some form of structured risk screening.

Care providers often said that 'open conversation', or 'asking explicitly' is a preferred strategy to identify the presence of psychosocial risk during pregnancy. There was, in fact, only one care provider who preferred women to fill out risk screening questionnaires themselves compared to asking direct questions during consultations. The most common position was asking explicit, non-judgemental questions about potential vulnerabilities elicits responses that are more honest and reduces certain barriers to the evaluation of vulnerability. Gynaecologist Jan, for example, commented that he believed that the stigma of talking about psychosocial problems is reduced when it's not "done sneakily", and adds:

> "In my experience, it is […] very important to ask about it very explicitly and non-judgmentally. Because people will not tell you of their own accord, so it is meaningful to ask it explicitly, eh, are there any debts or debt sanitation, or are there money problems? Is there any domestic violence going on, and ask a person that without the partner being there."

An additional often-mentioned advantage of asking questions directly was that it allowed care providers to "see people's reactions, to include that non-verbal part as well" (Nurse Thomas).

The one caregiver, a clinical midwife, who said that she preferred to rely on self-assessment forms, indicated that she felt the questionnaire might help to mitigate some feelings of shame and taboo connected to talking about psychological or social complaints during pregnancy. Many of the interviewed care providers talked about this stigma, which they often linked to the persistent societal myth that pregnancy is supposed to be a beautiful, happy, and carefree period in a woman's life (Dobris and Whitemills, 2006; Buchanan, 2013). This creates a problem for asking clients directly about pregnancy-related risks: people are not necessarily inclined to tell their care providers directly about psychosocial adversity because soon-to be-mothers are culturally expected to be healthy and in control of their bodies and minds (see also Kauppi et al., 2012).

All care providers in the study described what Zinn (2008) calls "in-between strategies" to identify vulnerability. They drew on emotion, trust, and intuition to make sense of and supplement the limited, and what they sometimes considered incorrect, information that they could explicitly access in consultations or case files. The participating care providers often supplemented explicit inquiries into psychosocial risks with 'tacit' or intuitive forms of knowledge. Tacit knowledge, or implicit knowledge, entails "those aspects of human knowledge, skills, and competencies, which lie outside the domain of rules and procedures and thus, can be extremely difficult to articulate" (Engel, 2008, e185). In clinical practice, Greenhalgh et.al.,(2008) argue, tacit and explicit forms of knowledge are often integrated and used to interpret each other. Like Zinn (2008) argues, in unpredictable situations, people mobilise various resources to control risks and uncertainties.

The use of these strategies to evaluate pregnant women's vulnerability appeared informed by a desire to balance the need to perform psychosocial risk screenings with the need to establish a trusting relationship and maintain open communication. For example, many stated that they were guided by their gut feeling (the Dutch phrase "niet-pluis-gevoel" was often used: this loosely translates as a "something-is-not-right-feeling"). Others described how they picked up various non-verbal signals of potential psychosocial problems during consultations. Midwife Marieke, for example, talks about a woman that she saw on nine different occasions during her pregnancy. At the first consultation, she

wore a beige bra, and slowly, consultation after consultation, Marieke saw this woman's bra getting darker and darker, making her aware that this woman only owned one pair of underwear. According to Marieke, this woman would not have told her about her financial troubles on her own accord. Care providers often talked about how they used their sense of smell to notice alcohol use or unhygienic living conditions. Some also described how non-verbal responses of a woman to physical or gynaecological examinations suggested a history of sexual abuse.

Vulnerability during pregnancy is for a large part identified and thus construed in the interpersonal contact between women and their care providers. Care providers asserted that information provided by women's history-taking or risk screenings may be interpreted differently depending on the relationship they developed with these women. Some situations are apparently risky, but in the personal interaction with a woman, things may turn out differently. This indicates the multi-layeredness of 'vulnerability' (Luna, 2019): people can be rendered vulnerable by a variety of risk factors, which interact with one another and with layers of resilience, such as coping strategies and social or material resources. Nurse Thomas, for example, describes:

> "Here in the psychiatry department, you read a story and think: that's just one big drama. And then a very pleasant, capable person shows up, with whom you can come to agreements easily, and it's a completely different picture than what you read before. So I myself prefer to be blank. I'd rather not exactly know all the things that happened. With a lot of people, they'll also be more open, and yeah, then I will be more open, the other is more open. And then later you'll see what's going on. And I think that's better. […] There's a huge difference between all the information and the person you see in front of you."

Thomas describes how he avoids knowing too much about his patients out of fear that some information may label women in a way that hampers building a relationship of mutual trust and openness. He prefers to leave risk factors that may indicate vulnerability at an epidemiological level aside, to safeguard a space in which the individual narrative prevails. Other care providers indicated that they sometimes avoid asking about social conditions because they are afraid this may lead to distrust. Gynaecologist Floor phrases this difficulty as follows:

> "Yes, I do ask actively about their profession and things like that, so you often kind of hear, you can tell a little bit about how or what, if they say that they are both ill or that they are both unemployed, yes then you kind of, then, of course, you have the idea, like, I have to keep asking. If the lady then says that she is a doctor's assistant and the man says that he is a painter at a large company, then I think, well, that's okay. But I don't check that, that's my interpretation of what they tell me. I find that very difficult. […] and sometimes I'll just not mention it for two check-ups because […] I want them to continue to feel at ease with me, medically, and because I want them to keep returning for check-ups."

Floor thus balances discussing psychosocial issues with the risk of compromising trust. She gauges whether mentioning potential problems should be avoided to ensure that at least people keep returning for their antenatal visits. Interestingly, care avoidance thus emerges both as a possible unintended consequence of risk screenings and a contributing factor to 'vulnerability' during pregnancy.

The difficulty of maintaining a trusting relationship while attending to psychosocial issues was confirmed in the interview with Nina, a pregnant woman who suffered from depression and had a difficult relationship with her boyfriend. When her obstetrician mentioned that they wanted to report her case to child protective services, she retaliated:

> "Look, I said, I am someone that talks about it, right. […] I said, I'm here every time just like I'm supposed to, I tell you about it myself, I'm asking for help, and so now I'm really quite upset that you sort of turn me into… I am the victim in this situation and you're labelling me as something I am absolutely not. Uhm, how should I say it, I just don't think, you know […] If I find out you make a report to child protective services (laughs), I'll never tell you anything and I'll never return here […] If you mention child protective services to a woman, it's kind of like an insult, right, for a woman, and there are so many stories in the world about kids being taken away. I think that because you say these kinds of things to people who cannot think straight, who think, yeah, now I really will not tell them anything anymore because before you know it, I'll lose my children. So, I think it is counterproductive, instead of creating a situation where women can honestly tell what's going on."

Nina's reaction exemplifies the sensitivity with which caregivers need to proceed in dealing with psychosocial problems during pregnancy, especially when women fear that their autonomy as mothers might be threatened.

The required sensitivity appears to lead health professionals to employ a multitude of strategies to find out about the circumstances of the pregnant women in their practice, ranging from reliance on standardised screening tools to having explicit and open conversations or using observations such as the state of clothing, and smell. The strategies they employ have an impact on the relationship with their clients and vice versa, and when care providers sense that probing might lead to care avoidance, they may opt to avoid the subject. Generally, evaluations of vulnerability depend on the interpersonal relationship and trust providers establish with women. However, providers only have limited time to spend with their clients, both in terms of consultation time and the 9-month period in which they meet with pregnant women, which limits their capacity to build a strong trusting relationship, and thus to identify and evaluate psychosocial risk and vulnerability.

5. Discussion

Our findings add to a small body of literature that explores the psychosocial risk work maternity care providers engage in. We found that care providers' initial definitions often align with a risk-based epidemiological understanding of vulnerability. This understanding of the concept has been criticised by bioethicist Florencia Luna (2019), who argues that, for the term 'vulnerability' to be ethically workable at all, is it imperative that it is seen as 'layered' and contextualised. When the term 'vulnerability' is applied in a dichotomous way ('you are either in or out', based on certain socio-economic markers), there is a danger that some pregnant women (e.g., women living in poverty or belonging to a certain ethnic group) will be over-included, while others (e.g., middle-class pregnant women) are under-included or become excluded. Luna (2009) argues instead for a more dynamic approach to vulnerability, where vulnerability is understood not so much as a "fixed label", but rather as relational: instead of labelling someone as vulnerable per se, it is more fruitful to consider particular situations that make or render someone vulnerable. This understanding of the concept helps to counter those aspects of the risk discourse that create an imbalanced focus on women's individual behaviour and lifestyle.

Feminist scholars argue that a discourse of maternal-foetal separation permeates maternity care (e.g. Oaks, 2000; Armstrong, 2003; Fordyce, 2014). Within this discourse, mother and child are seen as two separate beings whose interests are not necessarily aligned. Indeed, the care providers we interviewed did construct risk at the level of the mother and conceptualised the baby as the vulnerable party. This inevitably leads to tensions in the risk work these care providers do in their everyday encounters with pregnant women, due to the "inherently moral features of risk, in holding people accountable" (Brown and Gale, 2018a, 2). These tensions were indeed apparent in our findings, with care providers asking themselves "who am I to say" that certain 'risk factors' observed by them will become problematic for the future child. Moreover, care providers sometimes opted to not mention psychosocial

risks to prevent damaging their relationship with their clients. The importance of provider-client relationships is underscored by health providers' view that openness to and motivation for care and additional psychosocial support are key mitigators for vulnerability. After all, conducive provider-client relationships may well foster clients' openness to further support where offered.

Our findings thus highlight how care providers carefully and skilfully navigate psychosocial risk and vulnerability evaluations to maintain a necessary level of trust with the pregnant women in their practice. Care providers use trust, based on building a relationship with a client, and intuition, based on tacit knowledge, experience and a 'gut feeling', that something is not quite right. These strategies are not fully rational, in the sense of being calculative or instrumental, nor are they irrational as they often involve prior knowledge or experience and sensory information or embodied knowledge. This is what Zinn (2008) refers to as "in between-strategies". Zinn (2008) argues that, especially in situations where limited knowledge is available, it is important for care providers to be able to draw on these strategies to allow them to act in the face of uncertainty. These strategies need to be recognised in policy and training if they are to be safeguarded in the move toward greater standardisation of risk assessment.

Our findings illuminate the practical 'messiness' and complexity of risk work and underline the importance of continuity of care, sufficient consultation time and face-to-face contact between pregnant women and their care providers. Also, the new possibilities of using Big Data in the assessment of medical and psychosocial risks, which enable a more fine-grained and personalised approach to the use of epidemiological data, ask for careful reflection on the potential risk that big data and algorithms side-line the 'tacit' or 'intuitive' ways in which care providers recognise other and more dynamic aspects that are important in assessing and addressing vulnerability. Screening instruments can flag vulnerable circumstances based on population-level risks, but it is then up to care providers to discuss and check on possible psychosocial risks in a way that has the least possible negative impact on their relationship of trust with future parents.

6. Methodological reflections

The care providers included in the study were all motivated to engage in the care of vulnerable pregnant women. Interviews with health care providers who are less specialised in psychosocial care would probably have generated different data and insights. In addition, there may be important differences between providers who participate in research and those who do not. Moreover, our sample was limited mainly to care providers working in hospital settings. Conducting similar studies with larger and more varied samples of providers would expand our understanding of risk work, and discussing our findings at professional fora to elicit feedback and stimulate discussion and reflection will be important.

Our interview-based study provides unique insights into the conceptualisation of vulnerability and the tensions care providers experience in doing risk work, but observation of clinical practice (multidisciplinary meetings, medical consultations, and the use of risk screenings) will add important insights into risk work in maternity care. How care providers communicate risks and how women interpret these risks is also important, and we suggest that future studies focus on these aspects.

7. Conclusion

It is important to reflect on the conceptualisation and enactment of vulnerability in policy and practice since it is such a nebulous and morally laden concept. Equating 'vulnerability' with epidemiological risk may contribute to an imbalanced focus on individual mothers, rather than on both parents and the social context. Care providers skilfully attend to the risk that comes with risk work, in terms of its potential impact on relationships of trust and open communication, by employing "in between-strategies" based on intuition, embodied knowledge and relationships. We conclude that 'vulnerability' should be understood as a multi-layered, situated and relational concept rather than simply as an epidemiological category. Since an interpersonal, trusting relationship between pregnant women and care providers is crucial to evaluate and address vulnerability, we should ensure that policies, training, and resource allocation recognise providers' "in between-strategies" to embed epidemiological understandings of risk in the context of everyday risk work.

Author contributions

Esca van Blarikom Conceptualisation, Methodology, Investigation, Data curation, Writing – original draft preparation; Bregje de Kok & Hilmar Bijma: Conceptualisation, Methodology, Resources, Supervision, Validation, Writing- Reviewing and Editing.

Declaration of competing interest

None.

Data availability

The data that has been used is confidential.

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References

Aday, L.A., 1994. Health status of vulnerable populations. Annu. Rev. Publ. Health 15, 487–509. https://doi.org/10.1146/annurev.pu.15.050194.002415.

American College of Obstetricians and Gynecologists Committee on Health Care for Underserved Women, 2006. ACOG committee opinion No. 343: psychosocial risk factors: perinatal screening and intervention. Obstet. Gynecol. 108 (2), 469–477. https://doi.org/10.1097/00006250-200608000-00046.

Armstrong, E.M., 2003. Conceiving Risk, Bearing Responsibility: Fetal Alcohol Syndrome & the Diagnosis of Moral Disorder. Johns Hopkins University Press.

Barker, D.J.P., 2007. The origins of the developmental origins theory. J. Intern. Med. 261 (5), 412–417. https://doi.org/10.1111/j.1365-2796.2007.01809.x.

Beck, U., 1992. Risk Society: towards a New Modernity. Sage Publications.

Boerleider, A.W., Wiegers, A.T., Manniën, J., Francke, A.L., Devillé, W.L.J.M., 2013. Factors affecting the use of prenatal care by non-western women in industrialized western countries: a systematic review. BMC Pregnancy Childbirth 13, 81. https://doi.org/10.1186/1471-2393-13-81. March.

Bos, K., 2016. Verloskundige Bang Voor Medicalisering [Midwife Afraid of Medicalisation]. NRC Handelsblad. 23rd of June. https://www.nrc.nl/nieuws/2016/06/23/verloskundige-bang-voor-medicalisering-2880440-a1506147 accessed 16th of April 2022).

Braun, V., Clarke, V., 2006. Using thematic analysis in psychology. Qual. Res. Psychol. 3 (2), 77–101. https://doi.org/10.1191/1478088706qp063oa.

Brewster, L., Tarrant, C., Willars, J., Armstrong, N., 2018. Measurement of harms in community care: a qualitative study of use of the NHS safety thermometer. BMJ Qual. Saf. 27 (8), 625–632. https://doi.org/10.1136/bmjqs-2017-006970.

Brown, K., Ecclestone, K., Emmel, N., 2017. The many faces of vulnerability. Soc. Pol. Soc. 16 (3), 497–510. https://doi.org/10.1017/S1474746416000610.

Brown, P., Gale, N., 2018b. Theorising risk work: analysing professionals' lifeworlds and practices. Prof. Prof. 8 (1) https://doi.org/10.7577/p.1988 e1988–e1988.

Brown, P., Gale, N., 2018a. 'Developing a sociology of risk work in client-facing contexts: an editorial'. Health Risk Soc. 20 (1–2), 1–12. https://doi.org/10.1080/13698575.2018.1445072.

Brygger Venø, L., Jarbøl, D.E., Pedersen, L.B., Søndergaard, J., Ertmann, R.K., 2021. General practitioners' perceived indicators of vulnerability in pregnancy- A qualitative interview study. BMC Fam. Pract. 22 (1), 135. https://doi.org/10.1186/s12875-021-01439-3.

Buchanan, Lindal, 2013. Rhetorics of Motherhood. Southern Illinois University Press, Carbondale. https://muse.jhu.edu/book/22643.

Cowley, S., Mitcheson, J., Houston, A.M., 2004. Structuring health needs assessments: the medicalisation of health visiting. Sociol. Health Illness 26 (5), 503–526. https://doi.org/10.1111/j.0141-9889.2004.00403.x.

Denktaş, S., Bonsel, G.J., Van der Weg, E.J., Voorham, A.J.J., Torij, H.W., De Graaf, J.P., Wildschut, H.I.J., Peters, I.A., Birnie, E., Steegers, E.A.P., 2012. An urban perinatal health programme of strategies to improve perinatal health. Matern. Child Health J. 16 (8), 1553–1558. https://doi.org/10.1007/s10995-011-0873-y.

Department of Health, Wellbeing and Sport, 2018. 'Actieprogramma Kansrijke Start - Publicatie - Rijksoverheid.Nl'. Publicatie. 12 September 2018. https://www.rijksoverheid.nl/documenten/publicaties/2018/09/12/actieprogramma-kansrijke-start.

Department of Health, Wellbeing and Sport, 2020. Beter Signaleren. Https://www.kansrijkestartnl.nl/actieprogramma-kansrijke-start/actielijnen/beter-signaleren.

Department of Health, Wellbeing and Sport, 2021. Drijfveren, obstakels en kansrijke aanknopingspunten bij het signaleren van kwetsbare gezinnen - Kansrijke Start. https://www.kansrijkestartnl.nl/actueel/nieuws/2021/02/25/rapportage-drijfveren-obstakels-en-kansrijke-aanknopingspunten-bij-het-signaleren-van-kwetsbare-gezinnen.

Dobris, C.A., White-Mills, K., 2006. Rhetorical visions of motherhood: a feminist analysis of the what to expect series. Women Lang. 29 (1), 26–37.

Engel, P.J.H., 2008. Tacit knowledge and visual expertise in medical diagnostic reasoning: implications for medical education. Med. Teach. 30 (7), e184–e188. https://doi.org/10.1080/01421590802144260.

EURO-PERISTAT Project, with SCPE, EUROCAT, EURONEOSTAT, 2008. European Perinatal Health Report. https://www.europeristat.com/images/doc/EPHR/european-perinatal-health-report.pdf.

Fordyce, L., 2014. When bad mothers lose good babies: understanding fetal and infant mortality case reviews. Med. Anthropol. 33 (5), 379–394. https://doi.org/10.1080/01459740.2013.844696.

Giddens, A., 1991. Modernity and Self-Identity: Self and Society in the Late Modern Age. Polity Press, Cambridge.

Goodarzi, B., Holten, L., van El, C., de Vries, R., Franx, A., Houwaart, E., 2018. 'Risk and the politics of boundary work: preserving autonomous midwifery in The Netherlands'. Health, Health Risk Soc. 20 (7–8), 379–407. https://doi.org/10.1080/13698575.2018.1558182.

Glover, V., Barlow, Jane, 2014. Psychological adversity in pregnancy : what works to improve outcomes? J. Child. Serv. 9 (2), 96–108. https://doi.org/10.1108/JCS-01-2014-0003.

De Graaf, H.J.P., Ravelli, A.C., Wildschut, H.I.J., Denktaş, S., Voorham, T.G.J., Bonsel, G. J., Steegers, E.A.P., 2009. Perinatale uitkomsten in de vier grote steden en de prachtwijken in Nederland'. Nederlands Tijdschrift voor Geneeskunde. December. http://www.ntvg.nl/artikelen/perinatale-uitkomsten-de-vier-grote-steden-en-de-prachtwijken-nederland.

Greenhalgh, J., Flynn, R., Long, A.F., Tyson, S., 2008. Tacit and encoded knowledge in the use of standardised outcome measures in multidisciplinary team decision making: a case study of in-patient Neurorehabilitation. Soc. Sci. Med. 67 (1), 183–194. https://doi.org/10.1016/j.socscimed.2008.03.006.

Healy, S., Humphreys, E., Kennedy, C., 2016. 'Midwives' and obstetricians' perceptions of risk and its impact on clinical practice and decision-making in labour: an integrative review'. Women and birth. J. Aus.Coll. Midwives 29 (2), 107–116. https://doi.org/10.1016/j.wombi.2015.08.010.

Horlick-Jones, T., 2005. 'On "risk work": professional discourse, accountability, and everyday action'. Health, Health Risk Soc. 7 (3), 293–307. https://doi.org/10.1080/13698570500229820.

Van der Hulst, M., de Groot, M.W., de Graaf, J.P., Kok, R., Prinzie, P., Burdorf, A., Bertens, L.C.M., Steegers, E.A.P., 2018. Targeted social care for highly vulnerable pregnant women: protocol of the mothers of Rotterdam cohort study. BMJ Open 8 (3), e020199. https://doi.org/10.1136/bmjopen-2017-020199.

Kauppi, C., Montgomery, P., Shaikh, A., White, T., 2012. Postnatal Depression: when Reality Does Not Match Expectations. Perinatal Depression. IntechOpen. https://doi.org/10.5772/33013.

Kaur, N., Ricciardelli, R., 2020. Negotiating risk and choice in multifetal pregnancies. Soc. Sci. Med. 252, 112926 https://doi.org/10.1016/j.socscimed.2020.112926. May, 1982.

KNOV, 2021. Kwetsbare Zwangere Vrouwen. https://www.knov.nl/kennis-en-scholing/vakkennis-en-wetenschap/vakkennis/kwetsbare-zwangere-vrouwen. Accessed on 16th of April 2022.

Lagendijk, J., Vos, A.A., Bertens, L.C.M., Denktas, S., Bonsel, G.J., Steyerberg, E.W., Been, J.V., Steegers, E.A.P., 2018. Antenatal non-medical risk assessment and care pathways to improve pregnancy outcomes: a cluster randomised controlled trial. Eur. J. Epidemiol. 33 (6), 579–589. https://doi.org/10.1007/s10654-018-0387-7.

Luna, F., 2009. Elucidating the concept of vulnerability: layers not labels. Int. J. Fem. Approaches Bioeth. 2 (1), 121–139.

Luna, F., 2019. Identifying and evaluating layers of vulnerability – a way forward. Develop. World Bioeth. 19 (2), 86–95. https://doi.org/10.1111/dewb.12206.

Nelson, C.A., 2020. The implications of early adversity even before birth. JAMA Netw. Open 3 (1), e1920030. https://doi.org/10.1001/jamanetworkopen.2019.20030.

Oaks, L., 2000. Smoke-filled wombs and fragile fetuses: the social politics of fetal representation. Signs: J. Wom. Cult. Soc. 26 (1), 63–108. https://doi.org/10.1086/495568. October.

Pentecost, M., Meloni, M., 2020. It's never too early": preconception care and postgenomic models of life. Front. Sociol. 5 (April), 21. https://doi.org/10.3389/fsoc.2020.00021.

Perined, 2010. Perinatale zorg in Nederland anno 2020: duiding door landelijke perinatale audit en registratie. Utrecht. https://assets.perined.nl/docs/3d6a2b46-aa8a-417e-a55e-de0184fe2078.pdf. accessed 16th of April 2022.

Peters, I.A., Posthumus, A.G., Steegers, E.A.P., Denktaş, S., 2019. Satisfaction with obstetric care in a population of low-educated native Dutch and non-western minority women. Focus group research. PLoS One 14 (1), e0210506. https://doi.org/10.1371/journal.pone.0210506.

Pink, S., Horst, H., Postill, J., Hjorth, L., Lewis, T., Tacchi, J., 2016. Digital Ethnography. Principles and Practice. Sage, London.

Posthumus, A.G., Peters, I.A., Borsboom, G.J., Knapen, M.F.C.M., Bonsel, G.J., 2017. Inequalities in uptake of prenatal screening according to ethnicity and socio-economic status in the four largest cities of The Netherlands (2011-2013): inequalities in uptake of prenatal screening. Prenat. Diagn. 37 (10), 959–967. https://doi.org/10.1002/pd.5089.

Posthumus, A.G., Schölmerich, V.L.N., Steegers, E.A.P., Kawachi, I., Denktaş, S., 2015. The association of ethnic minority density with late entry into antenatal care in The Netherlands. PLoS One 10 (4), e0122720. https://doi.org/10.1371/journal.pone.0122720.

Quispel, C., Schneider, T.A.J., Bonsel, G.J., Lambregtse-van den Berg, M.P., 2012. An innovative screen-and-advice model for psychopathology and psychosocial problems among urban pregnant women: an exploratory study. J. Psychosom. Obstet. Gynaecol. 33 (1), 7–14. https://doi.org/10.3109/0167482X.2011.649814.

Rothman, B.K., 2014. Pregnancy, birth and risk: an introduction. Health Risk Soc. 16 (1), 1–6. https://doi.org/10.1080/13698575.2013.876191.

Scamell, M., 2011. The Swan effect in midwifery talk and practice: a tension between normality and the language of risk. Sociol. Health Illness 33 (7), 987–1001. https://doi.org/10.1111/j.1467-9566.2011.01366.x.

Scamell, M., Alaszewski, A., 2012. 'Fateful moments and the categorisation of risk: midwifery practice and the ever-narrowing window of normality during childbirth'. Health, risk & society: special issue series - health care through the 'lens of risk': special issue one (of four). The Categorisation of Health Risks 14 (2), 207–221. https://doi.org/10.1080/13698575.2012.661041.

Scheele, J., Harmsen van der Vliet–Torij, H.W., Wingelaar-Loomans, E.M., Goumans, M. J.B.M., 2020. Defining vulnerability in European pregnant women, a Delphi study. Midwifery 86, 102708. https://doi.org/10.1016/j.midw.2020.102708. July.

Sharp, G.C., Lawlor, A.D., Richardson, S.S., 2018. It's the mother!: how assumptions about the causal primacy of maternal effects influence research on the developmental origins of health and disease. Soc. Sci. Med. 213, 20–27. https://doi.org/10.1016/j.socscimed.2018.07.035. September 1982.

Spendlove, Z., 2018. 'Risk and boundary work in contemporary maternity care: tensions and consequences'. Health, Health Risk Soc. 20 (1–2), 63–80. https://doi.org/10.1080/13698575.2017.1398820.

Suzuki, K., 2018. The developing world of DOHaD. J. Dev. Orgins Health Dis. 9 (3), 266–269. https://doi.org/10.1017/S2040174417000691.

van der Meer, L., Ernst, H., Blanchette, L., Steegers, E., 2020. Een Kwetsbare Zwangere, Wat Is Dat Eigenlijk?, 20 May 2020. https://www.medischcontact.nl/nieuws/laatste-nieuws/artikel/een-kwetsbare-zwangere-wat-is-dat-eigenlijk.htm.

Zinn, J.O., 2008. 'Heading into the unknown: everyday strategies for managing risk and uncertainty'. Health, Health Risk Soc. 10 (5), 439–450. https://doi.org/10.1080/13698570802380891.